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As Confidentially Submitted to the Securities and Exchange Commission on November 20, 2015. This draft registration statement has not been publicly filed with the Securities and Exchange Commission and all information herein remains strictly confidential.

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

SYROS PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 2834 (Primary Standard Industrial Classification Code Number) 45-3772460 (I.R.S. Employer Identification No.)

620 Memorial Drive, Suite 300 Cambridge, Massachusetts 02139 (617) 744-1340

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Nancy Simonian, M.D. President and Chief Executive Officer Syros Pharmaceuticals, Inc. 620 Memorial Drive, Suite 300 Cambridge, Massachusetts 02139 (617) 744-1340

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Steven D. Singer Cynthia T. Mazareas Wilmer Cutler Pickering Hale and Dorr LLP 60 State Street Boston, Massachusetts 02109 Telephone: (617) 526-6000 Fax: (617) 526-5000 Divakar Gupta Nicole C. Brookshire Richard C. Segal Cooley LLP 1114 Avenue of the Americas New York, New York 10036 Telephone: (212) 479-6000 Fax: (212) 479-6275

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. $\hfill\square$

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer \Box

Accelerated filer \Box

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company \Box

CALCULATION OF REGISTRATION FEE	

	Proposed Maximum	
Title of Class of Securities Being Registered	Aggregate Offering Price(1)(2)	Amount of Registration Fee
Common Stock, \$0.001 par value per share	\$	\$

(1) In accordance with Rule 457(o) under the Securities Act of 1933, as amended, the number of shares being registered and the proposed maximum offering price per share are not included in this table.

(2) Estimated solely for purposes of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended. Includes the offering price of shares that the underwriters have the option to purchase to cover overallotments, if any.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting offers to buy these securities in any state or other jurisdiction where the offer or sale is not permitted.

PROSPECTUS (Subject to completion) Dated November 20, 2015

Shares

DS ARMACEUTICALS

Common Stock

This is the initial public offering of our common stock. We are offering shares of our common stock. We plan to apply to list our common stock on The NASDAQ Global Market under the symbol "SYRS." We expect that the initial public offering price for our common stock will be between \$ and \$ per share.

We are an "emerging growth company" under applicable Securities and Exchange Commission rules and will be eligible for reduced public company disclosure requirements for this prospectus and future filings. See "Summary-Implications of Being an Emerging Growth Company."

Our business and investment in our common stock involve significant risks. These risks are described in the section titled "Risk Factors" beginning on page 12 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Initial public offering price	\$	\$
Underwriting discounts and commissions(1)	\$	\$
Proceeds, before expenses, to Syros Pharmaceuticals, Inc.	\$	\$

(1) We refer you to the section entitled "Underwriting" beginning on page 172 for additional information regarding total underwriting compensation.

The underwriters may also purchase up to an additional shares from us at the initial public offering price, less the underwriting discounts and commissions, within 30 days from the date of this prospectus to cover overallotments.

The underwriters expect to deliver the shares against payment in New York, New York on or about

Cowen and Company

JMP Securities Wedbush PacGrow

Piper Jaffray

, 2016.

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You should rely only on the information contained in this prospectus or in any free writing prospectus prepared by us or on our behalf. We have not, and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdictions where the offer and sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since such date. Information contained on our website is not a part of this prospectus. Neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. You are required to inform yourselves about, and to observe any restrictions relating to, this offering and the distribution of this prospectus outside of the United States.

SUMMARY

This summary highlights, and is qualified in its entirety by, the more detailed information and consolidated financial statements included elsewhere in this prospectus. This summary does not contain all of the information that may be important to you. You should read and carefully consider the entire prospectus, especially our consolidated financial statements and the related notes thereto included elsewhere in this prospectus and the "Risk Factors" section of this prospectus, before deciding to invest in our common stock.

Overview

We are a biopharmaceutical company applying a pioneering approach to discover and develop medicines that control the expression of genes, which we refer to as gene control, with the aim of treating cancer and other serious diseases. We have built a proprietary platform that provides a unique lens to systematically and efficiently identify crucial genes that become dysregulated in diseased cells in order to create medicines that return cells to a non-diseased state. We believe that our platform will allow us to create a pipeline of gene control medicines that will provide a profound and durable benefit for currently underserved patients. By focusing on genomically defined subsets of patients, we believe we can conduct efficient clinical trials with a higher likelihood of success. Using our platform, we have built a pipeline of gene control medicines and intend to submit two investigational new drug applications, or INDs, to the U.S. Food and Drug Administration, or FDA, in 2016. The first IND is for our lead product candidate, SY-1425 (tamibarotene), for which we intend to initiate a Phase 2 clinical trial in the first half of 2016, initially in a genomically defined subset of patients with acute myelogenous leukemia, or AML, and myelodysplastic syndromes, or MDS. The second IND is for our cyclin-dependent kinase 7, or CDK7, inhibitor program initially for the treatment of acute leukemias, for which we intend to initiate a Phase 1/2 clinical trial in the first half of 2017. Leveraging our platform, we are also generating a pipeline of novel preclinical drug candidates for genomically defined subsets of patients. Our goal is to build a fully integrated biopharmaceutical company based on our leadership position in gene control.

Our Focus—Gene Control Medicines

There are approximately 200 different cell types in a given individual. Despite having identical genomes, each of these cell types has a different function. For example, a skin cell functions differently from a muscle cell despite sharing the exact same DNA. A small number of genes are crucial for determining cell type and function. The coordinated activity, or expression, of these genes is referred to as the gene control program. By understanding gene control programs, we believe we have the ability to uncover the drivers of cell type and function in healthy and diseased cells. To understand the cell's gene control program, we use genomic tools to locate enhancers, which are specialized regions of DNA that are associated with transcription factors, transcriptional kinases and other transcriptional and regulatory proteins and that carry coordinated information from the genes to the cell. We focus on super-enhancers, a very small subset of enhancers, which control the expression of crucial genes responsible for cell type and function.

In disease, gene control programs are altered. This process is mediated by changes in transcription factors, transcriptional kinases and other transcriptional and regulatory proteins that are critical to the expression of genes. Analysis of super-enhancers within diseased and healthy cells in specific patient segments enables us to systematically and efficiently identify disease-causing alterations in a cell's gene control program and pinpoint targets for therapeutic intervention.

The discovery and development of targeted therapies, in which the right drug is matched to the right patient, has dramatically improved the ability to treat cancer and other serious diseases. In contrast to most targeted therapies used in oncology, gene control medicines target the underlying

coordinated expression of genes that contribute to disease, opening up a wide array of potential new drug targets. We believe gene control medicines will allow us to influence multiple drivers of disease in a targeted fashion to achieve a profound and durable clinical benefit for patients. The relatively few gene control medicines available are among the most important targeted therapies today and are widely used, including estrogen receptor inhibitors for breast cancer and androgen receptor inhibitors for prostate cancer. However, a lack of understanding of gene control programs has historically prevented a systematic approach to identifying these critical points of therapeutic intervention, making gene control a largely untapped field for drug discovery and development.

Our Gene Control Platform

Our proprietary gene control platform consists of two fundamental pillars: mapping gene control programs and drugging gene control targets.

Mapping Gene Control Programs

Starting from human tissue samples, we compare diseased cells to normal cells and analyze the cells of different patient subsets within a disease to systematically and efficiently identify optimal points of therapeutic intervention and associated biomarkers for patient selection. We have invested significant resources in our tissue processing, genomics and computational biology capabilities to industrialize the production of maps of gene control programs in disease. We have amassed one of the largest known datasets of these maps across a wide range of human diseases and cell types and have identified multiple novel disease targets and biomarkers. To date, we have mapped AML, breast cancer, renal cell carcinoma, polycystic kidney disease, spinal muscular atrophy and normal T-cells. We are in the process of mapping several other cancers, including ovarian, pancreatic, hepatocellular, colorectal and lung cancer and melanoma, as well as several other diseases including Alzheimer's disease and inflammatory disorders. Our long-term goal is to map all serious diseases where we believe currently underserved patients can benefit from gene control medicines.

Drugging Gene Control Targets

Because of the central role they play in gene control programs, transcription factors, transcriptional kinases and other transcriptional and regulatory proteins are among the most promising and high-potential gene control targets. These gene control targets have historically been difficult to drug; however, through our significant investments in developing proprietary assays and in our capabilities in biochemistry, structural biology and medicinal chemistry, we believe we will be able to overcome challenges that have prevented others from systematically and successfully developing gene control medicines. We are building a pipeline of product candidates to modulate gene control programs through two distinct approaches: internal efforts to discover novel drugs against these targets, and linking existing drugs to novel genomically defined patient populations identified through our platform. By focusing on genomically defined subsets of patients who are most likely to respond, we believe we are positioning ourselves to rapidly achieve clinical proof-of-concept. With positive clinical results, we intend to apply for FDA Breakthrough Therapy designation and Fast Track designation which, if granted, could accelerate our clinical development path.

Our Clinical Programs

We are leveraging our platform to develop a pipeline of gene control product candidates. Our most advanced drug programs are summarized in the table below:

Program	Initial Indications	Planned Milestones	Potential Indications	Syros Commercial Rights
SY-1425	AML and MDS	Submit IND in	Breast cancer	North
(RARa		1H 2016		America,
agonist)		Initiate Phase 2 clinical trial in 1H 2016		Europe
CDK7 inhibitor	Acute leukemias	Submit IND in 2H 2016	Small cell lung cancer, triple negative breast cancer, <i>MYCN</i> -amplified neuroblastoma	Worldwide
		Initiate Phase 1/2 clinical trial in 1H 2017		

SY-1425

SY-1425 (tamibarotene) is an oral, potent and selective agonist of the transcription factor RAR a. We leveraged our platform to map gene control programs in primary AML and breast cancer patient tissue samples and discovered that *RARA*, the gene that produces RARa, was associated with a super-enhancer in some patients' tumor but not in others. We are initially advancing SY-1425 into novel genomically defined patient populations in AML and MDS. We chose these initial indications due to high levels of observed efficacy in our preclinical models, the significant unmet medical need of these patients and the potential for accelerated development. We intend to pursue additional indications, including breast cancer, in the near future. Through our platform, we have identified a biomarker for the *RARA* super-enhancer that we will use for patient selection.

We have exclusive North American and European commercial rights for SY-1425 products in all human cancers under our license agreement with TMRC Co., Ltd. Tamibarotene is approved in Japan for the treatment of acute promyelocytic leukemia, or APL, a form of AML, in which tamibarotene has a well-characterized efficacy and safety profile.

Our Preclinical Data

We have conducted multiple preclinical studies of SY-1425 in AML and breast cancer. In a mouse model implanted with human AML cells with the *RARA* biomarker, known as a *RARA* biomarker-positive patient-derived xenograft, or PDX, model, SY-1425 was observed to have significant anti-tumor activity and prolonged survival in treated animals relative to untreated animals. In contrast, in a PDX model without the *RARA* biomarker, SY-1425 was not observed to have an effect on tumor control or survival. These data demonstrate a strong link between the *RARA* biomarker and sensitivity to SY-1425, and provide meaningful evidence that patients with the *RARA* biomarker will be promising candidates for treatment with SY-1425.

SY-1425 Clinical Development Plan

In the first half of 2016, we plan to initiate a Phase 2 clinical trial that will enroll genomically defined patients with relapsed or refractory AML or MDS patients or AML patients who are elderly or

unfit for treatment with standard therapies. We plan to select patients for this trial using the *RARA* biomarker. We believe patients whose tumors have this biomarker will be more likely to experience a profound and durable clinical benefit from treatment with SY-1425.

CDK7 Inhibitor Program

Our CDK7 inhibitor program is focused on cancers that are dependent on a high and constant expression of certain transcription factors for their growth and survival, a phenomenon known as transcriptional addiction. CDK7 is a transcriptional kinase that is associated with the super-enhancers controlling the expression of the transcription factors driving the cancer's growth and survival.

Inhibiting CDK7 preferentially lowers the expression of disease-driving transcription factors controlled by super-enhancers, resulting in the selective killing of cancer cells over normal cells. Preclinical studies using our CDK7 inhibitors demonstrated that transcriptionally addicted cancers are particularly sensitive to selective inhibition of CDK7, including AML, T-ALL, a form of acute lymphoblastic leukemia, or ALL, *MYCN*-amplified neuroblastoma, small cell lung cancer and triple negative breast cancer.

Our Preclinical Data

In preclinical studies, our selective CDK7 inhibitors were observed to have significant anti-tumor activity and to preferentially kill cancer cells over healthy cells in *in vivo* models of several aggressive and underserved cancers, including AML, ALL, *MYCN*-amplified neuroblastoma, small cell lung cancer and triple negative breast cancer. In addition, our CDK7 inhibitors were observed to have markedly fewer negative effects on healthy cells than pan-CDK inhibitors, which frequently cause blood cell death, or myelosuppression.

In cell-derived xenograft, or CDX, and PDX models of AML, mice treated with our CDK7 inhibitors experienced complete tumor regression, meaning that the percentage of leukemia cells in the blood was less than 1%. In fact, at the end of the 48-day dosing period, all treated mice remained alive and levels of human leukemia cells in the blood remained at less than 1%. In untreated mice, the cancer progressed, reaching levels of human leukemia cells of greater than 50% in blood and greater than 90% in tissues, at which point all mice had died of their disease or were humanely sacrificed due to excessive tumor burden.

CDK7 Clinical Development Plan

We have generated several first-in-class potent and highly selective small molecule inhibitors of CDK7 with *in vivo* efficacy. We expect to select our development candidate in the first half of 2016 and start IND-enabling activities in the first half of 2016. Our goal is to submit an IND in the second half of 2016 and to initiate a Phase 1/2 clinical trial in patients with acute leukemias, including AML and ALL, in the first half of 2017. We believe there is a well-defined path to clinical proof-of-concept in acute leukemias. We then plan to expand into a broader set of patients using our gene control platform to identify patient subgroups with transcriptionally addicted cancers, such as small cell lung cancer, triple negative breast cancer and *MYCN*-amplified neuroblastoma.

Other Programs

We are using our platform to map gene control programs across additional cancers, inflammatory diseases and other diseases. Using these maps, we are creating a pipeline of novel preclinical drug candidates targeting transcriptional kinases, transcription factors and other transcriptional and regulatory proteins, as well as linking existing drugs to novel genomically defined patient populations.

Our Team

We were founded by leaders in the field of gene control from the Whitehead Institute for Biomedical Research at the Massachusetts Institute of Technology, or Whitehead, and the Dana-Farber Cancer Institute, or Dana-Farber, an affiliate of Harvard Medical School. Our management team consists of drug discovery, development and commercialization experts with experience in translating scientific discoveries into innovative treatments, including Avonex and Tysabri for multiple sclerosis, Velcade for hematological malignancies, Entyvio for ulcerative colitis, and Kalydeco and Orkambi for cystic fibrosis.

Our Strategy

Our mission is to transform the lives of patients through the creation of novel gene control medicines by building a fully integrated, leading biopharmaceutical company. To achieve this mission, we are executing on the following strategy:

- **Rapidly and efficiently advance our lead programs through clinical development.** We intend to enrich our trials with patients most likely to respond, which we believe will enable us to rapidly establish clinical proof-of-concept. Subject to encouraging clinical results, we intend to apply for Breakthrough Therapy designation and Fast Track designation.
- **Develop a robust pipeline of gene control product candidates.** We plan to continue to leverage our gene control platform to systematically and efficiently identify optimal therapeutic points of intervention in specific patient populations. We intend to generate a pipeline of gene control product candidates either through our internal drug discovery efforts or by linking existing drugs to novel patient populations.
- **Maintain our leadership position in the field of gene control.** Our long-term goal is to map all serious diseases where we believe currently underserved patients can benefit from gene control medicines. We intend to use these maps to pinpoint crucial genes for disease and to validate the associated targets for therapeutic intervention.
- **Continue to foster a culture of innovation.** We are committed to pioneering science and leadership in gene control medicines. We will continue to foster an environment that encourages innovation, excellence and productivity and develops our team as leaders in the field of gene control.
- Execute strategic collaborations to maximize value and extend the potential of our gene control platform across multiple disease areas. We intend to engage in strategic collaborations for both our programs and our platform. We are focused on partnerships that could expand our geographic reach, allow us to expand into the treatment of other cancers or serious diseases, or leverage the expertise of strategic partners.

Risks Associated with Our Business

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the "Risk Factors" section of this prospectus immediately following this prospectus summary. These risks include the following:

- We have incurred significant losses since inception, expect to incur significant and increasing losses for at least the next several years and may never achieve or maintain profitability.
- We have a limited operating history, no products approved for sale and no history of commercializing pharmaceutical products, which may make it difficult to evaluate the prospects for our future viability.



- We will need substantial additional funding, and if we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts.
- Our approach to the discovery and development of product candidates based on our gene control platform is unproven, and we do not know whether or when we will be able to develop any products of commercial value.
- In the near term, we are dependent on the successful development and commercialization of our lead product candidate, SY-1425, and our CDK7 inhibitor program.
- Our gene control platform may fail to help us discover and develop additional potential product candidates.
- Clinical drug development involves a lengthy and expensive process and has an uncertain outcome.
- We expect to rely on third parties to conduct clinical trials and certain aspects of our research and preclinical testing, to manufacture preclinical, clinical and commercial supplies of our product candidates and to develop our companion diagnostics.
- We are dependent on licenses with third parties for important intellectual property related to our business.
- If we are unable to obtain and maintain sufficient patent protection for our product candidates and gene control platform, including through existing and future licenses, or if the scope of the patent protection is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to commercialize our product candidates successfully may be adversely affected.

Our Corporate Information

We were incorporated under the laws of the State of Delaware on November 9, 2011 under the name LS22, Inc. Our executive offices are located at 620 Memorial Drive, Suite 300, Cambridge, Massachusetts 02139, and our telephone number is (617) 744-1340. Our website address is www.syros.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to "Syros," "the company," "we," "us" and "our" refer to Syros Pharmaceuticals, Inc. and our wholly owned subsidiary Syros Securities Corporation.

The Syros logo, "Syros" and "Syros Pharmaceuticals" are our trademarks. Solely for convenience, the trademarks and trade names in this prospectus are referred to without the ® and [™] symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. The trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners.

Implications of Being an Emerging Growth Company

As a company with less than \$1.0 billion of revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure and other requirements that are applicable to other public companies that are not emerging growth companies. In particular, in this prospectus, we have provided



only two years of audited consolidated financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. The JOBS Act also provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We have irrevocably elected not to avail ourselves of this exemption and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. Because we intend to rely on certain disclosure and other requirements of the JOBS Act, the information contained herein may be different than the information you receive from other public companies in which you hold stock. In addition, it is possible that some investors will find our common stock less attractive as a result of our determination to avail ourselves of exemptions under the JOBS Act, which may result in a less active trading market for our common stock and higher volatility in our stock price. We will remain an emerging growth company until the earlier to occur of: (1) the last day of the fiscal year in which we have total annual gross revenues of \$1.0 billion or more; (2) the last day of the fiscal year following the fifth anniversary of the date of the closing of this offering; (3) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (4) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission.

	THE OFFERING
Common stock offered by us	shares
Common stock to be outstanding immediately after this offering	shares, or shares if the underwriters exercise their option to purchase additional shares in full
Underwriters' option to purchase additional shares	shares
Use of proceeds	We estimate that we will receive net proceeds from this offering of approximately \$ million, assuming an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering to fund proof-of-concept readouts for our two lead drug candidates. In particular we intend to use the net proceeds from this offering to conduct a Phase 2 clinical trial of SY-1425, and, for our CDK7 inhibitor program, to launch IND-enabling activities and a Phase 1/2 clinical trial in acute leukemias, in each case including clinical research outsourcing, drug manufacturing, companion diagnostic development and internal personnel costs. We also intend to use a portion of the proceeds for new and ongoing research activities including our preclinical programs and our platform. The balance will be used for working capital and other general corporate purposes. See the "Use of Proceeds" section in this prospectus for a more complete description of the intended use of proceeds from this offering.
Risk factors	You should read the "Risk Factors" section of this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Proposed NASDAQ Global Market symbol	"SYRS"
stock outstandin conversion of al	r of shares of our common stock to be outstanding after this offering is based on 9,627,782 shares of our common g as of September 30, 2015 and 47,243,931 additional shares of our common stock issuable upon the automatic l outstanding shares of our preferred stock upon the closing of this offering.
• 7	,088,929 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 015, at a weighted-average exercise price of \$0.74 per share;
• 3	84,752 shares of our common stock available for future issuance as of September 30, 2015 under our 2012 equity acentive plan; and

.

and additional shares of our common stock that will become available for future issuance under our 2016 stock incentive plan and our 2016 employee stock purchase plan, respectively, each of which will become effective immediately prior to the closing of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under these plans. Unless otherwise indicated, all information in this prospectus assumes:

- the filing and effectiveness of our restated certificate of incorporation and the adoption of our amended and restated • bylaws, which will occur immediately prior to the closing of this offering;
- no exercise of the outstanding stock options described above; .
- no exercise by the underwriters of their option to purchase up to additional shares of our common stock to cover overallotments, if any; and
- the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 47,243,931 shares of our common stock upon the closing of this offering.

In addition, all information in this prospectus gives effect to a -forreverse stock split of our capital stock, which became effective on , 2016.

SUMMARY CONSOLIDATED FINANCIAL INFORMATION

You should read the following summary consolidated financial data together with our consolidated financial statements and the related notes included elsewhere in this prospectus and the "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of this prospectus. We have derived the statement of operations data for the years ended December 31, 2013 and 2014 from our audited consolidated financial statements included elsewhere in this prospectus. We have derived the statement of operations data for the nine months ended September 30, 2014 and 2015 and the balance sheet data as of September 30, 2015 from our unaudited consolidated financial statements included elsewhere in this prospectus, which have been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, the unaudited consolidated financial data reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the financial information as of and for the periods presented. Our historical results are not necessarily indicative of results that should be expected in any future period, and our results for any interim period are not necessarily indicative of results that should be expected for any full year.

	Year Ended December 31,				Nine Months Ended September 30,			
		2013		2014	_	2014		2015
		(in	that	isands, except sh		(unat		,
Statements of Operations Data:		(111	tnot	isanus, except si	are	and per share	uata	1)
Revenue	\$	_	\$		\$	_	\$	317
Operating expenses:								
Research and development		6,266		10,923		7,901		16,030
General and administrative		2,367		2,512		1,843		3,418
Total operating expenses		8,633		13,435		9,744		19,448
Loss from operations		(8,633)		(13,435)	_	(9,744)		(19,131)
Other income (expense), net		(32)		4		2		2
Net loss	\$	(8,665)	\$	(13,431)	\$	(9,742)	\$	(19,129)
Net loss per share applicable to common stockholders—basic and diluted(1)	\$	(2.25)	\$	(2.74)	\$	(1.93)	\$	(3.26)
Weighted-average number of common shares used in net loss per share applicable to common stockholders— basic and diluted(1)		4,110,716		5,718,844		5,599,543		6,997,532
Pro forma net loss per share—basic and diluted (unaudited)(1)			\$	(0.37)	_		\$	(0.37)
Weighted-average number of common shares used in pro forma net loss per share—basic and diluted (unaudited)(1)				35,901,743				54,255,749

(1) See Note 2 to our consolidated financial statements included elsewhere in this prospectus for a description of the method used to calculate basic and diluted net loss per share and unaudited pro forma basic and diluted net loss per share as well as the weighted-average number of common shares used in the calculation of the per share amounts.

The following table sets forth summary consolidated balance sheet data as of September 30, 2015:

- on an actual basis;
- on a pro forma basis to give effect to (i) the conversion of all outstanding shares of our preferred stock into 47,243,931 shares of our common stock, (ii) the vesting of 300,000 shares of restricted common stock and (iii) the change in our total stockholders' (deficit) equity resulting from the stock-based compensation expense associated with the vesting of options to purchase up to 222,706 shares of our common stock, each upon the closing of this offering; and
- on a pro forma as adjusted basis to give further effect to the issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

	Sep	September 30, 2015			
		Pro Forma o Forma <u>As Adjusted(2)</u> lited) (in thousands)			
Balance Sheet Data:					
Cash and cash equivalents	\$ 44,985 \$	44,985			
Working capital(1)	40,821	40,821			
Total assets	50,042	50,042			
Convertible preferred stock	82,013	_			
Total stockholders' (deficit) equity	(38,180)	43,833			

(1) We define working capital as current assets less current liabilities. See our consolidated financial statements for further details regarding our current assets and current liabilities.

(2) The pro forma as adjusted information presented in the summary consolidated balance sheet data is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each \$1.00 increase (decrease) in the assumed initial public offering price of per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, working capital, total assets and total stockholders' (deficit) equity by \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Each increase (decrease) of shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, working capital, total assets and total stockholders' (deficit) equity by \$ million, assuming no change in the assumed initial public offering price per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before you decide to invest in our common stock, you should carefully consider the risks described below, together with the other information contained in this prospectus, including our consolidated financial statements and the related notes included elsewhere in this prospectus. If any of the following risks actually occurs, our business, financial condition, results of operations and future growth prospects could be harmed. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

Risks Related to Our Financial Position and Need for Additional Capital

We have incurred significant losses since inception, expect to incur significant and increasing losses for at least the next several years, and may never achieve or maintain profitability.

We have incurred significant annual net operating losses in every year since our inception. We expect to continue to incur significant and increasing net operating losses for at least the next several years. Our net losses were \$8.7 million and \$13.4 million for the years ended December 31, 2013 and 2014, respectively, and \$19.1 million for the nine months ended September 30, 2015. As of September 30, 2015, we had an accumulated deficit of \$42.8 million. We have not generated any revenues from product sales, have not completed the development of any product candidate and may never have a product candidate approved for commercialization. We have financed our operations to date primarily through private placements of our preferred stock. We have devoted substantially all of our financial resources and efforts to research and development and general and administrative expense to support such research and development. Our net losses may fluctuate significantly from quarter to quarter and year to year. Net losses and negative cash flows have had, and will continue to have, an adverse effect on our stockholders' (deficit) equity and working capital.

We anticipate that our expenses will increase substantially if and as we:

- continue to develop and begin clinical trials with respect to our lead product candidate, SY-1425, including a Phase 2 clinical trial we expect to initiate in the first half of 2016;
- continue research, preclinical and clinical development efforts for our cyclin-dependent kinase 7, or CDK7, inhibitor program, for which we plan to submit an investigational new drug application, or IND, in the second half of 2016 and to initiate a Phase 1/2 clinical trial in the first half of 2017;
- initiate and continue research, preclinical and clinical development efforts for our preclinical programs;
- further develop our gene control platform;
- seek to identify and develop additional product candidates;
- acquire or in-license other product candidates or technologies;
- seek regulatory and marketing approvals for our product candidates that successfully complete clinical trials, if any;
- establish sales, marketing, distribution and other commercial infrastructure in the future to commercialize various products for which we may obtain marketing approval, if any;
- require the manufacture of larger quantities of product candidates for clinical development and, potentially, commercialization;
- maintain, expand and protect our intellectual property portfolio;
- hire and retain additional personnel, such as clinical, quality control and scientific personnel;



- add operational, financial and management information systems and personnel, including personnel to support our product development and help us comply with our obligations as a public company; and
- add equipment and physical infrastructure to support our research and development programs.

Our ability to become and remain profitable depends on our ability to generate revenue. We do not expect to generate significant revenue unless and until we are, or any future collaborator is, able to obtain marketing approval for, and successfully commercialize, one or more of our product candidates. Successful commercialization will require achievement of key milestones, including initiating and successfully completing clinical trials of our product candidates, obtaining marketing approval for these product candidates, manufacturing, marketing and selling those products for which we, or any of our future collaborators, may obtain marketing approval, satisfying any post-marketing requirements and obtaining reimbursement for our products from private insurance or government payors. Because of the uncertainties and risks associated with these activities, we are unable to accurately predict the timing and amount of revenues, and if or when we might achieve profitability. We and any future collaborators may never succeed in these activities and, even if we do, or any future collaborators do, we may never generate revenues that are large enough for us to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our pipeline of product candidates or continue our operations and cause a decline in the value of our common stock.

We have a limited operating history, no products approved for sale and no history of commercializing pharmaceutical products, which may make it difficult to evaluate the prospects for our future viability.

We commenced operations in 2011. Our operations to date have been limited to financing and staffing our company, developing our gene control platform and conducting preclinical research. We have not yet demonstrated an ability to successfully conduct clinical trials, obtain marketing approvals, manufacture a commercial-scale product or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Accordingly, you should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by companies in the early stages of development, especially clinical stage biopharmaceutical companies such as ours. Any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history or a history of successfully developing and commercializing pharmaceutical products.

We may encounter unforeseen expenses, difficulties, complications, delays and other known or unknown factors in achieving our business objectives. We will eventually need to transition from a company with a development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We expect our financial condition and operating results to continue to fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. Accordingly, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance.

We will need substantial additional funding, and if we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product development programs or commercialization efforts.

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is a very time consuming, expensive and uncertain process that takes years to complete. We expect our expenses to increase in connection with our ongoing activities, particularly as we initiate clinical trials of SY-1425, advance the development of our CDK7 inhibitor program, initiate new research and

preclinical development efforts and seek marketing approval for any product candidates that we successfully develop. Moreover, under license agreements with various licensors, we are obligated to make milestone payments upon the successful completion of specified development and commercialization activities. In addition, if we obtain marketing approval for any product candidate that we may successfully develop, we may incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution to the extent that such sales, marketing, manufacturing and distribution are not the responsibility of a future collaborator. Furthermore, following the closing of this offering, we expect to incur significant additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we may be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

We plan to use the net proceeds of this offering primarily to fund our ongoing research and development efforts. We will be required to expend significant funds in order to advance the development of SY-1425 and our CDK7 inhibitor program, as well as our other preclinical programs. In addition, while we may seek one or more collaborators for future development of our current product candidate or any future product candidates that we may develop for one or more indications, we may not be able to enter into a collaboration for any of our product candidates for such indications on suitable terms, on a timely basis or at all. In any event, the net proceeds of this offering and our existing cash and cash equivalents will not be sufficient to fund all of the efforts that we plan to undertake or to fund the completion of development of our product candidate or our other preclinical programs. Accordingly, we will be required to obtain further funding through public or private equity offerings, debt financings, collaborations and licensing arrangements or other sources. We do not have any committed external source of funds. Adequate additional financing may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy.

We believe that the net proceeds from this offering, together with our existing cash and cash equivalents as of September 30, 2015, will enable us to fund our operating expenses and capital expenditure requirements at least through . Our estimate as to how long we expect the net proceeds from this offering, together with our existing cash and cash equivalents, to be able to continue to fund our operations is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Further, changing circumstances, some of which may be beyond our control, could cause us to consume capital significantly faster than we currently anticipate, and we may need to seek additional funds sooner than planned. Our future funding requirements, both short-term and long-term, will depend on many factors, including:

- the scope, progress, timing, costs and results of clinical trials of SY-1425 and any CDK7 inhibitors we successfully advance into clinical development;
- research and preclinical development efforts for any future product candidates that we may develop;
- our ability to enter into and the terms and timing of any collaborations, licensing agreements or other arrangements;
- the number of future product candidates that we pursue and their development requirements;
- the outcome, timing and costs of seeking regulatory approvals;
- the costs of commercialization activities for any of our product candidates that receive marketing approval to the extent such costs are not the responsibility of any future collaborators, including the costs and timing of establishing product sales, marketing, distribution and manufacturing capabilities;

- the costs of acquiring potential new product candidates or technology;
- the costs of any physician education programs relating to selecting and treating genomically defined patient populations;
- the timing and amount of milestone and other payments due to licensors for patent and technology rights used in our development platform;
- revenue received from commercial sales, if any, of our current and future product candidates;
- our headcount growth and associated costs as we expand our research and development and establish a commercial infrastructure;
- the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against intellectual property related claims; and
- the costs of operating as a public company.

Raising additional capital may cause dilution to our stockholders, including purchasers of common stock in this offering, restrict our operations or require us to relinquish rights to our technologies or product candidates.

We expect our expenses to increase in connection with our planned operations. To the extent that we raise additional capital through the sale of common stock, convertible securities or other equity securities, your ownership interest may be diluted, and the terms of these securities could include liquidation or other preferences and anti-dilution protections that could adversely affect your rights as a common stockholder. In addition, debt financing, if available, would result in fixed payment obligations and may involve agreements that include restrictive covenants that limit our ability to take specific actions, such as incurring additional debt, making capital expenditures, creating liens, redeeming stock or declaring dividends, that could adversely impact our ability to conduct our business. In addition, securing financing could require a substantial amount of time and attention from our management and may divert a disproportionate amount of their attention away from day-to-day activities, which may adversely affect our management's ability to oversee the development of our product candidates.

If we raise additional funds through collaborations or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Risks Related to the Discovery, Development and Commercialization of Product Candidates

Our approach to the discovery and development of product candidates based on our gene control platform is novel and unproven, and we do not know whether we will be able to develop any products of commercial value.

We are focused on discovering and developing medicines for the treatment of cancer and other diseases based upon our gene control platform. We are leveraging our platform to create a pipeline of gene control drug candidates for genomically defined patients whose diseases have not been adequately addressed to date by other genomics approaches and to design and conduct efficient clinical trials with a higher likelihood of success. While we believe that applying our gene control platform to create medicines for genomically defined patient populations may potentially enable drug research and clinical development that is more efficient than conventional small molecule drug research and development, our approach is both novel and unproven. Because our approach is both novel and unproven, the cost and time needed to develop our product candidates is difficult to predict, and our efforts may not result in the discovery and development of commercially viable medicines. We may also be incorrect



about the effects of our product candidates on the diseases of genomically defined patient populations, which may limit the utility of our approach or the perception of the utility of our approach. Furthermore, our estimates of genomically defined patient populations available for study and treatment may be lower than expected, which could adversely affect our ability to conduct clinical trials and may also adversely affect the size of any market for medicines we may successfully commercialize.

We have not yet succeeded and may never succeed in demonstrating efficacy and safety for our current or any future product candidates in clinical trials or in obtaining marketing approval thereafter. For example, although we have discovered and evaluated compounds using our novel gene control platform, we have not yet advanced a compound into any phase of clinical development.

Our gene control platform may fail to help us discover and develop additional potential product candidates.

A significant portion of the research that we are conducting involves identifying novel targets and points of intervention and developing new compounds using our gene control platform. The drug discovery that we are conducting using our gene control platform may not be successful in identifying compounds that have commercial value or therapeutic utility. Our gene control platform may initially show promise in identifying potential product candidates, yet fail to yield viable product candidates for clinical development or commercialization for a number of reasons, including:

- compounds created through our gene control platform may not demonstrate efficacy, safety or tolerability;
- potential product candidates may, on further study, be shown to have harmful side effects or other characteristics that indicate that they are unlikely to receive marketing approval and achieve market acceptance;
- competitors may develop alternative therapies that render our potential product candidates non-competitive or less attractive; or
- a potential product candidate may not be capable of being produced at an acceptable cost.

Our research programs to identify new product candidates will require substantial technical, financial and human resources, and we may be unsuccessful in our efforts to identify new product candidates. If we are unable to identify suitable additional compounds for preclinical and clinical development, our ability to develop product candidates and obtain product revenues in future periods could be compromised, which could result in significant harm to our financial position and adversely impact our stock price.

In the near term, we are dependent on the success of SY-1425 and our CDK7 inhibitor program. If we are unable to initiate or complete the clinical development of, obtain marketing approval for or successfully commercialize SY-1425 or a product candidate in our CDK7 inhibitor program, either alone or with a collaborator, or if we experience significant delays in doing so, our business could be substantially harmed.

We currently have no products approved for sale and are investing a significant portion of our efforts and financial resources in the development of SY-1425 and our CDK7 inhibitor program. Our prospects are substantially dependent on our ability, or that of any future collaborator, to develop, obtain marketing approval for and successfully commercialize product candidates in one or more disease indications.

The success of SY-1425 and our CDK7 inhibitor program will depend on several factors, including the following:

- initiation and successful enrollment and completion of clinical trials;
- a safety, tolerability and efficacy profile that is satisfactory to the U.S. Food and Drug Administration, or FDA, or any comparable foreign regulatory authority for marketing approval;



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- timely receipt of marketing approvals from applicable regulatory authorities;
- the performance of our future collaborators, if any;
- the extent of any required post-marketing approval commitments to applicable regulatory authorities;
- establishment of supply arrangements with third-party raw materials suppliers and manufacturers including with respect to the supply of active pharmaceutical ingredient for SY-1425, for which we and TMRC Co. Ltd., or TMRC, are currently negotiating an agreement;
- establishment of arrangements with third-party manufacturers to obtain finished drug product that is appropriately packaged for sale;
- adequate ongoing availability of raw materials and drug product for clinical development and any commercial sales;
- obtaining and maintaining patent, trade secret protection and regulatory exclusivity, both in the United States and internationally, including our ability to maintain our license agreement with TMRC, which we refer to as the TMRC license agreement;
- protection of our rights in our intellectual property portfolio;
- successful launch of commercial sales following any marketing approval;
- a continued acceptable safety profile following any marketing approval;
- commercial acceptance by patients, the medical community and third-party payors;
- successful identification of biomarkers for patient selection;
- continued availability of appropriate tissue samples to enable the identification of novel targets in genomically defined subsets of patients; and
- our ability to compete with other therapies.

Many of these factors are beyond our control, including clinical development, the regulatory submission process, potential threats to our intellectual property rights and the manufacturing, marketing and sales efforts of any future collaborator. If we are unable to develop, receive marketing approval for and successfully commercialize SY-1425 or any product candidates under our CDK7 inhibitor program, on our own or with any future collaborator, or experience delays as a result of any of these factors or otherwise, our business could be substantially harmed.

If clinical trials of any future product candidates that we, or any future collaborators, may develop fail to satisfactorily demonstrate safety and efficacy to the FDA and other regulators, we, or any future collaborators, may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of these product candidates.

We, and any future collaborators, are not permitted to commercialize, market, promote or sell any product candidate in the United States without obtaining marketing approval from the FDA. Foreign regulatory authorities, such as the European Medicines Agency, or the EMA, impose similar requirements. We, and any future collaborators, must complete extensive preclinical development and clinical trials to demonstrate the safety and efficacy of our product candidates in humans before we will be able to obtain these approvals.

Clinical testing is expensive, is difficult to design and implement, can take many years to complete and is inherently uncertain as to outcome. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. The clinical development of our product candidates is susceptible to the risk of failure inherent at any stage of product development, including failure to demonstrate efficacy in a clinical trial or across a broad population of patients, the

occurrence of adverse events that are severe or medically or commercially unacceptable, failure to comply with protocols or applicable regulatory requirements and determination by the FDA or any comparable foreign regulatory authority that a product candidate may not continue development or is not approvable. For example, a Phase 2 clinical trial of tamibarotene (SY-1425) for the treatment of late-stage non-small cell lung cancer, or NSCLC, under a previous license between TMRC and a third party was terminated when interim data suggested that the primary endpoint of disease-free progression for 18 months after starting therapy would not be reached. Although we have no current plans to conduct studies of SY-1425 in NSCLC, we face a similar risk of failure in our planned clinical trials of SY-1425. It is possible that even if one or more of our product candidates has a beneficial effect, that effect will not be detected during clinical evaluation as a result of one or more of a variety of factors, including the size, duration, design, measurements, conduct or analysis of our clinical trials. Conversely, as a result of the same factors, our clinical trials may indicate an apparent positive effect of a product candidate that is greater than the actual positive effect, if any. Similarly, in our clinical trials we may fail to detect toxicity of or intolerability caused by our product candidates, or mistakenly believe that our product candidates are toxic or not well tolerated when that is not in fact the case.

Any inability to successfully complete preclinical and clinical development could result in additional costs to us, or any future collaborators, and impair our ability to generate revenues from product sales, regulatory and commercialization milestones and royalties. Moreover, if we, or any future collaborators, are required to conduct additional clinical trials or other testing of our product candidates beyond the trials and testing that we or they contemplate, if we, or they, are unable to successfully complete clinical trials of our product candidates or other testing, or the results of these trials or tests are unfavorable, uncertain or are only modestly favorable, or there are unacceptable safety concerns associated with our product candidates, we, or any future collaborators, may:

- incur additional unplanned costs;
- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or significant safety warnings, including boxed warnings;
- be subject to additional post-marketing testing or other requirements; or
- be required to remove the product from the market after obtaining marketing approval.

Our failure to successfully initiate and complete clinical trials of our product candidates and to demonstrate the efficacy and safety necessary to obtain regulatory approval to market any of our product candidates would significantly harm our business.

Adverse events or undesirable side effects caused by, or other unexpected properties of, product candidates that we develop may be identified during development and could delay or prevent their marketing approval or limit their use.

Adverse events or undesirable side effects caused by, or other unexpected properties of, SY-1425, any CDK7 inhibitors we may develop or any future product candidates that we may develop could cause us, any future collaborators, an institutional review board or regulatory authorities to interrupt, delay or halt clinical trials of one or more of our product candidates and could result in a more restrictive label or the delay or denial of marketing approval by the FDA or comparable foreign regulatory authorities. Because gene control techniques are relatively new, side effects from gene control approaches may be unpredictable. Furthermore, retinoids such as SY-1425 may cause birth defects and therefore may carry a warning on their label. We have not yet tested any of our CDK7

inhibitors in humans so the safety profile that any such CDK7 inhibitors will demonstrate in human clinical trials is unknown. If any of our product candidates is associated with adverse events or undesirable side effects or has properties that are unexpected, we, or any future collaborators, may need to abandon development or limit development of that product candidate to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Many compounds that initially showed promise in clinical or earlier stage testing have later been found to cause undesirable or unexpected side effects that prevented further development of the compound.

If we, or any future collaborators, experience any of a number of possible unforeseen events in connection with clinical trials of our current product candidate or any future product candidates that we, or any future collaborators, may develop, potential clinical development, marketing approval or commercialization of our product candidates could be delayed or prevented.

We, or any future collaborators, may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent clinical development, marketing approval or commercialization of our current product candidate or any future product candidates that we, or any future collaborators, may develop, including:

- regulators or institutional review boards may not authorize us, any future collaborators or our or their investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we, or any future collaborators, may have delays in reaching or fail to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- clinical trials of our product candidates may produce unfavorable or inconclusive results;
- we, or any future collaborators, may decide, or regulators may require us or them, to conduct additional clinical trials or abandon product development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we, or any future collaborators, anticipate, patient enrollment in these clinical trials may be slower than we, or any future collaborators, anticipate or participants may drop out of these clinical trials at a higher rate than we, or any future collaborators, anticipate;
- our estimates of the genomically defined patient populations available for study may be higher than actual patient numbers and result in our inability to sufficiently enroll our trials;
- the cost of planned clinical trials of our product candidates may be greater than we anticipate;
- our third-party contractors or those of any future collaborators, including those manufacturing our product candidates or components or ingredients thereof or conducting clinical trials on our behalf or on behalf of any future collaborators, may fail to comply with regulatory requirements or meet their contractual obligations to us or any future collaborators in a timely manner or at all;
- patients that enroll in a clinical trial may misrepresent their eligibility to do so or may otherwise not comply with the clinical trial protocol, resulting in the need to drop the patients from the clinical trial, increase the needed enrollment size for the clinical trial or extend the clinical trial's duration;

- we, or any future collaborators, may have to delay, suspend or terminate clinical trials of our product candidates for various reasons, including a finding that the participants are being exposed to unacceptable health risks, undesirable side effects or other unexpected characteristics of the product candidate;
- regulators or institutional review boards may require that we, or any future collaborators, or our or their investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or their standards of conduct, a finding that the participants are being exposed to unacceptable health risks, undesirable side effects or other unexpected characteristics of the product candidate or findings of undesirable effects caused by a chemically or mechanistically similar product or product candidate;
- the FDA or comparable foreign regulatory authorities may disagree with our, or any future collaborators', clinical trial designs or our or their interpretation of data from preclinical studies and clinical trials;
- the FDA or comparable foreign regulatory authorities may fail to approve or subsequently find fault with the manufacturing processes or facilities of third-party manufacturers with which we, or any future collaborators, enter into agreements for clinical and commercial supplies;
- the supply or quality of raw materials or manufactured product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient, inadequate or not available at an acceptable cost, or we may experience interruptions in supply; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient to obtain marketing approval.

Product development costs for us, or any future collaborators, will increase if we, or they, experience delays in testing or pursuing marketing approvals and we, or they, may be required to obtain additional funds to complete clinical trials and prepare for possible commercialization of our product candidates. We do not know whether any preclinical tests or clinical trials will begin as planned, will need to be restructured, or will be completed on schedule or at all. Significant preclinical study or clinical trial delays also could shorten any periods during which we, or any future collaborators, may have the exclusive right to commercialize our product candidates or allow our competitors, or the competitors of any future collaborators, to bring products to market before we, or any future collaborators, do and impair our ability, or the ability of any future collaborators, to successfully commercialize our product candidates and may harm our business and results of operations. In addition, many of the factors that lead to clinical trial delays may ultimately lead to the denial of marketing approval of any of our product candidates.

Failure to successfully validate, develop and obtain regulatory approval for companion diagnostics could harm our drug development strategy.

As one of the key elements of our development strategy, we seek to identify genomically defined subsets of patients within a disease category who may derive benefit from the product candidates we are developing. In collaboration with partners, we plan to develop companion diagnostics to help us to more accurately identify patients within a particular subset, both during our clinical trials and in connection with the commercialization of our product candidates that we are developing or may in the future develop. Companion diagnostics are subject to regulation by the FDA and comparable foreign regulatory authorities as medical devices and require separate regulatory approval prior to commercialization. We do not develop companion diagnostics internally and thus we will be dependent on the sustained cooperation and effort of our third-party collaborators in developing and obtaining approval for these companion diagnostics. We and our collaborators may encounter difficulties in developing and obtaining approval for the companion diagnostics, including issues relating to selectivity/specificity, analytical validation, reproducibility, or clinical validation. Any delay or failure by our

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collaborators to develop or obtain regulatory approval of the companion diagnostics could delay or prevent approval of our product candidates. In addition, our collaborators may encounter production difficulties that could constrain the supply of the companion diagnostics, and both they and we may have difficulties gaining acceptance of the use of the companion diagnostics in the clinical community. If such companion diagnostics fail to gain market acceptance, it would have an adverse effect on our ability to derive revenues from sales, if any, of our products. In addition, the diagnostic company with whom we contract may decide to discontinue selling or manufacturing the companion diagnostic that we anticipate using in connection with development and commercialization of our product candidates or our relationship with such diagnostic company may otherwise terminate. We may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with the development and commercialization of our product candidates or do so on commercially reasonable terms, which could adversely affect and/or delay the development or commercialization of our product candidates.

If we, or any future collaborators, experience delays or difficulties in the enrollment of patients in clinical trials, our or their receipt of necessary regulatory approvals could be delayed or prevented.

We, or any future collaborators, may not be able to initiate or continue clinical trials for our current product candidate or any future product candidates that we, or any future collaborators, may develop if we, or they, are unable to locate and enroll a sufficient number of eligible patients to participate in clinical trials. Patient enrollment is a significant factor in the timing of clinical trials, and is affected by many factors, including:

- the size and nature of the patient population;
- the severity of the disease under investigation;
- the availability of approved therapeutics for the relevant disease;
- the proximity of patients to clinical sites;
- the eligibility criteria for the trial;
- the design of the clinical trial;
- efforts to facilitate timely enrollment;
- competing clinical trials; and
- clinicians' and patients' perceptions as to the potential advantages and risks of the drug being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating.

In particular, we intend to enrich our clinical trials with patients most likely to respond to our gene control therapies. However, genomically defined diseases may have relatively low prevalence and it may be difficult for us or third parties with whom we collaborate to identify patients for our trials, which may lead to delays in enrollment for our trials. We intend to develop, or engage third parties to develop, companion diagnostics for use in our clinical trials, but we or such third parties may not be successful in developing such companion diagnostics, furthering the difficulty in identifying genomically defined subsets of patients for our clinical trials. Our inability to enroll a sufficient number of genomically defined patients for our clinical trials may result in significant delays and could require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for our product candidates, which would cause the value of our company to decline and limit our ability to obtain additional financing. Further, if we are unable to include a sufficient number of genomically defined patients in our trials, this could compromise our ability to seek participation in FDA's expedited review and approval programs, including Breakthrough Therapy designation and Fast Track designation, or otherwise to seek to accelerate clinical development and regulatory timelines.



Our inability, or the inability of any future collaborators, to enroll a sufficient number of patients for our, or their, clinical trials could result in significant delays or may require us or them to abandon one or more clinical trials altogether. Enrollment delays in our, or their, clinical trials may result in increased development costs for our product candidates, delay or halt the development of and approval processes for our product candidates and jeopardize our, or any future collaborators', ability to commence sales of and generate revenues from our product candidates, which could cause the value of our company to decline and limit our ability to obtain additional financing, if needed.

Results of preclinical studies and early clinical trials may not be predictive of results of future late-stage clinical trials.

We have not conducted any clinical trials, and all our data results from preclinical studies. We cannot assure you that we will be able to replicate in human clinical trials the results we observed in animal models. Moreover, the outcome of preclinical studies and early clinical trials may not be predictive of the success of later clinical trials, and interim results of clinical trials do not necessarily predict success in future clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials after achieving positive results in earlier development, and we could face similar setbacks. The design of a clinical trial can determine whether its results will support approval of a product and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. We have limited experience in designing clinical trials and may be unable to design and execute a clinical trial to support marketing approval. In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses. Many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval for the product candidates. Even if we, or any future collaborators, believe that the results of clinical trials for our product candidates warrant marketing approval, the FDA or comparable foreign regulatory authorities may disagree and may not grant marketing approval of our product candidates.

In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants. If we fail to receive positive results in clinical trials of our product candidates, the development timeline and regulatory approval and commercialization prospects for our most advanced product candidates, and, correspondingly, our business and financial prospects would be negatively impacted.

We have never obtained marketing approval for a product candidate and we may be unable to obtain, or may be delayed in obtaining, marketing approval for our current product candidate or any future product candidates that we, or any future collaborators, may develop.

We have never obtained marketing approval for a product candidate. It is possible that the FDA may refuse to accept for substantive review any new drug applications, or NDAs, that we submit for our product candidates or may conclude after review of our data that our application is insufficient to obtain marketing approval of our product candidates. If the FDA does not accept or approve our NDAs for any of our product candidates, it may require that we conduct additional clinical trials, preclinical studies or manufacturing validation studies and submit that data before it will reconsider our applications. Depending on the extent of these or any other FDA-required trials or studies, approval of any NDA or application that we submit may be delayed by several years, or may require us to expend more resources than we have available. It is also possible that additional trials or studies, if performed and completed, may not be considered sufficient by the FDA to approve our NDAs. In addition, our development programs contemplate the development of companion diagnostics by our third-party collaborators. Companion diagnostics are subject to regulation as medical devices and must themselves

be approved for marketing by the FDA or certain other foreign regulatory agencies before we may commercialize our product candidates.

Any delay in obtaining, or an inability to obtain, marketing approvals would prevent us from commercializing our product candidates or any companion diagnostics, generating revenues and achieving and sustaining profitability. If any of these outcomes occurs, we may be forced to abandon our development efforts for our product candidates, which could significantly harm our business.

Even if any product candidates that we, or any future collaborators, may develop receive marketing approval, we or others may later discover that the product is less effective than previously believed or causes undesirable side effects that were not previously identified, which could compromise our ability, or that of any future collaborators, to market the product.

Clinical trials of SY-1425, any product candidates we may develop under our CDK7 inhibitor program or any future product candidates that we, or any future collaborators, may develop will be conducted in carefully defined subsets of patients who have agreed to enter into clinical trials. Consequently, it is possible that our clinical trials, or those of any future collaborator, may indicate an apparent positive effect of a product candidate that is greater than the actual positive effect, if any, or alternatively fail to identify undesirable side effects. If, following approval of a product candidate, we, or others, discover that the product is less effective than previously believed or causes undesirable side effects that were not previously identified, any of the following adverse events could occur:

- regulatory authorities may withdraw their approval of the product or seize the product;
- we, or any future collaborators, may be required to recall the product, change the way the product is administered or conduct additional clinical trials;
- additional restrictions may be imposed on the marketing of, or the manufacturing processes for, the particular product;
- we may be subject to fines, injunctions or the imposition of civil or criminal penalties;
- regulatory authorities may require the addition of labeling statements, such as a "black box" warning or a contraindication;
- we, or any future collaborators, may be required to create a Medication Guide outlining the risks of the previously unidentified side effects for distribution to patients;
- we, or any future collaborators, could be sued and held liable for harm caused to patients;
- the product may become less competitive; and
- our reputation may suffer.

Any of these events could harm our business and operations, and could negatively impact our stock price.

Even if our current product candidate, or any future product candidate that we, or any future collaborators, may develop receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.

We have never commercialized a product, and even if one of our product candidates is approved by the appropriate regulatory authorities for marketing and sale, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. Physicians are often reluctant to switch their patients from existing therapies even when new and potentially more effective or convenient treatments enter the market. Further, patients often acclimate to the therapy that they are currently taking and do not want to switch unless their physicians recommend switching products or they are required to switch therapies due to lack of reimbursement for existing therapies.



Efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may not be successful. If any of our product candidates is approved but does not achieve an adequate level of market acceptance, we may not generate significant revenues and we may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of the product;
- the potential advantages of the product compared to competitive therapies;
- the prevalence and severity of any side effects;
- whether the product is designated under physician treatment guidelines as a first-, second- or third-line therapy;
- our ability, or the ability of any future collaborators, to offer the product for sale at competitive prices;
- the product's convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try, and of physicians to prescribe, the product;
- limitations or warnings, including distribution or use restrictions, contained in the product's approved labeling;
- the strength of sales, marketing and distribution support;
- · changes in the standard of care for the targeted indications for the product; and
- availability and amount of coverage and reimbursement from government payors, managed care plans and other third-party payors.

We may expend our limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we intend to focus on developing product candidates for specific indications that we identify as most likely to succeed, in terms of both their potential for marketing approval and commercialization. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that may prove to have greater commercial potential.

Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to the product candidate.

If we are unable to establish sales, marketing and distribution capabilities or enter into sales, marketing and distribution arrangements with third parties, we may not be successful in commercializing any product candidates if approved.

We do not have a sales, marketing or distribution infrastructure and have no experience in the sale, marketing or distribution of pharmaceutical products. To achieve commercial success for any approved product, we must either develop a sales and marketing organization or outsource these functions to third parties. We plan to build focused capabilities to commercialize development programs for certain indications where we believe that the medical specialists for the indications are sufficiently concentrated to allow us to effectively promote the product with a targeted sales team. The

development of sales, marketing and distribution capabilities will require substantial resources, will be time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing and distribution capabilities is delayed or does not occur for any reason, we could have prematurely or unnecessarily incurred these commercialization costs. This may be costly, and our investment could be lost if we cannot retain or reposition our sales and marketing personnel. In addition, we may not be able to hire or retain a sales force in the United States that is sufficient in size or has adequate expertise in the medical markets that we plan to target. If we are unable to establish or retain a sales force and marketing and distribution capabilities, our operating results may be adversely affected. If a potential partner has development or commercialization expertise that we believe is particularly relevant to one of our products, then we may seek to collaborate with that potential partner even if we believe we could otherwise develop and commercialize the product independently.

In certain indications, we plan to seek to enter into collaborations that we believe may contribute to our ability to advance development and ultimately commercialize our product candidates. We also intend to seek to enter into collaborations where we believe that realizing the full commercial value of our development programs will require access to broader geographic markets or the pursuit of broader patient populations or indications. As a result of entering into arrangements with third parties to perform sales, marketing and distribution services, our product revenues or the profitability of these product revenues may be lower, perhaps substantially lower, than if we were to directly market and sell products in those markets. Furthermore, we may be unsuccessful in entering into the necessary arrangements with third parties or may be unable to do so on terms that are favorable to us. In addition, we may have little or no control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively.

If we do not establish sales, marketing and distribution capabilities, either on our own or in collaboration with third parties, we will not be successful in commercializing any of our product candidates that receive marketing approval.

We face substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than we do.

The development and commercialization of new products is highly competitive. We expect that we, and any future collaborators, will face significant competition from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide with respect to any of our product candidates that we, or any future collaborators, may seek to develop or commercialize in the future. Specifically, there are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of product candidates for the treatment of the key indications of our most advanced programs, such as the use of chemotherapy followed by stem cell transplantation in the case of AML, MDS and ALL. SY-1425, may also face competition from other drug candidates currently in clinical development for relapsed or refractory AML and MDS, including drug candidates in development from Daiichi Sankyo Company, Limited, Boehringer Ingelheim GmbH, Agios Pharmaceuticals, Inc., Novartis AG, Astellas Pharma Inc. and Karyopharm Therapeutics Inc. We are aware of only one other selective RARa program, which is being undertaken by IO Therapeutics, Inc. and which appears to be in early preclinical development. Our CDK7 inhibitors may face competition from other drug candidates currently in clinical development for relapsed or refractory AML and MDS or from other drug candidates currently in clinical development for relapsed or refractory AML and MDS or from other drug candidates currently in development for relapsed or refractory AML and MDS or from other drug candidates currently in development for relapsed or refractory AML and MDS or from other drug candidates currently in Clinical development for relapsed or refractory AML and MDS or from other drug candidates currently in generation for neapset of only one other CDK7 inhibitor program being undertaken by a German academic group, Lead Discovery Center, which appears to be in early preclinical development.

Our competitors may succeed in developing, acquiring or licensing technologies and products that are more effective, have fewer side effects or more tolerable side effects or are less costly than any

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product candidates that we are currently developing or that we may develop, which could render our product candidates obsolete and noncompetitive.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer or more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we, or any future collaborators, may develop. Our competitors also may obtain FDA or other marketing approval for their products before we, or any future collaborators, are able to obtain approval for ours, which could result in our competitors establishing a strong market position before we, or any future collaborators, are able to enter the market.

Many of our existing and potential future competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining marketing approvals and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, the development of our product candidates.

Even if we, or any future collaborators, are able to commercialize any product candidate that we, or they, develop, the product may become subject to unfavorable pricing regulations, third-party payor reimbursement practices or healthcare reform initiatives, any of which could harm our business.

The commercial success of our product candidates will depend substantially, both domestically and abroad, on the extent to which the costs of our product candidates will be paid by third-party payors, including government health care programs and private health insurers. If coverage is not available, or reimbursement is limited, we, or any future collaborators, may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us, or any future collaborators, to establish or maintain pricing sufficient to realize a sufficient return on our or their investments. In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors and coverage and reimbursement levels for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time consuming and costly process that may require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

There is significant uncertainty related to third-party payor coverage and reimbursement of newly approved drugs. Marketing approvals, pricing and reimbursement for new drug products vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we, or any future collaborators, might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay commercial launch of the product, possibly for lengthy time periods, which may negatively impact the revenues we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability or the ability of any future collaborators to recoup our or their investment in one or more product candidates, even if our product candidates obtain marketing approval.

Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Therefore, our ability, and the ability of any future collaborators, to commercialize successfully any of our product candidates will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from third-party payors. Third-party payors decide which medications they will cover and establish reimbursement levels. The healthcare industry is acutely focused on cost containment, both in the United States and elsewhere. Government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications, which could affect our ability or that of any future collaborators to sell our product candidates profitably. These payors may not view our products, if any, as cost-effective, and coverage and reimbursement may not be available to our customers, or those of any future collaborators, or may not be sufficient to allow our products, if any, to be marketed on a competitive basis. Cost-control initiatives could cause us, or any future collaborators, to decrease the price we, or they, might establish for products, which could result in lower than anticipated product revenues. If the prices for our products, if any, decrease or if governmental and other third-party payors do not provide coverage or adequate reimbursement, our prospects for revenue and profitability will suffer.

There may also be delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the indications for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Reimbursement rates may vary, by way of example, according to the use of the product and the clinical setting in which it is used. Reimbursement rates may also be based on reimbursement levels already set for lower cost drugs or may be incorporated into existing payments for other services.

In addition, increasingly, third-party payors are requiring higher levels of evidence of the benefits and clinical outcomes of new technologies and are challenging the prices charged. Further, the net reimbursement for drug products may be subject to additional reductions if there are changes to laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. An inability to promptly obtain coverage and adequate payment rates from both government-funded and private payors for any of our product candidates for which we, or any future collaborator, obtain marketing approval could significantly harm our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

Product liability lawsuits against us could divert our resources, cause us to incur substantial liabilities and limit commercialization of any products that we may develop.

We will face an inherent risk of product liability claims as a result of the clinical testing of our product candidates despite obtaining appropriate informed consents from our clinical trial participants. We will face an even greater risk if we or any future collaborators commercially sell any product that we may or they may develop. For example, we may be sued if any product we develop allegedly causes injury or is found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our product candidates or products that we may develop;
- injury to our reputation and significant negative media attention;

- withdrawal of clinical trial participants;
- significant costs to defend resulting litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue;
- reduced resources of our management to pursue our business strategy; and
- the inability to commercialize any products that we may develop.

Although we intend to maintain clinical trial liability insurance coverage in the amount of up to \$5.0 million in the aggregate, this insurance may not fully cover potential liabilities that we may incur. The cost of any product liability litigation or other proceeding, even if resolved in our favor, could be substantial. We will need to increase our insurance coverage if and when we commercialize any product that receives marketing approval. In addition, insurance coverage is becoming increasingly expensive. If we are unable to obtain or maintain sufficient insurance coverage at an acceptable cost or to otherwise protect against potential product liability claims, it could prevent or inhibit the development and commercial production and sale of our product candidates, which could harm our business, financial condition, results of operations and prospects.

If the FDA or comparable foreign regulatory authorities approve generic versions of any of our products that receive marketing approval, or such authorities do not grant our products appropriate periods of data exclusivity before approving generic versions of our products, the sales of our products could be adversely affected.

Once an NDA is approved, the product covered thereby becomes a "reference-listed drug" in the FDA's publication, "Approved Drug Products with Therapeutic Equivalence Evaluations," or the Orange Book. Manufacturers may seek approval of generic versions of reference-listed drugs through submission of abbreviated new drug applications, or ANDAs, in the United States. In support of an ANDA, a generic manufacturer need not conduct clinical trials. Rather, the applicant generally must show that its product has the same active ingredient(s), dosage form, strength, route of administration and conditions of use or labeling as the reference-listed drug and that the generic version is bioequivalent to the reference-listed drug, meaning it is absorbed in the body at the same rate and to the same extent. Generic products may be significantly less costly to bring to market than the reference-listed drug and companies that produce generic products are generally able to offer them at lower prices. Thus, following the introduction of a generic drug, a significant percentage of the sales of any branded product or reference-listed drug may be typically lost to the generic product.

The FDA may not approve an ANDA for a generic product until any applicable period of non-patent exclusivity for the referencelisted drug has expired. The Federal Food, Drug, and Cosmetic Act, or FDCA, provides a period of five years of non-patent exclusivity for a new drug containing a new chemical entity, or NCE. Specifically, in cases where such exclusivity has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification that a patent covering the reference-listed drug is either invalid or will not be infringed by the generic product, in which case the applicant may submit its application four years following approval of the reference-listed drug. Because the composition of matter patent for SY-1425 has expired, it is possible that another applicant could obtain approval of tamibarotene from the FDA before us, in which case our NDA would not be eligible for NCE exclusivity. See "—Risks Related to Our Intellectual Property—We do not have composition of matter patent protection with respect to SY-1425." If any product we develop does not receive five years of NCE exclusivity, the FDA may approve generic versions of such product three years after its date of approval, subject to the requirement that the ANDA applicant certifies to any patents listed for our products in the Orange Book. Manufacturers may seek to launch these generic products following the expiration of the applicable marketing exclusivity period, even if we still have patent protection for our product.

Competition that our products may face from generic versions of our products could negatively impact our future revenue, profitability and cash flows and substantially limit our ability to obtain a return on our investments in those product candidates.

Risks Related to Our Dependence on Third Parties

We expect to rely on third parties to conduct our clinical trials and certain aspects of our research and preclinical testing, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, research or testing.

We expect to rely on third parties, such as contract research organizations, clinical data management organizations, medical institutions and clinical investigators, to conduct our clinical trials. We currently rely and expect to continue to rely on third parties to conduct certain aspects of our research and preclinical testing. Any of these third parties may terminate their engagements with us at any time. If we need to enter into alternative arrangements, it would delay our product development activities.

Our reliance on these third parties for research and development activities will reduce our control over these activities, but will not relieve us of our responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires us to comply with standards, commonly referred to as good clinical practices, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our medicines.

We also expect to rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of our product candidates or commercialization of our medicines, producing additional losses and depriving us of potential product revenue.

We will be required to obtain all the active pharmaceutical ingredients for our lead product candidate, SY-1425, from TMRC, a sole source supplier, and we have not yet entered into a supply agreement with TMRC.

Under the TMRC license agreement pursuant to which we obtained an exclusive license under patent rights, data, regulatory filings and other intellectual property for the development and commercialization of SY-1425 in North America and Europe for the treatment of human cancer indications, we agreed to enter into negotiations for a supply agreement obligating us to purchase all of our clinical and commercial requirements for active pharmaceutical ingredients for SY-1425 from TMRC. However, we may not be able to enter into a supply agreement on commercially reasonable terms, or at all, in time for the commencement of such clinical trial. We anticipate entering into this supply agreement prior to the commencement of our Phase 2 clinical trial of SY-1425.

Under the TMRC license agreement, we and TMRC agreed to negotiate a reasonable risk mitigation strategy and plan, which would likely include the selection and oversight of back-up suppliers to avoid potential interruptions in the supply of active pharmaceutical ingredients for SY-1425. Until any such strategy and plan is implemented, we will need to rely entirely on TMRC and its suppliers for our clinical and any commercial supplies of the active pharmaceutical ingredients in SY-1425. Toko Pharmaceuticals Ind. Co. Ltd., or Toko, is the owner of patent rights currently licensed to TMRC, from which our license agreement with TMRC derives its rights, and manufactures the active pharmaceutical ingredients of SY-1425, which it then provides to TMRC. We and TMRC have agreed to use commercially reasonable efforts to enable us to enter into a standby license with Toko, which we refer to as the standby license, whereby Toko would agree to cooperate with us to establish alternative supply arrangements if TMRC fails to supply active pharmaceutical ingredients for SY-1425. However, Toko is under no obligation to enter into the standby license with us. If TMRC is unable to supply the active pharmaceutical ingredients for SY-1425, or if we are unable to procure the active pharmaceutical ingredients for SY-1425 from TMRC on commercially favorable terms, we will need to identify, qualify, and obtain FDA approval of an alternative supplier of the active pharmaceutical ingredients for SY-1425. If we are not able to secure Toko's consent to do so, or we are otherwise unable or delayed, the supply of SY-1425 may be interrupted, which could result in delays in the clinical development and any future commercialization of SY-1425.

We currently depend on third-party manufacturers to produce our preclinical and clinical drug supplies and we intend to rely upon third-party manufacturers to produce commercial supplies of any approved product candidates.

We do not have any manufacturing facilities. We currently rely, and expect to continue to rely, on third-party manufacturers for the manufacture of our product candidates for preclinical and clinical testing and for commercial supply of any of these product candidates for which we or our collaborators obtain marketing approval.

We do not currently have a long term supply agreement with any third-party manufacturers. For a discussion of additional risks relating to the supply of active pharmaceutical ingredients for SY-1425, see "—We will be required to obtain all the active pharmaceutical ingredients for our lead product candidate, SY-1425, from TMRC, a sole source supplier, and we have not yet entered into a supply agreement with TMRC." We may be unable to establish any agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party;
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us; and
- reliance on the third party for regulatory compliance, quality assurance, and safety and pharmacovigilance reporting.

Third-party manufacturers may not be able to comply with current good manufacturing practices, or cGMP, regulations or similar regulatory requirements outside the United States. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or medicines, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our medicines and harm our business and results of operations.

Any medicines that we may develop may compete with other product candidates and products for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval. We do not currently have arrangements in place for redundant supply for bulk drug substances. If any one of our current contract manufacturers cannot perform as agreed, we may be required to replace that manufacturer. Although we believe that there are several potential alternative manufacturers who could manufacture our product candidates, we may incur added costs and delays in identifying and qualifying any such replacement.

Our current and anticipated future dependence upon others for the manufacture of our product candidates or medicines may adversely affect our future profit margins and our ability to commercialize any medicines that receive marketing approval on a timely and competitive basis.

We expect to seek to establish collaborations and, if we are not able to establish them on commercially reasonable terms, we may have to alter our development and commercialization plans.

We expect to seek one or more collaborators for the development and commercialization of one or more of our product candidates. Likely collaborators may include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. In addition, if we are able to obtain marketing approval for product candidates from foreign regulatory authorities, we intend to enter into strategic relationships with international biotechnology or pharmaceutical companies for the commercialization of such product candidates outside of the United States.

We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaborator's evaluation of a number of factors. Those factors may include the potential differentiation of our product candidate from competing product candidates, design or results of clinical trials, the likelihood of approval by the FDA or comparable foreign regulatory authorities and the regulatory pathway for any such approval, the potential market for the product candidate, the costs and complexities of manufacturing and delivering the product to patients and the potential of competing products. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available for collaboration and whether such a collaboration could be more attractive than the one with us for our product candidate. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

Collaborations are complex and time consuming to negotiate and document.

Any collaboration agreements that we enter into in the future may contain, restrictions on our ability to enter into potential collaborations or to otherwise develop specified product candidates. Further, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. We may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of the product candidate for which we are seeking to collaborate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense.

If we enter into collaborations with third parties for the development and commercialization of any product candidates, our prospects with respect to those product candidates will depend in significant part on the success of those collaborations.

We expect to enter into collaborations for the development and commercialization of one or more product candidates we may develop. We have not entered into any collaborations to date. If we enter into such collaborations, we will have limited control over the amount and timing of resources that our collaborators will dedicate to the development or commercialization of our product candidates. Our ability to generate revenues from these arrangements will depend on any future collaborators' abilities to successfully perform the functions assigned to them in these arrangements. In addition, any future collaborators may have the right to abandon research or development projects and terminate applicable agreements, including funding obligations, prior to or upon the expiration of the agreed upon terms.

Collaborations involving our product candidates pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs, based on clinical trial results, changes in the collaborators' strategic focus or available funding or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or termination of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all. If any future collaborator of ours is involved in a business combination, it could decide to delay, diminish or terminate the development or commercialization of any product candidate licensed to it by us.



Risks Related to Our Intellectual Property

If we fail to comply with our obligations under our existing and any future intellectual property licenses with third parties, we could lose license rights that are important to our business.

We are party to several license agreements under which we license patent rights and other intellectual property related to or business, including: a license agreement with Dana-Farber under which we were granted an exclusive worldwide license under specified patents relating to CDK7 inhibitors and JNK inhibitors; a license agreement with the Whitehead Institute for Biomedical Research, or Whitehead, and the Dana-Farber Cancer Institute, or Dana-Farber, pursuant to which we were granted a predominantly exclusive, with certain nonexclusive exceptions (see corresponding agreement summary in "Business-License Agreements-Whitehead Institute for Biomedical Research and Dana-Farber Cancer Institute, Inc.") worldwide license under specified patents relating to modulators of Myc/Max Screen and relating to Chem-Seq; a license agreement with Whitehead pursuant to which we were granted an exclusive worldwide license under specified patents relating to super-enhancers until April 2016, which license can remain exclusive thereafter, on a field-by-field basis, as long as we can demonstrate that we are using commercially reasonable efforts in the applicable field; and the TMRC license agreement, pursuant to which we were granted a license under specified patent rights, data, regulatory filings and other intellectual property for the North American and European development and commercialization of SY-1425 for the treatment of human cancer indications. We may enter into additional license agreements in the future. Our license agreements impose, and we expect that future license agreements will impose, various diligence, milestone payment, royalty, insurance and other obligations on us. If we fail to comply with our obligations under these licenses, our licensors may have the right to terminate these license agreements, in which event we might not be able to market any product that is covered by these agreements, or our licensors may convert the license to a non-exclusive license, which could adversely affect the value of the product candidate being developed under the license agreement. Termination of these license agreements or reduction or elimination of our licensed rights may also result in our having to negotiate new or reinstated licenses with less favorable terms.

We do not have composition of matter patent protection with respect to SY-1425.

We own certain patents and patent applications with claims directed to specific methods of using SY-1425 and we expect to have marketing exclusivity from the FDA and EMA for a period of seven and ten years, respectively because SY-1425 has not been approved in these markets. However, composition of matter protection in the United States and elsewhere covering SY-1425 has expired. We may be limited in our ability to list our patents in the FDA's Orange Book if the use of our product, consistent with its FDA-approved label, would not fall within the scope of our patent claims. Also, our competitors may be able to offer and sell products so long as these competitors do not infringe any other patents that we (or third parties) hold, including patents with claims directed to the manufacture of SY-1425 and/or method of use patents. In general, method of use patents are more difficult to enforce than composition of matter patents because, for example, of the risks that the FDA may approve alternative uses of the subject compounds not covered by the method of use patents, and others may engage in off-label sale or use of the subject compounds. Physicians are permitted to prescribe an approved product for uses that are not described in the product's labeling. Although off-label prescriptions may infringe our method of uses that are not covered by our patents would limit our ability to generate revenue from the sale of SY-1425, if approved for commercial sale. Off-label sales would limit our ability to generate revenue from the sale of SY-1425, if approved for commercial sale.

Our intellectual property licenses with third parties may be subject to disagreements over contract interpretations, which could narrow the scope of our rights to the relevant intellectual property or technology or increase our financial or other obligations to our licensors.

The agreements under which we currently license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could harm our business, financial condition, results of operations and prospects.

We may not be successful in obtaining or maintaining necessary rights to current or future product candidates through acquisitions and in-licenses.

We currently have rights to certain intellectual property, through licenses from third parties, to develop SY-1425 and product candidates under our CDK7 inhibitor program. Because our programs may require the use of proprietary rights by third parties, the growth of our business likely will depend, in part, on our ability to acquire, in-license or use these proprietary rights. We may be unable to acquire or in-license any compositions, methods of use, processes or other intellectual property rights from third parties that we identify as necessary for any product candidates. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment.

We sometimes collaborate with non-profit and academic institutions to accelerate our preclinical research or development under written agreements with these institutions. Typically, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Regardless of such option, we may be unable to negotiate a license within the specified timeframe or under terms that are acceptable to us or we may decide not to execute such option if we believe such license is not necessary to pursue our program. If we are unable or opt not to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program.

If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may be required to expend significant time and resources to redesign our product candidates or the methods for manufacturing them or to develop or license replacement technology, all of which may not be feasible on a technical or commercial basis. If we are unable to do so, we may be unable to develop or commercialize the affected product candidate, which could harm our business significantly.

We depend upon our license with TMRC, and we may not be able to maintain that license.

We and TMRC have agreed to use commercially reasonable efforts to enter into a standby license with Toko such that if at any time the license agreement between Toko and TMRC relating to the SY-1425 rights, which we refer to as the Toko license agreement, that TMRC has licensed to us terminates or otherwise ceases to be in effect for any reason, Toko would agree to grant directly to us such rights and licenses with respect to SY-1425 as are necessary for us to continue to develop SY-1425. However, we have not yet entered into the standby license with Toko, and there is no assurance that we will do so on terms that are acceptable to us, or at all. In the absence of the standby

license, if the TMRC license agreement terminates then we may lose rights to SY-1425 that may be necessary to the development and commercialization of SY-1425, which could have a material adverse impact on our business.

If we are unable to obtain and maintain sufficient patent protection for any product candidates, or if the scope of the patent protection is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our product candidates may be adversely affected.

Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our proprietary product candidates. If we do not adequately protect our intellectual property, our competitors may be able to erode or negate any competitive advantage we may have, which could harm our business and ability to achieve profitability. To protect our proprietary position, we file patent applications in the United States and abroad related to our novel product candidates that are important to our business. We also license or purchase patent applications filed by others. The patent applications at a reasonable cost or in a timely manner.

Agreements through which we license patent rights may not give us control over patent prosecution or maintenance, so that we may not be able to control which claims or arguments are presented and may not be able to secure, maintain, or successfully enforce necessary or desirable patent protection from those patent rights. We have not had and do not have primary control over patent prosecution and maintenance for certain of the patents and patent applications we license, and therefore cannot guarantee that these patents and applications will be prosecuted in a manner consistent with the best interests of our business. We cannot be certain that patent prosecution and maintenance activities by our licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents.

We, or any future partners, collaborators or licensees, may fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection for them. Therefore, we may miss potential opportunities to strengthen our patent position.

It is possible that defects of form in the preparation or filing of our patents or patent applications may exist, or may arise in the future, for example with respect to proper priority claims, inventorship, claim scope or patent term adjustments. If we or our partners, collaborators, licensees, or licensors, whether current or future, fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated. If our partners, collaborators, licensees or licensors, are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised. If there are material defects in the form, preparation, prosecution, or enforcement of our patents or patent applications, such patents may be invalid and/or unenforceable, and such applications may never result in valid, enforceable patents. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain. No consistent policy regarding the breadth of claims allowed in biotechnology and pharmaceutical patents has emerged to date in the United States or in many foreign jurisdictions. In addition, the determination of patent rights with respect to pharmaceutical compounds commonly involves complex legal and factual questions, which has in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain.

Pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Assuming the other requirements for patentability are met, currently, the first to file a patent application is generally entitled to the patent. However, prior to March 16, 2013, in the United States, the first to invent was entitled to the patent. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases, not at all. Therefore, we cannot be certain that we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. Similarly, we cannot be certain that parties from whom we do or may license or purchase patent rights were the first to make relevant claimed inventions, or were the first to file for patent protection for them. If third parties have filed patent applications on inventions claimed in our patents or applications on or before March 15, 2013, an interference proceeding in the United States can be initiated by such third parties to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. If third parties have filed such applications after March 15, 2013, a derivation proceeding in the United States can be initiated by such third parties to determine who was derived from theirs.

Moreover, because the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, our patents or pending patent applications may be challenged in the courts or patent offices in the United States and abroad. There is no assurance that all of the potentially relevant prior art relating to our patents and patent applications has been found. If such prior art exists, it may be used to invalidate a patent, or may prevent a patent from issuing from a pending patent application. For example, such patent filings may be subject to a third-party preissuance submission of prior art to the U.S. Patent and Trademark Office, or USPTO, to other patent offices around the world. Alternately or additionally, we may become involved in post-grant review procedures, oppositions, derivations, proceedings, reexaminations, *inter partes* review or interference proceedings, in the United States or elsewhere, challenging patents or patent applications in which we have rights, including patents on which we rely to protect our business. An adverse determination in any such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. In addition, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized.

Pending and future patent applications may not result in patents being issued which protect our business, in whole or in part, or which effectively prevent others from commercializing competitive products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. In addition, the laws of foreign countries may not protect our rights to the same extent or in the same manner as the laws of the United States.

Issued patents that we have or may obtain or license may not provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner. Our competitors may also seek approval to market their own products similar to or otherwise competitive with our products. Alternatively, our competitors may seek to market generic versions of any approved products by submitting ANDAs to the FDA in which they claim that patents owned or licensed by us are invalid, unenforceable or not infringed. In these circumstances, we may need to defend or assert our patents, or both, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or other

agency with jurisdiction may find our patents invalid or unenforceable, or that our competitors are competing in a non-infringing manner. Thus, even if we have valid and enforceable patents, these patents still may not provide protection against competing products or processes sufficient to achieve our business objectives. We are aware of a third party that is offering super-enhancer identification and analysis services, which we believe infringe our recently issued in-licensed United States patent relating to this subject matter. We are in communication with that third party and are seeking to have them cease offering those services in light of our issued patent. If we are unsuccessful we may be required to file infringement claims against that party with all of the associated risks of patent infringement litigation set forth herein. If that party continues to offer these services, it may affect our ability to attract corporate partners who are interested in super-enhancer identification and analysis and may negatively affect the value of our technology platform and therefore harm our business.

Pursuant to the terms of some of our license agreements with third parties, some of our third party licensors have the right, but not the obligation in certain circumstances to control enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents. Even if we are permitted to pursue such enforcement or defense, we will require the cooperation of our licensors, and cannot guarantee that we would receive it and on what terms. We cannot be certain that our licensors will allocate sufficient resources or prioritize their or our enforcement of such patents or defense of such claims to protect our interests in the licensed patents. If we cannot obtain patent protection, or enforce existing or future patents against third parties, our competitive position and our financial condition could suffer.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed.

In addition to the protection afforded by patents, we also rely on trade secret protection for certain aspects of our technology platform, including certain aspects of our gene control platform. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, consultants, independent contractors, advisors, contract manufacturers, suppliers and other third parties. We also enter into confidentiality and invention or patent assignment agreements with employees and certain consultants. Any party with whom we have executed such an agreement may breach that agreement and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time consuming, and the outcome is unpredictable. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating the trade secret. Further, if any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such third party, or those to whom they communicate such technology or information, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our business and competitive position could be harmed.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents, trademarks, copyrights or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming and divert the time and attention of our management and scientific personnel. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents, in addition to counterclaims asserting that our patents are invalid or unenforceable, or both. In any patent infringement proceeding, there is

a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patent claims do not cover the invention. An adverse outcome in a litigation or proceeding involving one or more of our patents could limit our ability to assert those patents against those parties or other competitors, and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

Even if we establish infringement, the court may decide not to grant an injunction against further infringing activity and instead award only monetary damages, which may or may not be an adequate remedy. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could adversely affect the price of shares of our common stock. Moreover, there can be no assurance that we will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded. Even if we ultimately prevail in such claims, the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings.

If we are sued for infringing intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing our product candidates.

Our commercial success depends, in part, on our ability to develop, manufacture, market and sell our product candidates and use our gene control technology without infringing the intellectual property and other proprietary rights of third parties. Third parties may have U.S. and non-U.S. issued patents and pending patent applications relating to compounds and methods of use for the treatment of the disease indications for which we are developing our product candidates. If any third-party patents or patent applications are found to cover our product candidates or their methods of use, we may not be free to manufacture or market our product candidates as planned without obtaining a license, which may not be available on commercially reasonable terms, or at all.

There is a substantial amount of intellectual property litigation in the biotechnology and pharmaceutical industries, and we may become party to, or threatened with, litigation or other adversarial proceedings regarding intellectual property rights with respect to our product candidates, including interference proceedings before the USPTO. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may be accused of infringing. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Accordingly, third parties may assert infringement claims against us based on existing or future intellectual property rights. The outcome of intellectual property litigation is subject to uncertainties that cannot be adequately quantified in advance. The pharmaceutical and biotechnology industries have produced a significant number of patents, and it may not always be clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to

interpretation by the courts, and the interpretation is not always uniform. If we were sued for patent infringement, we would need to demonstrate that our product candidates, products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid or unenforceable, and we may not be able to do this. Proving invalidity is difficult. For example, in the United States, proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel could be diverted in pursuing these proceedings, which could significantly harm our business and operating results. In addition, we may not have sufficient resources to bring these actions to a successful conclusion.

If we are found to infringe a third party's intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing or commercializing the infringing product candidate or product. Alternatively, we may be required to obtain a license from such third party in order to use the infringing technology and continue developing, manufacturing or marketing the infringing product candidate or product. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. Alternatively or additionally, it could include terms that impede or destroy our ability to compete successfully in the commercial marketplace. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

Changes to the patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involves both technological and legal complexity and is therefore costly, time consuming and inherently uncertain. Recent patent reform legislation in the United States, including the Leahy-Smith America Invents Act, or the America Invents Act, could increase those uncertainties and costs. The America Invents Act was signed into law on September 16, 2011, and many of the substantive changes became effective on March 16, 2013. The America Invents Act reforms United States patent law in part by changing the U.S. patent system from a "first to invent" system to a "first inventor to file" system, expanding the definition of prior art, and developing a post-grant review system. This legislation changes United States patent law in a way that may weaken our ability to obtain patent protection in the United States for those applications filed after March 16, 2013.

Further, the America Invents Act created new procedures to challenge the validity of issued patents in the United States, including post-grant review and *inter partes* review proceedings, which some third parties have been using to cause the cancellation of selected or all claims of issued patents of competitors. For a patent with an effective filing date of March 16, 2013 or later, a petition for post-grant review can be filed by a third party in a nine month window from issuance of the patent. A petition for *inter partes* review can be filed immediately following the issuance of a patent if the patent has an effective filing date prior to March 16, 2013. A petition for *inter partes* review can be filed after the nine month period for filing a post-grant review petition has expired for a patent with an effective filing date of March 16, 2013 or later. Post-grant review proceedings can be brought on any ground of invalidity, whereas *inter partes* review proceedings can only raise an invalidity challenge based on published prior art and patents. These adversarial actions at the USPTO review patent claims without the presumption of validity afforded to U.S. patents in lawsuits in U.S. federal courts, and use a lower

burden of proof than used in litigation in U.S. federal courts. Therefore, it is generally considered easier for a competitor or third party to have a U.S. patent invalidated in a USPTO post-grant review or *inter partes* review proceeding than invalidated in a litigation in a U.S. federal court. If any of our patents are challenged by a third party in such a USPTO proceeding, there is no guarantee that we or our licensors or collaborators will be successful in defending the patent, which would result in a loss of the challenged patent right to us.

In addition, recent court rulings in cases such as Association for Molecular Pathology v. Myriad Genetics, Inc.; BRCA1- & BRCA2-Based Hereditary Cancer Test Patent Litigation; and Promega Corp. v. Life Technologies Corp. have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents once obtained. Depending on future actions by the U.S. Congress, the U.S. courts, the USPTO and the relevant lawmaking bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

We may not be able to enforce our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. The requirements for patentability may differ in certain countries, particularly in developing countries; thus, even in countries where we do pursue patent protection, there can be no assurance that any patents will issue with claims that cover our products.

Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws. Additionally, laws of some countries outside of the United States and Europe do not afford intellectual property protection to the same extent as the laws of the United States and Europe. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of some countries, including India, China and other developing countries, do not favor the enforcement of patents and other intellectual property rights. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. Consequently, we may not be able to prevent third parties from practicing our inventions in certain countries outside the United States and Europe. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop and market their own products and, further, may export otherwise infringing products to territories where we have patent protection, if our ability to enforce our patents to stop infringing activities is inadequate. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Agreements through which we license patent rights may not give us sufficient rights to permit us to pursue enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents (or control of enforcement or defense) of such patent rights in all relevant jurisdictions as requirements may vary.

Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and resources from other aspects of our business. Moreover, such proceedings could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims

against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Furthermore, while we intend to protect our intellectual property rights in major markets for our products, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our products. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate.

Patent terms may be inadequate to protect our competitive position on our products for an adequate amount of time.

Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. We expect to seek extensions of patent terms in the United States and, if available, in other countries where we are prosecuting patents. In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the normal expiration of the patent, which is limited to the approved indication (or any additional indications approved during the period of extension). However, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case.

We may be subject to claims by third parties asserting that our employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our employees and our licensors' employees, including our senior management, were previously employed at universities or at other biotechnology or pharmaceutical companies, some of which may be competitors or potential competitors. Some of these employees, including each member of our senior management, executed proprietary rights, non-disclosure and non-competition agreements, or similar agreements, in connection with such previous employment. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such third party. Litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, while we typically require our employees, consultants and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own, which may result in claims by or against us related to the ownership of such intellectual property. If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to our senior management and scientific personnel.

Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and applications are required to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and applications. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process and after a patent has issued. There are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction.

Risks Related to Regulatory Approval and Marketing of Our Product Candidates and Other Legal Compliance Matters

Even if we complete the necessary preclinical studies and clinical trials, the marketing approval process is expensive, time consuming and uncertain and may prevent us or any future collaborators from obtaining approvals for the commercialization of some or all of our product candidates. As a result, we cannot predict when or if, and in which territories, we, or any future collaborators, will obtain marketing approval to commercialize a product candidate.

The research, testing, manufacturing, labeling, approval, selling, marketing, promotion and distribution of products are subject to extensive regulation by the FDA and comparable foreign regulatory authorities. We, and any future collaborators, are not permitted to market our product candidates in the United States or in other countries until we, or they, receive approval of an NDA from the FDA or marketing approval from applicable regulatory authorities outside the United States. Our product candidates are in various stages of development and are subject to the risks of failure inherent in drug development. We have not submitted an application for or received marketing approval for any of our product candidates in the United States or in any other jurisdiction. We have limited experience in conducting and managing the clinical trials necessary to obtain marketing approvals, including FDA approval of an NDA.

The process of obtaining marketing approvals, both in the United States and abroad, is lengthy, expensive and uncertain. It may take many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities. The FDA or other regulatory authorities may determine that our product candidates are not safe and effective, only moderately effective or have undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining marketing approval or prevent or limit commercial use. Moreover, the FDA or other regulatory authorities may fail to approve the companion diagnostics we contemplate developing with partners. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

In addition, changes in marketing approval policies during the development period, changes in or the enactment or promulgation of additional statutes, regulations or guidance or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional

preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Any marketing approval we, or any future collaborators, ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

Any delay in obtaining or failure to obtain required approvals could negatively affect our ability or that of any future collaborators to generate revenue from the particular product candidate, which likely would result in significant harm to our financial position and adversely impact our stock price.

Failure to obtain marketing approval in foreign jurisdictions would prevent our product candidates from being marketed abroad. Any approval we are granted for our product candidates in the United States would not assure approval of our product candidates in foreign jurisdictions.

In order to market and sell our products in the European Union and other foreign jurisdictions, we, and any future collaborators, must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The marketing approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United States, a product must be approved for reimbursement before the product can be approved for sale in that country. We, and any future collaborators, may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. We may file for marketing approvals but not receive necessary approvals to commercialize our products in any market.

We, or any future collaborators, may not be able to obtain orphan drug designation or orphan drug exclusivity for our product candidates and, even if we do, that exclusivity may not prevent the FDA or the EMA from approving competing products.

Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States. We, or any future collaborators, may seek orphan drug designations for product candidates and may be unable to obtain such designations.

Even if we, or any future collaborators, obtain orphan drug designation for a product candidate, we, or they, may not be able to obtain orphan drug exclusivity for that product candidate. Generally, a product with orphan drug designation only becomes entitled to orphan drug exclusivity if it receives the first marketing approval for the indication for which it has such designation, in which case the FDA or the EMA will be precluded from approving another marketing application for the same drug for that indication for the applicable exclusivity period. The applicable exclusivity period is seven years in the United States and ten years in Europe. The European exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan drug exclusivity may be lost if the FDA or the EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

Even if we, or any future collaborators, obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs can be

approved for the same condition and the same drug can be approved for different conditions. Even after an orphan drug is approved, the FDA can subsequently approve the same drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care.

Even if we, or any future collaborators, obtain marketing approvals for our product candidates, the terms of approvals and ongoing regulation of our products may limit how we manufacture and market our products, which could impair our ability to generate revenue.

Once marketing approval has been granted, an approved product and its manufacturer and marketer are subject to ongoing review and extensive regulation. We, and any future collaborators, must therefore comply with requirements concerning advertising and promotion for any of our product candidates for which we or they obtain marketing approval. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, we and any future collaborators will not be able to promote any products we develop for indications or uses for which they are not approved.

In addition, manufacturers of approved products and those manufacturers' facilities are required to comply with extensive FDA requirements, including ensuring that quality control and manufacturing procedures conform to cGMPs, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation and reporting requirements. We, our contract manufacturers, any future collaborators and their contract manufacturers could be subject to periodic unannounced inspections by the FDA to monitor and ensure compliance with cGMPs.

Accordingly, assuming we, or any future collaborators, receive marketing approval for one or more of our product candidates, we, and any future collaborators, and our and their contract manufacturers will continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance and quality control.

If we, and any future collaborators, are not able to comply with post-approval regulatory requirements, we, and any future collaborators, could have the marketing approvals for our products withdrawn by regulatory authorities and our, or any future collaborators', ability to market any future products could be limited, which could adversely affect our ability to achieve or sustain profitability. Further, the cost of compliance with post-approval regulations may have a negative effect on our operating results and financial condition.

Any of our product candidates for which we, or any future collaborators, obtain marketing approval in the future could be subject to post-marketing restrictions or withdrawal from the market and we, or any future collaborators, may be subject to substantial penalties if we, or they, fail to comply with regulatory requirements or if we, or they, experience unanticipated problems with our products following approval.

Any of our product candidates for which we, or any future collaborators, obtain marketing approval, as well as the manufacturing processes, post-approval studies and measures, labeling, advertising and promotional activities for such product, among other things, will be subject to ongoing requirements of and review by the FDA and other regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping. Even if marketing approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to the conditions of approval, including the requirement to implement a Risk Evaluation and Mitigation Strategy.

The FDA may also impose requirements for costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of a product. The FDA and other agencies, including the Department of Justice, closely regulate and monitor the post-approval marketing and promotion of products to ensure that they are manufactured, marketed and distributed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA imposes stringent restrictions on manufacturers' communications regarding off-label use and if we, or any future collaborators, do not market any of our product candidates for which we, or they, receive marketing approval for only their approved indications, we, or they, may be subject to warnings or enforcement action for off-label marketing. Violation of the FDCA and other statutes, including the False Claims Act, relating to the promotion and advertising of prescription drugs may lead to investigations or allegations of violations of federal and state health care fraud and abuse laws and state consumer protection laws.

In addition, later discovery of previously unknown adverse events or other problems with our products or their manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on such products, manufacturers or manufacturing processes;
- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- restrictions on coverage by third-party payors;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;
- refusal to permit the import or export of products;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

We may seek a Breakthrough Therapy designation for one or more of our product candidates, but we might not receive such designation, and even if we do, such designation may not lead to a faster development or regulatory review or approval process.

We may seek a Breakthrough Therapy designation for one or more of our product candidates. A Breakthrough Therapy is defined as a product that is intended, alone or in combination with one or more other products, to treat a serious condition, and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For biologics that have been designated as Breakthrough Therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Products designated as Breakthrough Therapies by the FDA may also be eligible for priority review if supported by clinical data at the time the NDA is submitted to FDA.



Designation as a Breakthrough Therapy is within the discretion of the FDA. Accordingly, even if we believe that one of our product candidates meets the criteria for designation as a Breakthrough Therapy, the FDA may disagree and instead determine not to make such designation. Even if we receive Breakthrough Therapy designation, the receipt of such designation for a product candidate may not result in a faster development or regulatory review or approval process compared to products considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualify as Breakthrough Therapies, the FDA may later decide that the product candidates no longer meet the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

We may seek Fast Track designation for one or more of our product candidates, but we might not receive such designation, and even if we do, such designation may not actually lead to a faster development or regulatory review or approval process.

If a product is intended for the treatment of a serious condition and nonclinical or clinical data demonstrate the potential to address unmet medical need for this condition, a product sponsor may apply for FDA Fast Track designation. If we seek Fast Track designation for a product candidate, we may not receive it from the FDA. However, even if we receive Fast Track designation, Fast Track designation does not ensure that we will receive marketing approval or that approval will be granted within any particular timeframe. We may not experience a faster development or regulatory review or approval process with Fast Track designation compared to conventional FDA procedures. In addition, the FDA may withdraw Fast Track designation if it believes that the designation is no longer supported by data from our clinical development program. Fast Track designation alone does not guarantee qualification for the FDA's priority review procedures.

Current and future legislation may increase the difficulty and cost for us and any future collaborators to obtain marketing approval of and commercialize our product candidates and affect the prices we, or they, may obtain.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could, among other things, prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability, or the ability of any future collaborators, to profitably sell any products for which we, or they, obtain marketing approval. We expect that current laws, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we, or any future collaborators, may receive for any approved products.

In March 2010 for example, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively the PPACA. Among the provisions of the PPACA of potential importance to our business and our product candidates are the following:

- an annual, non-deductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;
- expansion of healthcare fraud and abuse laws, including the civil False Claims Act and the federal Anti-Kickback Statute, new government investigative powers and enhanced penalties for noncompliance;

- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices to eligible beneficiaries during their coverage gap period, as a condition for a manufacturer's outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability;
- expansion of eligibility criteria for Medicaid programs;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- new requirements to report certain financial arrangements with physicians and teaching hospitals;
- a new requirement to annually report drug samples that manufacturers and distributors provide to physicians; and
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

In addition, other legislative changes have been proposed and adopted since the PPACA was enacted. These changes include the Budget Control Act of 2011, which, among other things, led to aggregate reductions to Medicare payments to providers of up to 2% per fiscal year that started in 2013 and will stay in effect through 2024 unless additional Congressional action is taken, and the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several types of providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding.

Legislative and regulatory proposals have also been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by the United States Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us and any future collaborators to more stringent product labeling and post-marketing testing and other requirements.

Governments outside the United States tend to impose strict price controls, which may adversely affect our revenues, if any.

In some countries, such as the countries of the European Union, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we, or any future collaborators, may be required to conduct a clinical trial that compares the cost-effectiveness of our product to other available therapies. If reimbursement of our products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be harmed.

We may be subject to certain healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, fines, disgorgement, exclusion from participation in government healthcare programs, curtailment or restricting of our operations, and diminished profits and future earnings.

Healthcare providers, third-party payors and others will play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Our future arrangements with healthcare providers and third-party payors will expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute any products for which we obtain marketing approval. Potentially applicable U.S. federal and state healthcare laws and regulations include the following:

Anti-Kickback Statute. The federal Anti-Kickback Statute prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal healthcare programs such as Medicare and Medicaid;

False Claims Laws. The federal false claims laws, including the civil False Claims Act, impose criminal and civil penalties, including those from civil whistleblower or *qui tam* actions against individuals or entities for knowingly presenting, or causing to be presented to the federal government claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;

HIPAA. The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing or attempting to execute a scheme to defraud any healthcare benefit program;

HIPAA and HITECH. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or the HITECH Act, also imposes obligations on certain types of individuals and entities, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

False Statements Statute. The federal false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;

Transparency Requirements. The federal Physician Payments Sunshine Act requires certain manufacturers of drugs, devices, biologics, and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program, with specific exceptions, to report annually to the U.S. Department of Health and Human Services information related to physician payments and other transfers of value and physician ownership and investment interests; and

Analogous State and Foreign Laws. Analogous state laws and regulations, such as state anti-kickback and false claims laws, and transparency laws, may apply to sales or marketing arrangements, and claims involving healthcare items or services reimbursed by non-governmental third party payors, including private insurers, and some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, in addition to requiring drug manufacturers to report information related to payments to physicians and other healthcare providers or marketing expenditures. Many state laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted

by HIPAA, thus complicating compliance efforts. Foreign laws also govern the privacy and security of health information in many circumstances.

Efforts to ensure that our business arrangements with third parties, and our business generally, will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion of products from government funded healthcare programs, such as Medicare and Medicaid, disgorgement, contractual damages, and reputational harm, any of which could substantially disrupt our operations. If any of the physicians or other providers or entities with whom we expect to do business is found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

We are subject to U.S. and foreign anti-corruption and anti-money laundering laws with respect to our operations and non-compliance with such laws can subject us to criminal and/or civil liability and harm our business.

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and possibly other state and national anti-bribery and anti-money laundering laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, third-party intermediaries, joint venture partners and collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. We may have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. In addition, we may engage third party intermediaries to promote our clinical research activities abroad and/or to obtain necessary permits, licenses, and other regulatory approvals. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize or have actual knowledge of such activities.

Prior to the completion of this offering, we will adopt a Code of Business Conduct and Ethics, which will be effective upon the completion of this offering, and expect to prepare and implement policies and procedures to ensure compliance with such code. The Code of Business Conduct and Ethics mandates compliance with the FCPA and other anti-corruption laws applicable to our business throughout the world. However, we cannot assure you that our employees and third party intermediaries will comply with this code or such anti-corruption laws. Noncompliance with anti-corruption and anti-money laundering laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension and/or debarment from contracting with certain persons, the loss of export privileges, reputational harm, adverse media coverage, and other collateral consequences. If any subpoenas, investigations, or other enforcement actions are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations and financial condition could be materially harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources and significant defense and compliance costs and other professional fees. In certain cases, enforcement authorities may even cause us to appoint an independent compliance monitor which can result in added costs and administrative burdens.

We are subject to governmental export and import controls that could impair our ability to compete in international markets due to licensing requirements and subject us to liability if we are not in compliance with applicable laws.

Our products and solutions are subject to export control and import laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls. Exports of our products and solutions outside of the United States must be made in compliance with these laws and regulations. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges; fines, which may be imposed on us and responsible employees or managers; and, in extreme cases, the incarceration of responsible employees or managers.

In addition, changes in our products or solutions or changes in applicable export or import laws and regulations may create delays in the introduction, provision, or sale of our products and solutions in international markets, prevent customers from using our products and solutions or, in some cases, prevent the export or import of our products and solutions to certain countries, governments or persons altogether. Any limitation on our ability to export, provide, or sell our products and solutions could adversely affect our business, financial condition and results of operations.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. From time to time and in the future, our operations may involve the use of hazardous and flammable materials, including chemicals and biological materials, and may also produce hazardous waste products. Even if we contract with third parties for the disposal of these materials and waste products, we cannot completely eliminate the risk of contamination or injury resulting from these materials. In the event of contamination or injury resulting from the use or disposal of our hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

We maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, but this insurance may not provide adequate coverage against potential liabilities. However, we do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. Current or future environmental laws and regulations may impair our research, development or production efforts. In addition, failure to comply with these laws and regulations may result in substantial fines, penalties or other sanctions.

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. The most recent global financial crisis caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn, such as the most recent global financial crisis, could result in a variety of risks to our business, including weakened demand for our product candidate and our ability to raise additional capital when needed on acceptable terms, if at all. This is particularly true in the European Union, which is undergoing a continued severe economic crisis. A weak or declining economy could strain our suppliers, possibly



resulting in supply disruption, or cause delays in payments for our services by third-party payors or our collaborators. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Our internal computer systems, or those of our collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

Our internal computer systems and those of our current and any future collaborators and other contractors or consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such material system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a disruption of our development programs and our business operations, whether due to a loss of our trade secrets or other proprietary information or other similar disruptions. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, our competitive position could be harmed and the further development and commercialization of our product candidates could be delayed.

Our employees may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.

We are exposed to the risk of employee fraud or other misconduct, including intentional failures to comply with FDA regulations or similar regulations of comparable foreign regulatory authorities, provide accurate information to the FDA or comparable foreign regulatory authorities, comply with manufacturing standards we have established, comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities, report financial information or data accurately or disclose unauthorized activities to us. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, standards or regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant fines or other sanctions.

Risks Related to Employee Matters and Managing Growth

Our future success depends on our ability to retain our executive officers and to attract, retain and motivate qualified personnel.

We are highly dependent on the pharmaceutical research and development and business development expertise of Nancy Simonian, M.D., our president and chief executive officer; Kyle D. Kuvalanka, our chief operating officer; Eric R. Olson, Ph.D., our chief scientific officer; Jorge Conde, our chief financial officer; and Jonathan Garen, our chief business officer. Each of these executive officers is employed "at will," meaning any of them may terminate his or her employment with us at any time with or without notice and for any reason or no reason. In the future, we may be dependent on other members of our management, scientific and development team.

Our ability to compete in the biotechnology and pharmaceuticals industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. Our industry has experienced a high rate of turnover of management personnel in recent years. If we lose one or more of our executive officers or other key employees, our ability to implement our business strategy successfully could be seriously harmed. Furthermore, replacing executive officers or other key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to develop, gain marketing approval of and commercialize products successfully. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these additional key employees on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions.

We rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by other entities and may have commitments under consulting or advisory contracts with those entities that may limit their availability to us. If we are unable to continue to attract and retain highly qualified personnel, our ability to develop and commercialize our product candidates will be limited.

We expect to expand our organization, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

As of September 30, 2015, we had 40 full-time employees. We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of drug manufacturing, regulatory affairs and sales, marketing and distribution. To manage these growth activities, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Our management may need to devote a significant amount of its attention to managing these growth activities. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion or relocation of our operations, retain key employees, or identify, recruit and train additional qualified personnel. Our inability to manage the expansion or relocation of our operations effectively may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could also require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If we are unable to effectively manage our expected growth, our expenses may increase more than expected, our ability to generate revenues could be reduced and we may not be able to implement our business strategy, including the successful commercialization of our product candidates.

We may engage in acquisitions that could disrupt our business, cause dilution to our stockholders or reduce our financial resources.

In the future, we may enter into transactions to acquire other businesses, products or technologies. Because we have not made any acquisitions to date, our ability to do so successfully is unproven. If we do identify suitable candidates, we may not be able to make such acquisitions on favorable terms, or at all. Any acquisitions we make may not strengthen our competitive position, and these transactions may be viewed negatively by customers or investors. We may decide to incur debt in connection with an acquisition or issue our common stock or other equity securities to the stockholders of the acquired company, which would reduce the percentage ownership of our existing stockholders. We could incur losses resulting from undiscovered liabilities of the acquired business that are not covered by the

indemnification we may obtain from the seller. In addition, we may not be able to successfully integrate the acquired personnel, technologies and operations into our existing business in an effective, timely and non-disruptive manner. Acquisitions may also divert management attention from day-to-day responsibilities, increase our expenses and reduce our cash available for operations and other uses. We cannot predict the number, timing or size of future acquisitions or the effect that any such transactions might have on our operating results.

Risks Related to Our Common Stock and This Offering

No public market for our common stock currently exists, and an active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock. The initial public offering price for our common stock will be determined through negotiations with the underwriters. This price will not necessarily reflect the price at which investors in the market will be willing to buy and sell our shares following this offering. Although we plan to apply to list our common stock on The NASDAQ Global Market, an active trading market for our shares may never develop or, if developed, be maintained following this offering. If an active market for our common stock does not develop or is not maintained, it may be difficult for you to sell shares you purchase in this offering without depressing the market price for the shares or at all. An inactive trading market may also impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration.

If you purchase shares of common stock in this offering, you will suffer immediate dilution in the book value of your investment.

The initial public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of our common stock in this offering, you will pay a price per share that substantially exceeds our net tangible book value per share after this offering. Based on the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of \$ per share, representing the difference between our pro forma net tangible book value per share after giving effect to this offering and the assumed initial public offering price. Purchasers of common stock in this offering will have contributed approximately % of the aggregate price paid by all purchasers of our stock and will own approximately % of our common stock outstanding after this offering, excluding any shares of our common stock that they may have acquired prior to this offering. Furthermore, if the underwriters exercise their overallotment option or our previously issued options to acquire common stock at prices below the assumed initial public offering price are exercised, you will experience further dilution. For additional information on the dilution that you will experience immediately after this offering, see the section titled "Dilution."

The price of our common stock is likely to be highly volatile, which could result in substantial losses for purchasers of our common stock in this offering.

Our stock price is likely to be highly volatile. The stock market in general and the market for smaller pharmaceutical and biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common stock at or above the initial public offering price and you may lose some or all of your investment. The market price for our common stock may be influenced by many factors, including:

- the timing and results of clinical trials of SY-1425 and any product candidates that we may advance into clinical development under our CDK7 inhibitor program;
- the success of existing or new competitive products or technologies;

- regulatory actions with respect to our product candidates or our competitors' products and product candidates;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- commencement or termination of collaborations for our development programs;
- failure or discontinuation of any of our development programs;
- results of clinical trials of product candidates of our competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to develop additional product candidates or products;
- actual or anticipated changes in estimates as to financial results or development timelines or recommendations by securities analysts;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or other stockholders;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in estimates or recommendations by securities analysts, if any, that cover our stock;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this "Risk Factors" section.

Additionally, our stock price is likely to be volatile, and in the past companies that have experienced volatility in the market price of their stock have been subject to an increased incidence of securities class action litigation. This risk is especially relevant for us because pharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively or in ways with which you agree.

Although we currently intend to use the net proceeds from this offering in the manner described in the section titled "Use of Proceeds" in this prospectus, our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering. The failure by our management to apply these funds effectively could result in financial losses that could harm our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

We are an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and may remain an emerging growth company for up to five years. For so long as we remain an emerging growth company, we are permitted and plan to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or SOX Section 404, not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements, reduced disclosure obligations regarding executive compensation and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. In this prospectus, we have provided only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, and particularly after we are no longer an "emerging growth company," we will incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The NASDAQ Global Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. We expect that we will need to hire additional accounting, finance and other personnel in connection with our becoming, and our efforts to comply with the requirements of being, a public company and our management and other personnel will need to devote a substantial amount of time towards maintaining compliance with these requirements. These requirements will increase our legal and financial compliance costs and will make some activities more time consuming and costly. For example, we expect that the rules and regulations applicable to us as a public company may make it more difficult and more expensive for us to obtain director and officer liability insurance, which could make it more difficult for us to attract and retain qualified members of our board of directors. We are currently evaluating these rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

We have identified material weaknesses in our internal control over financial reporting. If we are unable to remedy our material weaknesses, or if we fail to establish and maintain effective internal controls, we may be unable to produce timely and accurate financial statements, and we may conclude that our internal control over financial reporting is not effective, which could adversely impact our investors' confidence and our stock price.

Prior to this offering, we were a private company and had limited accounting and financial reporting personnel and other resources with which to address our internal controls and related procedures. In connection with the audit of our consolidated financial statements for the years ended December 31, 2013 and 2014, we and our independent registered public accounting firm identified material weaknesses in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses related to our controls over the classification of certain indirect and other expenses between general and administrative and research and development, and to the accounting for stock-based compensation. We also identified deficiencies related to our controls over our accounting for income taxes. The material weaknesses that we identified were due to the lack of appropriate oversight and review procedures by accounting personnel to properly identify and evaluate certain accounting matters that resulted in errors in our financial statements.

We are implementing measures designed to improve our internal control over financial reporting to remediate these material weaknesses, including the following:

- we are formalizing our processes and internal control documentation and strengthening supervisory reviews by our management;
- we have hired additional qualified accounting personnel and engaged financial consultants, both of whom have significant accounting and financial reporting experience, which will enable the implementation of internal controls over financial reporting and segregating duties amongst accounting personnel;
- we expect to hire additional senior accounting and finance staff to complete this remediation; and
- we intend to implement certain accounting systems to automate manual processes, such as tracking and accounting for stockbased awards.

We expect to incur additional costs to remediate these weaknesses, primarily personnel costs and external consulting fees. We cannot assure you that the measures we have taken to date, together with any measures we may take in the future, will be sufficient to remediate the control deficiencies that led to the material weaknesses in our internal control over financial reporting or to avoid potential future material weaknesses. In addition, neither our management nor an independent registered public accounting firm has ever performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act because no such evaluation has been required. Had we or our independent registered public accounting firm performed an evaluation of our internal control over financial reporting in accordance with the provisions of the Sarbanes-Oxley Act, additional material weaknesses may have been identified. If we are unable to successfully remediate our existing or any future material weaknesses in our internal control over financial reporting may be adversely affected, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to applicable stock exchange listing requirements, investors may lose confidence in our financial reporting, and our stock price may decline as a result.

We also could become subject to investigations by NASDAQ, the Securities and Exchange Commission, or SEC, or other regulatory authorities.

As a result of becoming a public company, we will be obligated to develop and maintain proper and effective internal controls over financial reporting. Any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our common shares.

Pursuant to SOX Section 404 we will be required to furnish a report by our management on our internal control over financial reporting beginning with our second filing of an Annual Report on Form 10-K with the Securities and Exchange Commission, or SEC, after we become a public company. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. Our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting as defined in the JOBS Act. At such time as we are required to obtain auditor attestation, if we then have a material weakness, we would receive an adverse opinion regarding our internal control over financial reporting firm.

To achieve compliance with SOX Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. During our evaluation of our internal control, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our ordinary shares could decline, and we could be subject to sanctions or investigations by NASDAQ, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

A significant portion of our total outstanding shares is restricted from immediate resale but may be sold into the market in the near future, which could cause the market price of our common stock to decline significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. Following this offering, we will have shares of common stock outstanding based on the 56,871,713 shares of our common stock outstanding as of September 30, 2015 after giving effect to the conversion of all outstanding shares of our preferred stock into 47,243,931 shares of our common stock upon the closing

of this offering. Of these shares, the shares sold by us in this offering may be resold in the public market immediately, unless purchased by our affiliates. The remaining 56,871,713 shares are currently restricted under securities laws or as a result of lock-up or other agreements, but will be able to be sold after this offering as described in the "Shares Eligible for Future Sale" section of this prospectus. The representatives of the underwriters may release these stockholders from their lock-up agreements with the underwriters at any time and without notice, which would allow for earlier sales of shares in the public market.

Moreover, after this offering, holders of an aggregate of 47,243,931 shares of our common stock will have rights, subject to conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also plan to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance and once vested, subject to volume limitations applicable to affiliates and the lock-up agreements described in the "Underwriting" section of this prospectus. If additional shares are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

We might not be able to utilize a significant portion of our net operating loss carryforwards and research and development tax credit carryforwards.

As of December 31, 2014, we had federal and state net operating loss carryforwards of \$20.3 million and \$20.2 million, respectively, and federal research and development tax credit carryforwards of \$0.8 million, each of which if not utilized will expire at various dates through 2034. These net operating loss and tax credit carryforwards could expire unused and be unavailable to offset future income tax liabilities. In addition, under Section 382 of the Internal Revenue Code of 1986, as amended, and corresponding provisions of state law, if a corporation undergoes an "ownership change," which is generally defined as a greater than 50% change, by value, in its equity ownership over a three-year period, the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income may be limited. We have not determined if we have experienced Section 382 ownership changes in the past and if a portion of our net operating loss and tax credit carryforwards are subject to an annual limitation under Section 382. In addition, we may experience ownership changes in the future as a result of subsequent shifts in our stock ownership, including this offering, some of which may be outside of our control. We have not conducted a detailed study to document whether our historical activities qualify to support the research and development credit carryforwards. A detailed study could result in adjustment to our research and development credit carryforwards are adjusted, it would harm our future operating loss and tax credit carryforwards are adjusted, it would harm our future operating loss and tax credit carryforwards.

We do not anticipate paying any cash dividends on our capital stock in the foreseeable future. Accordingly, stockholders must rely on capital appreciation, if any, for any return on their investment.

We have never declared nor paid cash dividends on our capital stock. We currently plan to retain all of our future earnings, if any, to finance the operation, development and growth of our business. In addition, the terms of any future debt or credit agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

Concentration of ownership of our common stock among our existing executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions.

Based upon shares outstanding as of September 30, 2015, upon the closing of this offering, our executive officers and directors, combined with our stockholders who owned more than 5% of our outstanding common stock before this offering and their affiliates, will, in the aggregate, beneficially own shares representing approximately % of our common stock. As a result, if these stockholders were to choose to act together, they would be able to control all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would control the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of ownership control may:

- delay, defer or prevent a change in control;
- entrench our management or the board of directors; or
- impede a merger, consolidation, takeover or other business combination involving us that other stockholders may desire.

Some of these persons or entities may have interests different than yours. For example, because many of these stockholders purchased their shares at prices substantially below the price at which shares are being sold in this offering and have held their shares for a longer period, they may be more interested in selling our company to an acquirer than other investors or they may want us to pursue strategies that deviate from the interests of other stockholders.

Provisions in our certificate of incorporation and bylaws and under Delaware law may prevent or frustrate attempts by our stockholders to change our management or hinder efforts to acquire a controlling interest in us.

Provisions in our certificate of incorporation and our bylaws that will become effective upon the closing of this offering may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- establish a classified board of directors such that all members of the board are not elected at one time;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from the board;
- establish advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted on at stockholder meetings;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call a special meeting of stockholders;
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a "poison pill" that would work to dilute the stock ownership of a



- potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and
- require the approval of the holders of at least 75% of the votes that all our stockholders would be entitled to cast to amend or repeal certain provisions of our certificate of incorporation or bylaws.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. This could discourage, delay or prevent someone from acquiring us or merging with us, whether or not it is desired by, or beneficial to, our stockholders. This could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that investors are willing to pay for our stock.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our common stock will likely depend in part on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. We do not currently have research coverage, and there can be no assurance that analysts will cover us, or provide favorable coverage. Securities or industry analysts may elect not to provide research coverage of our common stock after this offering, and such lack of research coverage may negatively impact the market price of our common stock. In the event we do have analyst coverage, if one or more analysts downgrade our stock or change their opinion of our stock, our share price would likely decline. In addition, if one or more analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

Our certificate of incorporation that will become effective upon the closing of this offering designates the state courts in the State of Delaware or, if no state court located within the State of Delaware has jurisdiction, the federal court for the District of Delaware, as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could discourage lawsuits against our company and our directors and officers.

Our certificate of incorporation that will become effective upon the closing of this offering provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) will be the sole and exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or employees to our company or our stockholders, any action asserting a claim against us arising pursuant to any provision of the General Corporation Law of the State of Delaware or our certificate of incorporation or bylaws, or any action asserting a claim against us governed by the internal affairs doctrine. This exclusive forum provision may limit the ability of our stockholders to bring a claim in a judicial forum that such stockholders find favorable for disputes with us or our directors or officers, which may discourage such lawsuits against us and our directors and officers.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. The forward-looking statements are contained principally in the sections of this prospectus entitled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," but are also contained elsewhere in this prospectus. All statements, other than statements of historical facts, contained in this prospectus, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management and expected market growth are forward-looking statements. The words "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. The forward-looking statements and opinions contained in this prospectus are based upon information available to us as of the date of this prospectus and, while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information.

These forward-looking statements include, among other things, statements about:

- our plans to initiate clinical trials for SY-1425 and product candidates we may advance under our CDK7 inhibitor program;
- planned clinical trials for our product candidates, whether conducted by us or by any future collaborators, including the timing of these trials and of the anticipated results;
- our plans to research, develop and commercialize our current and future product candidates;
- our expectations regarding the potential benefits of our gene control platform and our approach;
- our plans to seek to enter into collaborations for the development and commercialization of certain product candidates;
- the potential benefits of any future collaboration;
- the timing of and our ability to obtain and maintain regulatory approvals for our product candidates;
- the rate and degree of market acceptance and clinical utility of any products for which we receive marketing approval;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our intellectual property position and strategy;
- our ability to identify additional products or product candidates with significant commercial potential;
- our expectations related to the use of proceeds from this offering;
- our estimates regarding expenses, future revenue, capital requirements and need for additional financing;
- developments relating to our competitors and our industry; and
- the impact of government laws and regulations.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results



or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this prospectus. We have included important factors in the cautionary statements included in this prospectus, particularly in the "Risk Factors" section, that could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures or investments that we may make or enter into.

You should read this prospectus and the documents that we have filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. The Private Securities Litigation Reform Act of 1995 and Section 27A of the Securities Act of 1933, as amended, do not protect any forward-looking statements that we make in connection with this offering.

This prospectus includes statistical and other industry and market data that we obtained from industry publications and research, surveys and studies conducted by third parties. All of the market data used in this prospectus involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data. We believe that the information from these industry publications, surveys and studies is reliable. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of important factors, including those described in the section titled "Risk Factors." These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of shares of our common stock in this offering will be \$ million, or \$ million if the underwriters exercise their overallotment option in full, assuming an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) our net proceeds from this offering by \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. Each increase (decrease) of shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) of shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) of shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) our net proceeds from this offering by \$ million, assuming no change in the assumed initial public offering price per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

As of September 30, 2015, we had cash and cash equivalents of \$45.0 million. We currently estimate that we will use the net proceeds from this offering as follows:

- approximately \$ million to fund our Phase 2 clinical trial of SY-1425 in AML and MDS, including clinical research outsourcing, drug manufacturing, companion diagnostic development and internal personnel costs;
- approximately \$ million to fund our IND-enabling activities and Phase 1/2 clinical trial for our CDK7 inhibitor program, including clinical research outsourcing, drug manufacturing and internal personnel costs;
- approximately \$ million for our additional development of our lead programs, SY-1425 and our CDK7 inhibitor program, for additional indications;
- approximately \$ million for new and ongoing research activities, including for our preclinical programs and our platform with a goal of systematically delivering additional INDs; and
- the remainder for working capital and other general corporate purposes.

To the extent our actual net proceeds from this offering are insufficient to fund this allocation, we expect to use some of our existing cash and cash equivalents to fund any difference.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development and commercialization efforts, the status of and results from clinical trials, any collaborations that we may enter into with third parties for our product candidates and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering. We have no current agreements, commitments or understandings for any material acquisitions or licenses of any products, businesses or technologies.

Based on our planned use of the net proceeds from this offering, we estimate that such funds will be sufficient to enable us to reach proof-of-concept data readouts for SY-1425 in AML and MDS and our CDK7 inhibitor program in acute leukemias and to fund our operating expenses and capital expenditure requirements at least through . We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. We do not expect that the net proceeds from this offering and our existing cash and cash equivalents will be sufficient to enable us to fund the completion of development of any of our product candidates.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in short-term, investment-grade, interestbearing instruments and U.S. government securities.



DIVIDEND POLICY

We have never declared nor paid cash dividends on our common stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. We do not intend to pay cash dividends in respect of our common stock in the foreseeable future. Any future determination to pay cash dividends will be made at the discretion of our board of directors and will depend on restrictions and other factors our board of directors may deem relevant. Investors should not purchase our common stock with the expectation of receiving cash dividends.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of September 30, 2015 on:

- an actual basis excluding 1,243,296 shares of our common stock that are subject to repurchase by us;
- a pro forma basis to give effect to (i) the conversion of all outstanding shares of our preferred stock into 47,243,931 shares of our common stock, (ii) the vesting of 300,000 shares of restricted stock, (iii) the change in our total stockholders' (deficit) equity resulting from the stock-based compensation expense associated with the vesting of options to purchase up to 222,706 shares of our common stock and (iv) the filing and effectiveness of our restated certificate of incorporation, each upon the closing of this offering; and
- a pro forma as adjusted basis to give further effect to the issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table together with our consolidated financial statements and the related notes included elsewhere in this prospectus and the sections of this prospectus titled "Selected Consolidated Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Description of Capital Stock."

	September 30, 2015				
	Actual Pro Forma (unaudited) (in thousar share and per share			· •	
Cash and cash equivalents	\$	44,985		44,985	\$
Series A convertible preferred stock, \$0.001 par value; 30,350,000 shares authorized, issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	\$	29.015	\$		\$
Series B convertible preferred stock, \$0.001 par value; 16,893,931 shares authorized, issued and outstanding, actual; no shares authorized, issued and outstanding pro forma and pro forma as adjusted	Ŷ	52,998	÷		Ţ
Stockholders' (deficit) equity:		52,770			
Preferred stock, \$0.001 par value: no shares authorized, issued and outstanding actual; shares authorized, no shares issued and outstanding pro forma and pro forma as adjusted		_			
Common stock, \$0.001 par value; 64,571,908 shares authorized, 8,384,486 shares issued and outstanding, actual; shares authorized, 55,928,417 shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma		0			
as adjusted		8		56	
Additional paid-in capital Accumulated deficit		4,636		87,434	
		(42,824)	_	(43,657)	
Total stockholders' (deficit) equity	<u>_</u>	(38,180)	<u>_</u>	43,833	<u></u>
Total capitalization	\$	43,833	\$	43,833	\$

Our capitalization following the closing of this offering will depend on the actual initial public offering price and other terms of this offering determined at pricing. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each additional paid-in-capital, total stockholders' (deficit) equity and total capitalization by \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated expenses payable by us. Each increase (decrease) of shares in the number of shares offered by us, as set forth on the cover page (decrease) the pro forma as adjusted amount of each of additional paid-in-capital, total stockholders' (deficit) equity and total capitalization by \$ million, assuming no change in the assumed initial public offering price per share and after deducting underwriting discounts and commissions and estimated expenses payable by us.

The number of shares of our common stock shown as outstanding on an actual, pro forma and pro forma as adjusted basis in the table above does not include:

- 7,088,929 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2015, at a weighted-average exercise price of \$0.74 per share;
- 384,752 shares of our common stock available for future issuance as of September 30, 2015 under our 2012 equity incentive plan; and
- and additional shares of our common stock that will become available for future issuance under our 2016 stock incentive plan and our 2016 employee stock purchase plan, respectively, each of which will become effective immediately prior to the closing of this offering, as well as any automatic increases in the number of shares of common stock reserved for future issuance under these plans.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock after this offering.

Our historical net tangible book deficit as of September 30, 2015 was \$38.2 million, or \$3.97 per share of our common stock. Our historical net tangible book deficit is the amount of our total tangible assets less our total liabilities. Historical net tangible book deficit, including our convertible preferred stock divided by the 9,627,782 shares of our common stock outstanding as of September 30, 2015, including 1,243,296 shares of unvested restricted stock subject to repurchase by us.

Our pro forma net tangible book value as of September 30, 2015 was \$43.8 million, or \$0.77 per share of our common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities. After giving effect to the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 47,243,931 shares of our common stock upon the closing of this offering, pro forma net tangible book value per share represents pro forma net tangible book value divided by the 56,871,713 shares of our common stock outstanding as of September 30, 2015.

After giving effect to our issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2015 would have been \$ million, or \$ per share. This represents an immediate increase in pro forma as adjusted net tangible book value per share of \$ to existing stockholders and immediate dilution of \$ in pro forma as adjusted net tangible book value per share to new investors purchasing common stock in this offering. Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share to new investors. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share	\$
Historical net tangible book value (deficit) per share as of September 30, 2015	\$ (3.97)
Increase per share attributable to the conversion of outstanding preferred stock	4.74
Pro forma net tangible book value per share as of September 30, 2015	0.77
Increase in net tangible book value per share attributable to new investors	
Pro forma as adjusted net tangible book value per share after this offering	
Dilution per share to new investors	\$

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value per share by \$ and dilution per share to new investors purchasing shares in this offering by \$ assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. An increase (decrease) of shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) of shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) of shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) of shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value per share by

and \$, respectively, and increase (decrease) the dilution per share to new investors participating in this offering by
 and \$, respectively, assuming no change in the assumed initial public offering price and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters exercise their overallotment option in full, the pro forma as adjusted net tangible book value will increase to

\$ per share, representing an immediate increase to existing stockholders of \$ per share and an immediate dilution of
 \$ per share to new investors. If any shares are issued upon exercise of outstanding options, you will experience further dilution.

The following table summarizes, on a pro forma as adjusted basis as of September 30, 2015, the number of shares of common stock purchased from us, the total consideration paid to us and the average price per share paid by existing stockholders and by new investors purchasing shares of common stock in this offering. The calculation below is based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting underwriting discounts and commissions and estimated offering expenses payable by us.

		Total					
	Shares P	Shares Purchased		eration	Average Price		
	Number	Percent	Amount	Percent	Per Share		
Existing stockholders		%\$		C	%\$		
New investors							
Total		100%	6\$	1009	%		

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid by new investors by \$ million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by percentage points, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. An increase (decrease) of shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid by new investors by \$ million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by percentage points, assuming no change in the assumed initial public offering price.

The number of shares purchased from us by existing stockholders is based on 56,871,713 shares of our common stock outstanding as of September 30, 2015, after giving effect to the automatic conversion of all of our outstanding shares of preferred stock into 47,243,931 shares of common stock upon the closing of this offering, and excludes:

- 7,088,929 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2015, at a weighted-average exercise price of \$0.74 per share;
- 384,752 additional shares of our common stock available for future issuance as of September 30, 2015 under our 2012 equity incentive plan; and
- and additional shares of our common stock that will become available for future issuance under our 2016 stock incentive plan and our 2016 employee stock purchase plan, respectively, each of which will become effective immediately prior to the closing of this offering,

as well as any automatic increases in the number of shares of common stock reserved for future issuance under these plans.

To the extent that stock options are exercised, new stock options are issued under our equity incentive plans, or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

If the underwriters exercise their overallotment option in full, the following will occur:

- the percentage of shares of our common stock held by existing stockholders will decrease to % of the total number of shares of our common stock outstanding after this offering; and
- the number of shares of our common stock held by new investors will increase to , or % of the total number of shares of our common stock outstanding after this offering.

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SELECTED CONSOLIDATED FINANCIAL DATA

You should read the following selected consolidated financial data together with our consolidated financial statements and the related notes included elsewhere in this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus. We have derived the statement of operations data for the years ended December 31, 2013 and 2014 and the balance sheet data as of December 31, 2013 and 2014 from our audited consolidated financial statements included elsewhere in this prospectus. We have derived the statement of operations data for the nine months ended September 30, 2014 and 2015 and the balance sheet data as of September 30, 2015 from our unaudited consolidated financial statements included elsewhere in this prospectus, which have been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, the unaudited consolidated financial data reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the financial information as of and for the periods presented. Our historical results are not necessarily indicative of results that should be expected in any future period, and our results for any interim period are not necessarily indicative of results that should be expected for any full year.

		Year Ended	ember 31,		Nine Months Ended September 30,					
	2013 2014					2014 2015				
Statements of Operations Data		(unaudited) (in thousands, except share and per share data)								
Statements of Operations Data: Revenue	\$		\$		\$		\$	317		
	Э		Ф		Ф		Þ	517		
Operating expenses: Research and development		6,266		10,923		7,901		16,030		
General and administrative		2,367		2,512		1,843		3,418		
			_		-					
Total operating expenses		8,633		13,435		9,744		19,448		
Loss from operations		(8,633)		(13,435)		(9,744)		(19,131)		
Other income (expense), net		(32)		4		2		2		
Net loss	\$	(8,665)	\$	(13,431)	\$	(9,742)	\$	(19,129)		
Net loss per share applicable to common stockholders—basic and diluted(1)	\$	(2.25)	\$	(2.74)	\$	(1.93)	\$	(3.26)		
Weighted-average number of common shares used in net loss per share applicable to common stockholders—basic and diluted(1)	4	110,716		5,718,844		5,599,543		6,997,532		
Pro forma net loss per share—basic and diluted (unaudited)(1)		<u> </u>	\$	(0.37)			\$	(0.37)		
Weighted-average number of common shares used in pro forma net loss per share—basic and diluted (unaudited)(1)				35,901,743			4	54,255,749		

(1) See Note 2 to our consolidated financial statements included elsewhere in this prospectus for a description of the method used to calculate basic and diluted net loss per share and unaudited pro forma basic and diluted net loss per share as well as the weighted-average number of common shares used in the calculation of the per share amounts.

	 December 31,			Sep	tember 30,
	2013	2013 2014			2015
				(ui	naudited)
			(in thousands		
Balance Sheet Data:					
Cash and cash equivalents	\$ 3,801	\$	60,393	\$	44,985
Working capital(1)	3,003		59,291		40,821
Total assets	4,921		61,494		50,042
Convertible preferred stock	13,266		82,013		82,013
Total stockholders' deficit	(9,293)		(21,772)		(38,180)

(1) We define working capital as current assets less current liabilities. See our consolidated financial statements for further details regarding our current assets and current liabilities.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the section of this prospectus titled "Selected Consolidated Financial Data" and our consolidated financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risk and uncertainties, such as statements of our plans, objectives, expectations and intentions. As a result of many factors, including those factors set forth in the "Risk Factors" section of this prospectus, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are a biopharmaceutical company applying a pioneering approach to discover and develop medicines that control the expression of genes with the aim of treating cancer and other serious diseases. We have built a proprietary platform that provides a unique lens to systematically and efficiently identify crucial genes that become dysregulated in diseased cells in order to create medicines that return cells to a non-diseased state. We believe that our platform will allow us to create a pipeline of gene control medicines that will provide a profound and durable benefit for currently underserved patients. By focusing on genomically defined subsets of patients, we believe we can conduct efficient clinical trials with a higher likelihood of success. We intend to submit an investigational new drug application, or IND, to the Food and Drug Administration, or FDA, and advance our lead product candidate, SY-1425 (tamibarotene), into a Phase 2 clinical trial, in the first half of 2016. This trial is expected to initially enroll genomically defined subsets of patients with acute myelogenous leukemia, or AML, and myelodysplastic syndromes, or MDS, identified by our gene control platform. We plan to submit an IND for our second program targeting cyclin-dependent kinase 7, or CDK7, which is an important gene control target in several cancers, initially for the treatment of acute leukemias, in the second half of 2016. Leveraging our platform, we are also generating a pipeline of novel preclinical drug candidates for genomically defined subsets of patients. Our goal is to build a fully integrated biopharmaceutical company based on our leadership position in gene control.

Since our inception in November 2011, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, developing our technology platform and conducting preclinical research for our product candidates. We do not have any products approved for sale and have not generated any revenue from product sales. We have financed our operations to date primarily through private placements of preferred stock. From inception through September 30, 2015, we have raised an aggregate of \$82.0 million of gross proceeds from sales of our preferred stock and the issuance of convertible notes that subsequently converted to preferred stock to fund operations.

Since inception, we have incurred significant operating losses. Our net losses were \$8.7 million and \$13.4 million for the years ended December 31, 2013 and 2014, respectively, and \$19.1 million for the nine months ended September 30, 2015. As of September 30, 2015, we had an accumulated deficit of \$42.8 million. We expect to continue to incur significant expenses and operating losses for the foreseeable future. We anticipate that our expenses will increase significantly in connection with our ongoing activities, as we:

- pursue clinical development of our lead product candidate, SY-1425, including a Phase 2 clinical trial we expect to initiate in the first half of 2016;
- continue development efforts for our CDK7 inhibitor program, for which we plan to submit an IND in the second half of 2016 and initiate a Phase 1/2 clinical trial in the first half of 2017;
- continue our disease mapping efforts;

- initiate and continue research, preclinical and clinical development efforts for other gene control programs;
- seek regulatory and marketing approvals for our product candidates that successfully complete clinical trials, if any;
- continue investment in our proprietary gene control platform;
- develop and scale up our manufacturing processes and capabilities to support our ongoing preclinical activities and clinical trials of our product candidates;
- maintain, expand and protect our intellectual property portfolio;
- hire and retain key scientific personnel; and
- expand our operational, financial and management systems and increase personnel, including personnel to support our clinical development and manufacturing efforts and our operations as a public company upon closing of this offering.

Because of the numerous risks and uncertainties associated with product development, we are unable to predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations.

As of September 30, 2015, we had cash and cash equivalents of \$45.0 million. We believe that the anticipated net proceeds from this offering, together with our existing cash and cash equivalents as of September 30, 2015, will enable us to fund our operating expenses and capital expenditure requirements through at least the next months. See "—Liquidity and Capital Resources."

Financial Operations Overview

Revenue

To date, we have not generated any revenue from product sales and do not expect to generate any revenue from product sales for the foreseeable future. For additional information about our revenue recognition policy, see the section titled "—Critical Accounting Policies and Estimates—Revenue."

Expenses

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including development of our gene control platform and gene control product candidates, which initially focus on cancer indications, and which include:

- employee-related expenses including salaries and benefits;
- stock-based compensation expense;
- external costs of funding research performed by third parties that conduct research and development and preclinical activities on our behalf and of purchasing lab supplies used in designing, developing and manufacturing preclinical study materials;
- consulting, licensing and professional fees related to research and development activities; and
- facilities costs, depreciation and other expenses, which include direct and allocated expenses for rent and maintenance of facilities and insurance.

Research and development costs are expensed as incurred. Nonrefundable advance payments made to vendors for goods or services that will be received in the future for use in research and development



activities are deferred and capitalized, even when there is no alternative future use for the research and development, until related goods or services are provided.

The following summarizes our most advanced current research and development programs:

- Our lead product candidate, SY-1425, is an oral, potent and selective RARa agonist. We plan to initiate a Phase 2 clinical trial in genomically defined patients with AML and MDS in the first half of 2016.
- Our CDK7 inhibitor program is focused on the treatment of subsets of cancers that are dependent on certain transcription factors for their growth and survival. We have generated potent and highly selective small molecule CDK7 inhibitors. We expect to select our development candidate in the first half of 2016, submit an IND in the second half of 2016 and initiate a Phase 1/2 clinical trial in patients with acute leukemias in the first half of 2017.

We typically use our employee, consultant and infrastructure resources across our development programs. We track outsourced development costs by product candidate or development program, but we do not allocate personnel costs, other internal costs or external consultant costs to specific product candidates or development programs.

We have not provided program costs for the years ended December 31, 2013 and 2014 because prior to 2015, we did not track or record our research and development expenses on a program-by-program basis. The following table summarizes our research and development expenses by program (in thousands) for the nine months ended September 30, 2015:

CDK7 external costs	\$ 4,799
SY-1425 external costs	824
Other research and platform programs external costs	3,813
Employee-related expenses, including stock-based compensation	5,539
Facilities and other expenses	1,055
Total research and development expenses	\$ 16,030

We expect our research and development expenses will increase for the foreseeable future as we seek to advance our programs. At this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the development of our product candidates. We are also unable to predict when, if ever, material net cash inflows will commence from sales of our product candidates. This is due to the numerous risks and uncertainties associated with developing such product candidates, including the uncertainty of:

- successful completion of preclinical studies, including IND-enabling activities and minimally efficacious dose studies in animals, where applicable and requested under the FDA's good laboratory practice, or GLP, requirements;
- approval of INDs for our product candidates to commence planned or future clinical trials;
- successful enrollment in, and completion of preclinical studies and clinical trials;
- successful data from our clinical program that supports an acceptable benefit-risk profile of our product candidates in the intended populations;
- successful development, and subsequent clearance or approval, of companion diagnostics for use as screening criteria for potential patients;
- receipt of regulatory approvals from applicable regulatory authorities;
- establishment of arrangements with third-party manufacturers for clinical supply and commercial manufacturing and, where applicable, commercial manufacturing capabilities;



- establishment and maintenance of patent and trade secret protection or regulatory exclusivity for our product candidates;
- commercial launch of our product candidates, if and when approved, whether alone or in collaboration with others;
- enforcement and defense of intellectual property rights and claims;
- maintenance of a continued acceptable safety profile of the product candidates following approval; and
- retention of key research and development personnel.

Any changes in the outcome of any of these variables with respect to the development of our product candidates in preclinical and clinical development could mean a significant change in the costs and timing associated with the development of these product candidates. For example, if the FDA or another regulatory authority were to delay our planned start of clinical trials or require us to conduct clinical trials or other testing beyond those that we currently expect or if we experience significant delays in enrollment in any of our planned clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development of our product candidates.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and other related costs, including stock-based compensation, for personnel in executive, finance and administrative functions. Other significant costs include corporate facility costs not otherwise included in research and development expenses, legal fees related to patent and corporate matters and fees for accounting and consulting services.

We anticipate that our general and administrative expenses will increase in the future as we increase our headcount to support our continued research activities and development of our product candidates and remediate our material weakness in our internal control over financial reporting. We also anticipate that we will incur increased accounting, audit, legal, regulatory, compliance and director and officer insurance costs as well as investor and public relations expenses associated with being a public company.

Other Income (Expense), Net

Other income (expense), net consists of interest income on our cash and cash equivalents and interest expense related to our convertible promissory notes and equipment financing arrangements.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make judgments and estimates that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our financial statements. We base our estimates on historical experience, known trends and events and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. On an ongoing basis, we evaluate our judgments and estimates in light of changes in circumstances, facts and experience. The effects of material revisions in estimates, if any, will be reflected in the financial statements prospectively from the date of the change in estimates.

While our significant accounting policies are described in more detail in the notes to our financial statements appearing elsewhere in this prospectus, we believe the following accounting policies used in the preparation of our financial statements require the most significant judgments and estimates.

Revenue

As of September 30, 2015, all of our revenue was generated exclusively from our research agreement with a multinational pharmaceutical company. We recognize revenue in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 605 *Revenue Recognition*, or ASC 605. Accordingly, revenue is recognized for each unit of accounting when all of the following criteria are met:

- persuasive evidence of an arrangement exists;
- delivery has occurred or services have been rendered;
- the seller's price to the buyer is fixed or determinable; and
- collectability is reasonably assured.

We analyze multiple element arrangements based on the guidance in ASC Topic 605-25, *Revenue Recognition—Multiple Element Arrangements*, or ASC 605-25. Pursuant to the guidance in ASC 605-25, we evaluate multiple element arrangements to determine (1) the deliverables included in the arrangement and (2) whether the individual deliverables represent separate units of accounting or whether they must be accounted for as a combined unit of accounting. This evaluation involves subjective determinations and we are required to make judgements about the individual deliverables and whether such deliverables are separate from other aspects of the contractual relationship. Deliverables are considered separate units of accounting provided that: (i) the delivered item(s) has value to the customer on a standalone basis and (ii) the arrangement includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially within our control.

We recognize arrangement consideration allocated to each unit of accounting when all of the revenue recognition criteria in ASC 605 are satisfied for that particular unit of accounting. In the event that a deliverable does not represent a separate unit of accounting, we recognize revenue from the combined unit of accounting over the contractual or estimated performance period for the undelivered items, which is typically the term of our research and development obligations. If there is no discernible pattern of performance or objectively measurable performance measures do not exist, then we recognize revenue under the arrangement on a straight-line basis over the period we are expected to complete our performance obligations or upon completion when the final act is of such significance to the overall arrangement that performance has not substantively occurred until the completion of that act. Conversely, if the pattern of performance over which the service is provided to the customer can be determined and objectively measurable performance measures exist, then we recognize revenue under the arrangement that arrangement using the proportional performance method.

Our research agreement contains a single unit of accounting and we recognize service revenue based upon the completed performance method of revenue recognition as we are unable to reasonably estimate the period of performance of the services and the delivery of the final study report is significant to the arrangement.

Research and Development Expenses

As part of the process of preparing our financial statements, we are required to estimate our accrued expenses as of each balance sheet date. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the

service when we have not yet been invoiced or otherwise notified of the actual cost. The majority of our service providers invoice us monthly in arrears for services performed or when contractual milestones are met. We make estimates of our accrued expenses as of each balance sheet date based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. The significant estimates in our accrued research and development expenses include the costs incurred for services performed by our service providers in connection with research and development activities for which we have not yet been invoiced.

We record our expenses related to research and development activities based on our estimates of the services received and efforts expended pursuant to quotes and contracts with vendors that conduct research and development on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the research and development expense. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or prepaid accordingly. Non-refundable advance payments for goods and services that will be used in future research and development activities are deferred and capitalized, even when there is no alternative future use for the research and development, until related goods or services are provided.

Although we do not expect our estimates to be materially different from amounts actually incurred, if our estimates of the status and timing of services performed, it could result in us reporting amounts that are too high or too low in any particular period. To date, there have been no material differences between our estimates of such expenses and the amounts actually incurred.

We have and may in the future in-license the rights to develop and commercialize product candidates. For each in-license transaction we evaluate whether we have acquired processes or activities along with inputs that would be sufficient to constitute a "business" as defined under U.S. GAAP. A "business" as defined under U.S. GAAP consists of inputs and processes applied to those inputs that have the ability to create outputs. Although businesses usually have outputs, outputs are not required for an integrated set of activities to qualify as a business. When we determine that we have not acquired sufficient processes or activities to constitute a business, any up-front payments, as well as milestone payments, are immediately expensed as acquired research and development in the period in which they are incurred.

Stock-Based Compensation

We apply the fair value recognition provisions of ASC Topic 718, *Compensation—Stock Compensation*, or ASC 718. Determining the amount of stock-based compensation to be recorded requires us to develop estimates of the fair value of stock options as of their grant date. Calculating the fair value of stock-based awards requires that we make highly subjective assumptions.

We use the Black-Scholes option pricing model to value our stock option awards. Use of this valuation methodology requires that we make assumptions as to the volatility of our common stock, the expected term of our stock options, the risk free interest rate for a period that approximates the expected term of our stock options and our expected dividend yield. Because we are a privately held company with a limited operating history, we utilize data from a representative group of public companies to estimate expected stock price volatility. For purposes of identifying representative companies, we considered characteristics such as number of product candidates in early stages of product development, area of therapeutic focus, length of trading history and similar vesting provisions. The expected volatility was determined using an average of the historical volatilities of the

representative group of companies for a period equal to the expected term of the option grant. We intend to consistently apply this process using the same representative companies until a sufficient amount of historical information regarding the volatility of our own share price becomes available or until circumstances change, such that the identified entities are no longer representative companies. In the latter case, more suitable, similar entities whose share prices are publicly available would be utilized in the calculation.

We use the "simplified method" to estimate the expected term of stock option grants to employees. Under this approach, the weightedaverage expected option term is presumed to be the average of the contractual term (ten years) and the vesting term (generally four years) of our stock options. We utilize this method due to lack of historical exercise data and the "plain-vanilla" nature of our stock-based awards. The risk-free rate is based on the yield curve of U.S. Treasury securities in effect at the time of grant with periods commensurate with the expected term of the options being valued. We have never paid, and do not anticipate paying, any cash dividends in the foreseeable future, and therefore use an expected dividend yield of zero in the option-pricing model.

We have computed the fair value of each stock option on the date of grant using the following weighted-average assumptions:

	Decembe	er 31,	September 30,
	2013	2014	2015
Weighted-average risk-free interest rate	1.21%	2.00%	1.76%
Expected dividend yield	0%	0%	0%
Expected option term (in years)	6.11	7.03	6.09
Volatility	89.23%	85.51%	82.59%

We are also required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from our estimates. The term "forfeitures" is distinct from "cancellations" or "expirations" and represents only the unvested portion of the surrendered option. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. To the extent that actual forfeitures differ from our estimates, the difference is recorded as a cumulative adjustment in the period in which the estimates are revised. Stock-based compensation expense recognized in the financial statements is based on awards that are ultimately expected to vest. Through September 30, 2015, actual forfeitures have not been material.

We expense the fair value of our stock-based awards to employees on a straight-line basis over the associated service period, which is generally the vesting period. For stock-based awards granted to consultants and non-employees, we recognize compensation expense over the period during which the services are rendered by such consultants and non-employees. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then-current fair value of our common stock for restricted stock and updated assumptions in the Black-Scholes option-pricing model for stock options.

We record the expense for stock-based awards that contain performance-based milestones in accordance with the accelerated attribution model. Management evaluates when the achievement of a performance-based milestone is probable based on the expected satisfaction of the performance conditions as of the reporting date. For certain of our performance-based awards, notwithstanding any vesting in accordance with the achievement of performance-based milestones, such awards vest in full on the sixth anniversary of the vesting commencement date. Compensation expense for such awards is recognized over the six-year vesting period unless management determines that the achievement of any performance-based milestones are probable, in which case expense is accelerated.

The following table presents the grant dates, number of underlying shares of common stock and the per share exercise prices of stock options granted between January 1, 2014 and September 30, 2015, along with the fair value per share utilized to calculate stock-based compensation expense:

Date of Issuance	Type of Award	Number of Shares	of A	rcise Price ward per 1are(1)	of C Sto Sl	ir Value Common ock per hare at Grant	Est	r Share timated Fair alue of vard(2)
1/29/2014	Options	5,000	\$	0.27	\$	0.26	\$	0.19
6/3/2014	Options	677,922	\$	0.37	\$	0.37	\$	0.27
9/4/2014	Options	66,373	\$	0.37	\$	0.37	\$	0.27
10/22/2014	Options	344,190	\$	0.81	\$	0.81	\$	0.58
2/5/2015	Options	841,990	\$	0.81	\$	1.10(3)	\$	0.83
6/9/2015	Options	1,447,904	\$	0.81	\$	1.59(3)	\$	1.27
9/17/2015	Options	241,250	\$	1.85	\$	1.85	\$	1.33
9/21/2015	Options	967,769	\$	1.85	\$	1.85	\$	1.30

- (1) The Exercise Price of Award per Share represents the fair value of our common stock on the date of grant, as determined by our board of directors, taking into account our most recently available independent third-party valuation of our common stock as well as additional factors that may have changed since the date of such valuation.
- (2) The Per Share Estimated Fair Value of Award reflects the fair value of options as estimated at the date of grant using the Black-Scholes option-pricing model.
- (3) At the time of the option grants on February 5, 2015 and June 9, 2015, our board of directors determined the fair value of our common stock was \$0.81 per share, based on a valuation report dated as of October 9, 2014. However, as described below, in connection with a retrospective fair value assessment for financial reporting purposes we adjusted the fair value of common stock at the date of these grants.

Stock-based compensation expense totaled approximately \$0.9 million for the year ended December 31, 2014 and \$2.4 million for the nine months ended September 30, 2015. As of September 30, 2015, we had \$6.4 million of unrecognized compensation expense related to unvested stock options and unvested restricted stock which we expect to recognize over a weighted-average period of 2.7 years. We expect the impact of our stock-based compensation expense for restricted stock and stock options granted to employees, directors and other service providers to increase in future periods due to potential increases in the value of our common stock and headcount.

Determination of Fair Value of Common Stock on Grant Dates

We are required to estimate the fair value of our common stock underlying our stock-based awards when performing the fair value calculations using the Black-Scholes option pricing model. The fair value of our common stock underlying our stock-based awards was determined on each grant date by our board of directors, with input from management, considering our most recently available independent third-party valuations of common stock and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of grant. These independent third-party valuations of our common stock were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants *Audit and Accounting Practice Aid Series: Valuation of Privately Held Company Equity Securities Issued as Compensation*, or the Practice Aid. Once a public trading market for our common stock has been established in connection with the closing of this offering, it will no longer be necessary for us to estimate the fair value of our common stock in

connection with our accounting for stock options and restricted stock, as the fair value of our common stock will be its trading price on The NASDAQ Global Market.

For financial reporting purposes, we performed common stock valuations, with the assistance of an independent third-party valuation specialist, as of April 1, 2014, October 9, 2014 and September 9, 2015 which resulted in valuations of our common stock of \$0.37, \$0.81 and \$1.85, respectively, as of those dates. In September 2015, with the assistance of an independent third-party valuation specialist, we performed retrospective common stock valuations for financial reporting purposes as of March 31, 2015 and June 30, 2015, which resulted in valuations of our common stock of \$1.23 and \$1.59 per share, respectively, as of those dates. In conducting these independent third-party valuations, we considered all objective and subjective factors that we believed to be relevant for each valuation conducted, including our best estimate of our business condition, prospects and operating performance at each valuation date. Within the valuations performed, a range of factors, assumptions and methodologies were used. The significant factors included:

- the lack of an active public market for our common and preferred stock;
- prices of shares of our preferred stock that we had sold to outside investors in arm's length transactions, and the rights, preferences and privileges of that convertible stock relative to our common stock;
- our results of operations and financial position and the status of our research and preclinical development efforts;
- the material risks related to our business;
- our business strategy;
- the market performance of publicly traded companies in the life sciences and biotechnology sectors;
- the likelihood of achieving a liquidity event for the holders of our common stock, such as an initial public offering, or IPO, given prevailing market conditions; and
- recent independent third-party valuations of our common stock prepared in accordance with methodologies outlined in the Practice Aid.

There are significant judgments and estimates inherent in the determination of the fair value of our common stock. These judgments and estimates include assumptions regarding our future operating performance, the time to completing an IPO or other liquidity event, the related company valuations associated with such events and the determinations of the appropriate valuation methods. If we had made different assumptions, our stock-based compensation expense, net loss and net loss per share applicable to common stockholders could have been significantly different.

Common Stock Valuations Methodologies

Common stock valuation methodologies. The valuations of our common stock were prepared in accordance with the guidelines in the Practice Aid, which prescribes several valuation approaches for determining the value of an enterprise, such as the cost, market and income approaches, and various methodologies for allocating the value of an enterprise to its capital structure and specifically the common stock.

The market approach estimates the fair value of a company by applying market multiples of comparable companies in a similar line of business and considers the price that investors have paid for the equity of publicly traded companies or venture investments in a private firm. Through the creation of multiples of revenue, operating income, net income and other key metrics for comparable assets, a method of obtaining a relative valuation of an asset can be made.

Generally, our enterprise value was determined using the market approach valuation method.

Methods used to allocate our enterprise value to classes of securities. In accordance with the Practice Aid, we considered the following methods for allocating the enterprise value across our classes and series of capital stock to determine the fair value of our common stock at each valuation date:

OPM. The option pricing method, or OPM, treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceed the value of the liquidation preferences at the time of a liquidity event, such as a strategic sale or merger. The common stock is modeled as a call option on the underlying equity value at a predetermined exercise price. In the model, the exercise price is based on a comparison with the total equity value rather than, as in the case of a regular call option, a comparison with a per share stock price. Thus, common stock is considered to be a call option with a claim on the enterprise at an exercise price equal to the remaining value immediately after the preferred stock liquidation preference is paid.

The OPM uses the Black-Scholes option-pricing model to price the call options. This model defines the securities' fair values as functions of the current fair value of a company and uses assumptions, such as the anticipated timing of a potential liquidity event and the estimated volatility of the equity securities.

The OPM backsolve approach was used to estimate enterprise value under the OPM. The OPM backsolve approach uses the OPM to derive the implied equity value for one type of equity security from a contemporaneous sale transaction involving another type of the company's equity securities. In the OPM, the assumed volatility factor was based on the historical trading volatility of our publicly traded peer companies. At each valuation date, a determination was made by us as to the appropriate volatility to be used, considering such factors as the expected time to a liquidity event and our stage of development.

To derive the fair value of the common stock using the OPM, the proceeds to the common stockholders were calculated based on the preferences and priorities of the preferred stock and common stock. We then applied a discount for lack of marketability to the common stock to account for the lack of access to an active public market.

PWERM. Under a probability-weighted expected return method, or PWERM, the value of the various equity securities are estimated based upon an analysis of future values for the enterprise, assuming various outcomes. The common stock value is based on the probability-weighted present value of expected future investment returns considering each of the possible outcomes available as well as the rights of each class of stock. The future value of the common stock under each outcome is discounted back to the valuation date at an appropriate risk-adjusted discount rate and probability weighted to arrive at an indication of value for the common stock.

Hybrid Method. The hybrid method is a PWERM where the equity value in one of the scenarios is calculated using an OPM. In the hybrid method used by us, two types of future-event scenarios were considered: an IPO and an unspecified liquidity event. The enterprise value for the IPO scenario was determined using a market approach. The enterprise value for the unspecified liquidity event scenario was determined using the OPM backsolve approach. The relative probability of each type of future-event scenario was determined based on an analysis of market conditions at the time, including then-current IPO valuations of similarly situated companies, and expectations as to the timing and likely prospects of the future-event scenarios.

To determine the enterprise value for the IPO scenario, we used the guideline public company method, which includes comparisons to publicly traded companies in the biopharmaceutical industry that recently completed IPOs. That enterprise value was then discounted back to the valuation date at an appropriate risk-adjusted discount rate.

To derive the fair value of the common stock for each scenario under the hybrid method, the proceeds to the common stockholders were calculated based on the conversion rights and preferences of the preferred stock. We then applied a discount for lack of marketability to the common stock to account for the lack of access to an active public market.

Prior to January 1, 2015, our common stock valuations were prepared utilizing OPM. Our common stock valuations in 2015 were prepared utilizing the hybrid method.

Results of Operations

Comparison of Nine Months Ended September 30, 2014 and 2015

The following table summarizes our results of operations for the nine months ended September 30, 2014 and 2015, together with the changes in those items in dollars (in thousands):

		nths Ended nber 30,		
	2014	2015 (unaudited	Dollar Change	Percentage Change
Revenue	\$	\$ 317	\$ 317	n/a
Operating expenses:				
Research and development	7,901	16,030	8,129	103%
General and administrative	1,843	3,418	1,575	85%
Total operating expenses	9,744	19,448	9,704	100%
Other income (expense), net	2	2		0
Net loss	\$ (9,742)	\$ (19,129)	\$ (9,387)	96%

Revenue

Revenue was \$0.3 million for the nine months ended September 30, 2015 and related to the completion of a research project under our research agreement with a multinational pharmaceutical company. We did not earn any revenue for the nine months ended September 30, 2014.

Research and Development Expense

Research and development expense increased by \$8.1 million from \$7.9 million for the nine months ended September 30, 2014 to \$16.0 million for the nine months ended September 30, 2015. The following table summarizes our research and development expenses for the nine months ended September 30, 2014 and September 30, 2015 (in thousands):

	Nine Months Ended September 30,						
	2014	2015	Dollar Change				
		(unaudite	d)				
External research and preclinical development	\$ 4,037	\$ 8,079	\$ 4,042				
Employee-related expenses, excluding stock-based compensation	2,170	3,466	1,296				
Stock-based compensation	514	2,073	1,559				
Consulting, licensing and professional fees	517	1,357	840				
Facilities and other expenses	663	1,055	392				
Total research and development expenses	\$ 7,901	\$ 16,030	\$ 8,129				

The increase in research and development expense was primarily attributable to research and develop activities associated with advancing our lead preclinical programs and enhancing our internal capabilities and included the following:

- approximately \$4.0 million for costs from third parties that conduct research and development and preclinical activities on our behalf, including approximately \$2.1 million in chemistry expenses for contract chemistry personnel and increased chemistry analysis and \$0.8 million for in vivo study costs;
- approximately \$1.6 million for increased stock-based compensation expense;
- approximately \$1.3 million for increased personnel related expenses, including increased salary and benefits primarily due to the hire of research and development personnel;
- approximately \$0.8 million in consulting, licensing and professional fees including the \$0.5 million upfront payment made under the TMRC license agreement; and
- approximately \$0.4 million for increases in facilities costs including rent, depreciation and maintenance expenses.

General and Administrative Expense

General and administrative expense increased by \$1.6 million from \$1.8 million for the nine months ended September 30, 2014 to \$3.4 million for nine months ended September 30, 2015. The increase in general and administrative expense was primarily attributable to the following:

- approximately \$0.8 million for employee-related costs, including salary and benefits as a result of the increase in administrative function headcount;
- approximately \$0.4 million primarily for consulting and professional fees, including increased corporate legal fees in support of the negotiations of the TMRC license agreement and the negotiations of our operating lease agreement for office space and increased public relations expenses; and
- approximately \$0.2 million for increased stock-based compensation expense.

Other Income (Expense), Net

Other income (expense), net for the nine months ended September 30, 2014 and September 30, 2015 was \$2,000 and was comprised of interest income on our invested cash and cash equivalents, offset by interest expense related to our equipment financing arrangements.

Comparison of Years Ended December 31, 2013 and 2014

The following table summarizes our results of operations for the years ended December 31, 2013 and December 31, 2014, respectively, together with the changes in those items in dollars (in thousands):

	_	Year Decem]	Dollar	Percentage
	_	2013 2014			_(Change	Change
Revenue	\$	_	\$	_	\$	_	0%
Operating expenses:							
Research and development		6,266		10,923		4,657	74%
General and administrative		2,367		2,512		145	6%
Total operating expenses		8,633		13,435		4,802	56%
Other income (expense), net		(32)		4		36	(113)%
Net loss	\$	(8,665)	\$	(13,431)	\$	(4,766)	55%



Revenue

During the years ended December 31, 2013 and 2014, respectively, we did not earn any revenue.

Research and Development Expense

Research and development expense increased by \$4.7 million from \$6.3 million for the year ended December 31, 2013 to \$10.9 million for the year ended December 31, 2014. The following table summarizes our research and development expenses for the years ended December 31, 2014 and December 31, 2013, respectively (in thousands):

		Year Ended December 31,				
	2013					
External research and preclinical development	\$ 2,499	\$ 5,520	\$ 3,021			
Employee-related expenses, excluding stock-based compensation	1,864	2,984	1,120			
Stock-based compensation	673	830	157			
Consulting, licensing and professional fees	466	682	216			
Facilities and other expenses	764	907	143			
Total research and development expenses	\$ 6,266	\$ 10,923	\$ 4,657			

The increase in research and development expense was primarily attributable to research and development associated with advancing our preclinical programs and enhancing our internal capabilities, and included the following:

- approximately \$3.0 million for costs from third parties that conduct research and development and preclinical activities on our behalf, including approximately \$2.0 million in chemistry expenses for contract chemistry personnel and increased chemistry analysis and \$0.5 million for high-throughput sequencing; and
- approximately \$1.1 million for increased personnel related expenses, including salary and benefits primarily due to the hire of research personnel.

General and Administrative Expense

General and administrative expense increased by \$0.1 million from \$2.4 million for the year ended December 31, 2013 to \$2.5 million for the year ended December 31, 2014. The increase in general and administrative expense was primarily attributable to the following:

- approximately \$0.3 million for employee compensation costs, including salary and benefits as a result of the increase in administrative function headcount; offset by
- approximately \$0.2 million decrease in consulting and professional fees.

Other Income (Expense), Net

Other income (expense), net for the years ended December 31, 2013 and 2014 was (\$32,000) and \$4,000, respectively. Interest expense in 2013 was related to the interest accrued on our convertible promissory notes, which were converted into shares of preferred stock in April 2013, and interest income in 2014 was related to the interest on our invested cash and cash equivalents.

Liquidity and Capital Resources

Sources of Liquidity

We have funded our operations primarily through gross proceeds of \$82.0 million from sales of our preferred stock and the issuance of convertible notes that subsequently coverted into preferred stock. As of September 30, 2015, we had cash and cash equivalents of \$45.0 million.

Cash Flows

The following table provides information regarding our cash flows for the years ended December 31, 2013 and 2014 and the nine months ended September 30, 2014 and September 30, 2015 (in thousands):

	 Year Ended December 31,			 		hs Ended oer 30,	
	2013	_	2014	2014	_	2015	
	 			(una	udit	ed)	
Net cash provided by (used in):							
Operating activities	\$ (7,194)	\$	(11,969)	\$ (8,466)	\$	(14,829)	
Investing activities	(878)		(201)	(187))	(883)	
Financing activities	10,045		68,762	15,764		304	
Net increase (decrease) in cash and cash equivalents	\$ 1,973	\$	56,592	\$ 7,111	\$	(15,408)	

Net Cash Used in Operating Activities

The use of cash in all periods resulted primarily from our net losses adjusted for non-cash charges and changes in components of working capital.

Net cash used in operating activities was \$12.0 million during the year ended December 31, 2014 compared to \$7.2 million during the year ended December 31, 2013. The increase in cash used in operating activities was primarily due to an increase in net loss of \$4.8 million for the year ended December 31, 2014 as compared to the year ended December 31, 2013.

Net cash used in operating activities was \$14.8 million during the nine months ended September 30, 2015 compared to \$8.5 million during the nine months ended September 30, 2014. The increase in cash used in operating activities was primarily due to an increase in our net loss of \$9.4 million for the nine months ended September 30, 2015 as compared to the nine months ended September 30, 2014.

Net Cash Used in Investing Activities

Net cash used in investing activities was \$0.2 million during the year ended December 31, 2014 compared to \$0.9 million during the year ended December 31, 2013. The decrease in cash used in investing activities was due to decreased purchases of property and equipment.

Net cash used in investing activities was \$0.9 million during the nine months ended September 30, 2015 compared to \$0.2 million during the nine months ended September 30, 2014. The increase in cash used in investing activities was due to increased purchases of property and equipment.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was \$68.8 million during the year ended December 31, 2014 compared to \$10.1 million during the year ended December 31, 2013. The increase in cash provided by financing activities was primarily due to the issuance of \$15.8 million of Series A-3 preferred stock and \$53.1 million of Series B preferred stock during the year ended December 31, 2014. In the year ended December 31, 2013, \$10.0 million of Series A-2 preferred stock was issued.

Net cash provided by financing activities was \$0.3 million during the nine months ended September 30, 2015 compared to \$15.8 million during the nine months ended September 30, 2014. The decrease in cash provided by financing activities was primarily due to the issuance of \$15.8 million of Series A-3 preferred stock during the nine months ended September 30, 2014, with no preferred stock issuance occurring during the nine months ended September 30, 2015.



Funding Requirements

We expect our expenses to increase in connection with our ongoing activities, particularly as we initiate clinical trials of SY-1425, advance the development of our CDK7 inhibitor program, initiate new research and preclinical development efforts and seek marketing approval for any product candidates that we successfully develop. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to establishing sales, marketing, distribution and other commercial infrastructure to commercialize such products. Furthermore, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our research and development programs or future commercialization efforts.

We believe that the anticipated net proceeds from this offering, together with our existing cash and cash equivalents as of September 30, 2015, will enable us to fund our operating expenses and capital expenditure requirements through at least the next months. Our future capital requirements will depend on many factors, including:

- the scope, progress, timing, costs and results of clinical trials of SY-1425 and any CDK7 inhibitors we successfully advance into clinical development;
- research and preclinical development efforts for any future product candidates that we may develop;
- our ability to enter into and the terms and timing of any collaborations, licensing agreements or other arrangements;
- the number of future product candidates that we pursue and their development requirements;
- the outcome, timing and costs of seeking regulatory approvals;
- the costs of commercialization activities for any of our product candidates that receive marketing approval to the extent such costs are not the responsibility of any future collaborators, including the costs and timing of establishing product sales, marketing, distribution and manufacturing capabilities;
- the costs of acquiring potential new product candidates or technology;
- the costs of any physician education programs relating to selecting and treating genomically defined patient populations;
- the timing and amount of milestone and other payments due to licensors for patent and technology rights used in our development platform;
- revenue received from commercial sales, if any, of our current and future product candidates;
- our headcount growth and associated costs as we expand our research and development and establish a commercial infrastructure;
- the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights and defending against intellectual property related claims; and
- the costs of operating as a public company.

Identifying potential product candidates and conducting preclinical studies and clinical trials is a time-consuming, expensive and uncertain process that takes many years to complete, and we may never generate the necessary data or results required to obtain marketing approval and achieve product sales. In addition, our product candidates, if approved, may not achieve commercial success. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all.

Until such time, if ever, as we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

If we raise funds through additional collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Contractual Obligations

As of December 31, 2014, we had no significant contractual obligations. The remaining lease commitment under our operating lease for our previous office space at 480 Arsenal Street in Watertown, Massachusetts, which expired in August 2015, was \$206,000 as of December 31, 2014.

The following table summarizes our significant contractual obligations as of payment due date by period at September 30, 2015 (in thousands):

		L	ess Than					Мо	re than
	Total	_	1 Year	1 t	o 3 Years	3 t	o 5 Years	5	Years
Operating lease commitments(1)	\$ 6,452	\$	1,148	\$	2,523	\$	2,668	\$	113
Capital lease(2)	\$ 390	\$	131	\$	259				

- (1) We lease office space at 620 Memorial Drive in Cambridge, Massachusetts under a non-cancelable operating lease that expires in October 2020.
- (2) We have a capital lease for laboratory equipment that expires in March 2018.

We enter into agreements in the normal course of business with our contract research organizations and institutions to license intellectual property. We have not included these future payments in the table of contractual obligations above since the contracts are cancelable at any time by us, generally upon 30 to 90 days prior written notice.

Our license agreements include potential milestone payments that are contingent upon the successful development and commercialization of products using the intellectual property licensed under such agreements. Under our agreements with Dana-Farber and Whitehead, the maximum aggregate potential milestone payments payable by us total approximately \$6.9 million. Under the applicable agreement, we are also required to pay annual maintenance fees, as well as tiered, single-digit percentage royalties, on a country-by-country, product-by-product basis, on net product sales.

Under the TMRC license agreement, we may make additional payments upon the successful achievement of pre-specified clinical and regulatory milestones in an aggregate amount of approximately \$13.0 million per indication. We are obligated to pay the balance of the upfront license fee under this agreement upon the execution of a supply agreement with TMRC for the supply of the active pharmaceutical agreement in SY-1425, which we expect to occur by the end of 2015. Upon the successful dosing of the first patient in our Phase 2 clinical trial of SY-1425, which we expect to occur in the first half of 2016, we are obligated to make a \$1.0 million milestone payment.

These future obligations are not reflected in the table above as these payments are contingent upon achievement of developmental and commercial milestones, the likelihood of which cannot be reasonably estimated at this time.

Off-Balance Sheet Arrangements

We did not have, during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under applicable Securities and Exchange Commission rules.

Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk related to changes in interest rates. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments, including cash equivalents, are in the form of a money market fund and marketable securities and are invested in U.S. Treasury obligations.

We are also exposed to market risk related to changes in foreign currency exchange rates. We contract with vendors that are located in Asia and Europe and certain invoices are denominated in foreign currencies. We are subject to fluctuations in foreign currency rates in connection with these arrangements. We do not currently hedge our foreign currency exchange rate risk. As of September 30, 2015, we had minimal or no liabilities denominated in foreign currencies.

Inflation generally affects us by increasing our cost of labor and clinical trial costs. We do not believe that inflation had a material effect on our business, financial condition or results of operations during the years ended December 31, 2013 and 2014 and the nine months ended September 30, 2014 and September 30, 2015, respectively.

Internal Control over Financial Reporting

In connection with the audit of our financial statements as of and for the years ended December 31, 2014 and 2013, we identified material weaknesses in our internal control over financial reporting. The material weaknesses related to our controls over the classification of certain indirect and other expenses between general and administrative and research and development, and to the accounting for stock-based compensation. We also identified deficiencies related to our controls over our accounting for income taxes. The material weaknesses were due to the lack of appropriate oversight and review procedures by accounting personnel to properly identify and evaluate certain accounting matters that resulted in errors in our financial statements.

We are implementing measures designed to improve our internal control over financial reporting to remediate these material weaknesses, including the following:

- we are formalizing our processes and internal control documentation and strengthening supervisory reviews by our management;
- we have hired additional qualified accounting personnel and engaged financial consultants, all of whom have significant accounting and financial reporting experience, which will enable the implementation of internal controls over financial reporting and segregating duties among accounting personnel;
- we expect to hire additional senior accounting and finance staff to complete this remediation; and
- we intend to implement certain accounting systems to automate manual processes, such as tracking and accounting for stockbased awards.

These additional resources and procedures are designed to enable us to broaden the scope and quality of our internal review of underlying information related to financial reporting and to formalize and enhance our internal control procedures. With the oversight of senior management, we have begun



taking steps and plan to take additional measures to remediate the underlying causes of the material weaknesses.

We, and our independent registered public accounting firm, were not required to perform an evaluation of our internal control over financial reporting as of December 31, 2014 in accordance with the provisions of the Sarbanes-Oxley Act. Accordingly, we cannot provide assurance that we have identified all, or that we will not in the future have additional, material weaknesses. Material weaknesses may still exist when we report on the effectiveness of our internal control over financial reporting as required by reporting requirements under Section 404 of the Sarbanes-Oxley Act after the closing of this offering.

JOBS Act

In April 2012, the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, was enacted. Section 107 of the JOBS Act provides that an emerging growth company, or EGC, can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, for complying with new or revised accounting standards. Thus, an EGC can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

We are in the process of evaluating the benefits of relying on other exemptions and reduced reporting requirements under the JOBS Act. Subject to certain conditions, as an EGC, we intend to rely on certain of these exemptions, including the exemption from the requirement to provide an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act and with the exemption from any requirement that may be adopted by the Public Company Accounting Oversight Board, or PCAOB, regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements, known as the auditor discussion and analysis. We will remain an EGC until the earlier of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.0 billion or more; (ii) the last day of the fiscal year following the fifth anniversary of the date of the closing of this offering; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission.

BUSINESS

Overview

We are a biopharmaceutical company applying a pioneering approach to discover and develop medicines that control the expression of genes with the aim of treating cancer and other serious diseases. We have built a proprietary platform that provides a unique lens to systematically and efficiently identify crucial genes that become dysregulated in diseased cells in order to create medicines that return cells to a non-diseased state. We believe that our platform will allow us to create a pipeline of gene control medicines that will provide a profound and durable benefit for currently underserved patients. By focusing on genomically defined subsets of patients, we believe we can conduct efficient clinical trials with a higher likelihood of success. We intend to submit an investigational new drug application, or IND, to the U.S. Food and Drug Administration, or FDA, and advance our lead product candidate, SY-1425 (tamibarotene), into a Phase 2 clinical trial, in the first half of 2016. This trial is expected to initially enroll genomically defined subsets of patients with acute myelogenous leukemia, or AML, and myelodysplastic syndromes, or MDS, identified by our gene control platform. We plan to submit an IND for our second program targeting cyclin-dependent kinase 7, or CDK7, which is an important gene control target in several cancers, initially for the treatment of acute leukemias, in the second half of 2016. Leveraging our platform, we are also generating a pipeline of novel preclinical drug candidates for genomically defined subsets of patients. Our goal is to build a fully integrated biopharmaceutical company based on our leadership position in gene control.

There are approximately 200 different cell types in a given individual. Despite having identical genomes, each of these cell types has a different function. For example, a skin cell functions differently from a muscle cell despite sharing the exact same DNA. A small number of genes are crucial for determining cell type and function. The coordinated activity, or expression, of these genes is referred to as the gene control program. By understanding gene control programs, we believe we have the ability to uncover the drivers of cell type and function in healthy and diseased cells. To understand the cell's gene control program, we use genomic tools to locate enhancers, which are specialized regions of DNA that are associated with transcription factors, transcriptional kinases and other transcriptional and regulatory proteins and that carry coordinated information from the genes to the cell. We focus on super-enhancers, a very small subset of enhancers, which control the expression of crucial genes responsible for cell type and function.

In disease, gene control programs are altered. This process is mediated by changes in transcription factors, transcriptional kinases and other transcriptional and regulatory proteins that are critical to the expression of genes. Analysis of super-enhancers within diseased and healthy cells in specific patient segments enables us to systematically and efficiently identify disease-causing alterations in a cell's gene control program and pinpoint targets for therapeutic intervention.

The discovery and development of targeted therapies, in which the right drug is matched to the right patient, has dramatically improved the ability to treat cancer and other serious diseases. The success of targeted therapies relies in large part on the identification of patients with a specific genetic alteration who are more likely to benefit from a particular treatment. Most targeted therapies in oncology focus on targeting one abnormal protein resulting from a genetic alteration. In contrast, gene control medicines target the underlying coordinated expression of genes that contribute to disease, opening up a wide array of potential new drug targets, including transcription factors, transcriptional kinases and other transcriptional and regulatory proteins, that mediate the gene control program of a cell. Dysregulation of gene control programs is fundamental to many serious diseases, including cancer. We believe gene control medicines will allow us to influence multiple drivers of disease in a targeted fashion to achieve a profound and durable clinical benefit for patients.

The relatively few gene control medicines available are among the most important targeted therapies available today and are widely used for the treatment of cancer and inflammatory diseases.

Drugs that target transcription factors, such as estrogen receptors in breast cancer, androgen receptors in prostate cancer and glucocorticoid receptors in inflammation, are important examples of gene control medicines that have produced transformative patient benefits. For example, tamoxifen, a gene control medicine targeting a transcription factor, revolutionized the treatment of certain breast cancers and is prescribed 1.9 million times annually in the United States, illustrating the significant therapeutic potential of gene control medicines. However, a lack of understanding of gene control programs has historically prevented a systematic approach to identifying these critical points of therapeutic intervention, making gene control a largely untapped field for drug discovery and development.

We believe that through our proprietary gene control platform, we have created a systematic and efficient approach to the discovery of novel disease targets and biomarkers. Our gene control platform consists of two fundamental pillars: mapping gene control programs and drugging gene control targets. The first pillar of our platform is our ability to map gene control programs. Starting from human tissue samples, we compare diseased cells to healthy cells and analyze the cells of different patient subsets within a disease to identify changes in gene control programs. We have invested significant resources in tissue processing, genomics and computational biology capabilities to industrialize the production of maps of gene control programs. We believe this approach allows us to systematically and efficiently pinpoint disease-driving genes and optimal points of therapeutic intervention. We have amassed one of the largest known datasets of these maps across a wide range of human diseases and cell types and have identified multiple novel disease targets. To date, we have mapped AML, breast cancer, renal cell carcinoma, polycystic kidney disease, spinal muscular atrophy and normal T-cells. Maps are either ongoing or planned in several cancers, including ovarian, pancreatic, hepatocellular, colorectal and lung cancer and melanoma, as well as several other diseases including Alzheimer's disease and inflammatory disorders. Our long-term goal is to map all serious diseases where we believe currently underserved patients can benefit from gene control medicines.

The second pillar of our platform is our ability to drug gene control targets. Because of the central role they play in gene control programs, transcription factors, transcriptional kinases and other transcriptional and regulatory proteins are among the most promising and high potential gene control targets. These gene control targets have historically been difficult to drug; however, through our significant investments in developing proprietary assays and in our capabilities in biochemistry, structural biology and medicinal chemistry, we believe we will be able to overcome challenges that have prevented others from systematically and successfully developing gene control medicines. We are building a pipeline of product candidates to modulate gene control programs through two distinct approaches: internal efforts to discover novel drugs against these targets and linking existing drugs to novel genomically defined patient populations identified through our platform. Our highly selective and potent inhibitors of CDK7 demonstrate our ability to create proprietary gene control product candidates. Our SY-1425 program demonstrates our ability to link existing drugs to novel genomically defined subsets of patients, which could allow us to accelerate our clinical development path.

We are leveraging our platform to develop a pipeline of gene control product candidates. Our most advanced drug programs are summarized in the table below:

Program	Initial Indications	Planned Milestones	Potential Indications	Syros Commercial Rights
SY-1425 (RARa	AML and MDS	Submit IND in	Breast cancer	North
agonist)		1H 2016		America, Europe
		Initiate Phase 2 clinical trial in 1H 2016		Lucp
CDK7 inhibitor	Acute leukemias	Submit IND in 2H 2016	Small cell lung cancer, triple negative breast cancer, <i>MYCN</i> - amplified neuroblastoma	Worldwide
		Initiate Phase 1/2 clinical trial in 1H 2017		

Our lead product candidate, SY-1425, is an oral, potent and selective RAR a agonist that we are advancing based on our deep understanding of the role of transcription factors in certain cancers. We plan to initiate a Phase 2 clinical trial in a genomically defined group of AML and MDS patients in the first half of 2016. Using our platform, we have identified genomically defined subsets of AML and breast cancer patients that have a super-enhancer associated with the *RARA* gene, and we also identified a proprietary gene control biomarker, which we refer to as the *RARA* biomarker. In *in vivo* mouse models implanted with human AML tumors, SY-1425 was observed to be effective in stopping the growth of tumors that were positive for the *RARA* biomarker. Importantly, mice with *RARA* biomarkerpositive tumors that were treated with SY-1425 experienced extended survival. We observed the *RARA* biomarker. This leads us to believe that approximately 16,000 patients diagnosed annually in the United States, Canada and the five largest European countries by population, Germany, the United Kingdom, France, Spain and Italy, have the form of AML or MDS that could be addressed by SY-1425. Similarly, we have observed the *RARA* biomarker in approximately 35% of breast cancer patient samples we analyzed, leading us to believe that approximately 55,000 metastatic breast cancer patients diagnosed annually in the countries listed above could benefit from SY-1425. We have exclusive North American and European commercial rights for SY-1425 in human cancer under our license agreement with TMRC Co., Ltd., or TMRC. Tamibarotene is approved in Japan for the treatment of acute promyelocytic leukemia, or APL, a form of AML, for which tamibarotene has a well characterized efficacy and safety profile.

We are developing our CDK7 inhibitor program based on our deep understanding of transcriptional kinase biology and biochemistry. Our CDK7 inhibitor program is focused on the treatment of cancers that are dependent on a high and constant expression of certain transcription factors for their growth and survival, a phenomenon known as transcriptional addiction. Using our internal drug discovery capabilities, we have generated potent and highly selective small molecule CDK7 inhibitors. In preclinical studies, our selective CDK7 inhibitors were observed to have significant anti-tumor activity and to preferentially kill cancer cells over healthy cells in *in vivo* models of several aggressive and underserved cancers, including AML, acute lymphoblastic leukemia, or ALL, *MYCN*-amplified neuroblastoma, small cell lung cancer and triple negative breast cancer. We expect to select our development candidate in the first half of 2016, submit an IND in the second half of 2016 and initiate a Phase 1/2 clinical trial in patients with acute leukemias in the first half of 2017. We

selected acute leukemias as our first clinical development indications due to high levels of observed efficacy in our preclinical models and because few treatment options exist for these patients. Subject to strong clinical results, there could be an opportunity for accelerated clinical development. We believe that all of the approximately 37,000 AML and 12,000 ALL patients diagnosed annually in the United States, Canada, the five largest European countries and Japan, which we refer to as the developed pharmaceutical markets, could benefit from an effective CDK7 inhibitor.

We were founded by leaders in the field of gene control from the Whitehead Institute for Biomedical Research at the Massachusetts Institute of Technology, or Whitehead, and the Dana-Farber Cancer Institute, or Dana-Farber, an affiliate of Harvard Medical School. Many of our employees have been members of teams that uncovered innovative scientific findings and delivered highly impactful drugs to the marketplace. Our management team consists of drug discovery, development and commercialization experts with experience in translating scientific discoveries into innovative treatments, including Avonex and Tysabri for multiple sclerosis, Velcade for hematological malignancies, Entyvio for ulcerative colitis, and Kalydeco and Orkambi for cystic fibrosis.

Our Principles

We maintain a culture that embodies the following core principles with the aim to provide long-term benefits to patients and to create significant value for our employees, investors and other stakeholders:

- We are committed to transforming the lives of patients.
- We are pioneering in our science.
- We challenge each other to achieve excellence.
- We work with passion, integrity and respect.
- We like rigorous work and serious fun.

Our Strategy

Our mission is to transform the lives of patients through the creation of novel gene control medicines by building a fully integrated, leading biopharmaceutical company. To achieve this mission, we are executing on the following strategy:

- **Rapidly and efficiently advance our lead programs through clinical development.** We intend to submit two INDs in 2016. We expect to submit an IND for SY-1425 and to enroll our first patient in a Phase 2 clinical trial in the first half of 2016. We expect to select a development candidate from our CDK7 inhibitor program in the first half of 2016, start IND-enabling activities in the first half of 2016, submit an IND in the second half of 2016 and initiate a Phase 1/2 clinical trial in patients with acute leukemias in the first half of 2017. For both of these programs, we intend to enrich our clinical trials with patients most likely to respond, which we believe will enable us to rapidly establish clinical proof-of-concept. Because AML, MDS and ALL are diseases of significant unmet medical need, we could be eligible, subject to encouraging clinical results, to apply for Breakthrough Therapy designation and Fast Track designation which, if granted, could accelerate clinical development and regulatory review.
- **Develop a robust pipeline of gene control product candidates.** We plan to continue leveraging our gene control platform to systematically and efficiently pinpoint genes that cause disease and to identify optimal therapeutic points of intervention in genomically defined patient populations. Employing our unique drug discovery approach, we intend to continue to either internally discover selective small molecule inhibitors of these targets or link existing drugs to novel patient populations, enabling us to potentially accelerate our clinical development path.



- Maintain our leadership position in the field of gene control. We are pioneering a novel approach to discover and develop gene control medicines. To fortify our leadership position, we intend to enhance our mapping technologies to create the most extensive collection of maps of gene control programs. We also intend to expand our validation technologies to continue to identify and validate novel targets and biomarkers across many serious diseases. Our long-term goal is to map all serious diseases where gene control is a potential viable therapeutic strategy and to validate therapeutic targets from these maps. We plan to continue investing in building our drugging capabilities, including developing proprietary assays and enhancing our biochemistry, structural biology and medicinal chemistry expertise to create or acquire gene control medicines targeting disease drivers identified by our maps.
- **Continue to foster a culture of innovation.** We are committed to pioneering science and to leadership in gene control medicines. Our employees are critical to the successful achievement of our leadership vision. We will continue to foster an environment that encourages innovation, excellence and productivity and develops our team as leaders in the field of gene control.
- Execute strategic collaborations to maximize value and extend the potential of our gene control platform across multiple disease areas. We intend to engage in strategic collaborations around both our programs and our platform. With respect to our programs, we currently own the rights to develop and commercialize SY-1425 in North America and Europe for all cancer indications. We currently retain full commercial rights to our CDK7 inhibitor program and all our other preclinical programs. We intend to evaluate collaborations that could maximize value for our programs and allow us to expand our geographic reach or leverage the expertise of strategic partners. With respect to our platform, we are focused on engaging in collaborations that will allow us to maximize the potential of our platform in oncology and other therapeutic areas. We believe that the potential of our platform is vast and these collaborations may enable us to tap into its potential across a broad range of diseases.

Our Focus—Gene Control Medicines

There are approximately 200 different cell types in a given individual. Despite having identical genomes, each of these cell types has a different function. For example, a skin cell functions differently than a muscle cell despite sharing the exact same DNA. A small number of genes within a cell are crucial in determining cell type and function. The coordinated expression of these crucial genes, which we refer to as the cell's gene control program, is what ultimately determines the type and function of a cell. The gene control program in each cell is implemented by a number of cellular components, key to which are transcription factors, transcriptional kinases and other transcriptional and regulatory proteins. These proteins are associated with specific DNA regions, called enhancers, and control the rate of transcription of genetic information from DNA into the cell.

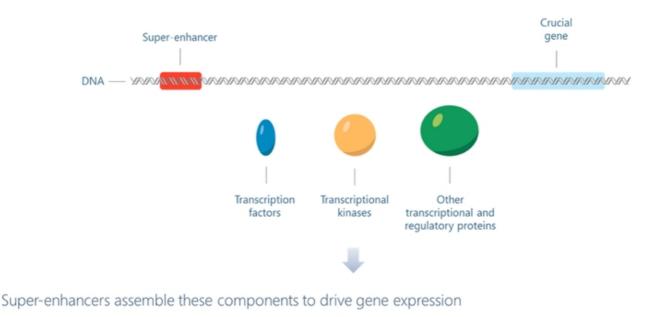
In disease, the gene control programs are altered, which changes the expression of the crucial genes determining cell type and function. This process is mediated by changes in transcription factors, transcriptional kinases and other transcriptional and regulatory proteins that regulate the coordinated expression of genes, which makes these proteins important points for therapeutic intervention.

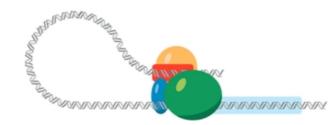
Richard A. Young, Ph.D., a Syros co-founder, a professor at Whitehead and the Department of Biology at the Massachusetts Institute of Technology, and a leader in gene control, has made recent and significant contributions to the understanding of gene control programs. Dr. Young's laboratory discovered that a very small number of enhancers, called super-enhancers, are central to orchestrating gene control programs by driving increased expression of crucial genes responsible for determining cell type and function. Analysis of the super-enhancers within a cell can rapidly and systematically enable an understanding of the gene control programs responsible for determining cell type and function and

provide critical insights into important changes in disease, pinpointing targets for therapeutic intervention.

The graphics below illustrate how super-enhancers assemble the cellular components of the transcription process that drive the expression of genes that are crucial to cell type and function.

Multiple cellular components are associated with gene expression





Super-enhancers exist in both normal and diseased cells. In many different diseases, super-enhancers are associated with, and drive the expression of, disease-causing genes. For example, multiple well-known genes, such as *MYC*, are implicated in cancer and are associated with super-enhancers. Based on our identification and analysis of disease-specific super-enhancers, we can uncover new targets and patient populations for drug discovery and development.

The discovery and development of targeted therapies, in which the right drug is matched to the right patient, has dramatically improved the ability to treat cancer and other serious diseases. The success of targeted therapies relies in large part on identification of patients with a specific genetic alteration who are most likely to benefit from a particular treatment. Most targeted therapies in oncology focus on targeting one abnormal protein resulting from a genetic alteration. In contrast, gene control medicines target gene control programs that are implicated in disease at the level of gene expression, opening up a wide array of potential new drug targets, including transcription factors, transcriptional kinases and other transcriptional and regulatory proteins. Dysregulation of gene control programs is fundamental to many serious diseases, including cancer. We believe gene control medicines will allow us to influence multiple drivers of disease in a targeted fashion to achieve a profound and durable clinical benefit for patients.



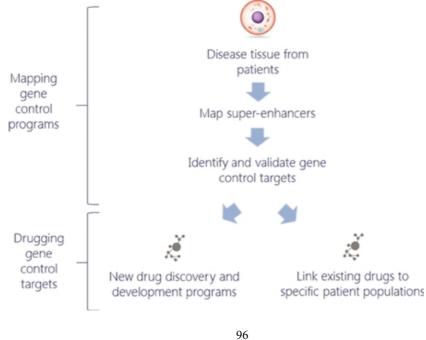
The relatively few gene control medicines available are among the most important targeted therapies available today and are widely used for the treatment of cancer and inflammatory diseases. Drugs that target transcription factors, such as estrogen receptors in breast cancer, androgen receptors in prostate cancer and glucocorticoid receptors in inflammation, are important examples of gene control medicines that have produced transformative patient benefits. For example, tamoxifen, a gene control medicine targeting a transcription factor, revolutionized the treatment of certain breast cancers and is prescribed 1.9 million times annually in the United States, illustrating the significant therapeutic potential of gene control medicines. However, a lack of understanding of gene control programs has historically prevented a systematic approach to identifying these critical points of therapeutic intervention, making gene control a largely untapped field for drug discovery and development.

Until recently, understanding of gene control programs and opportunities to therapeutically intervene have been limited. Based on the work of Syros' scientific founders Dr. Young, James Bradner, M.D. and Nathanael Gray, Ph.D., and other scientists, there is now a growing scientific understanding of gene control. That understanding, combined with technological advancements, has enabled our pioneering approach to creating gene control medicines. We have built a platform that we believe enables us to systematically discover novel gene control targets and biomarkers in human disease and create gene control medicines for the treatment of cancer and other serious diseases.

Our Gene Control Platform

Our proprietary gene control platform consists of two fundamental pillars:

- *Mapping.* We map gene control programs to identify novel disease targets and biomarkers linked to specific patient populations.
- *Drugging*. We develop product candidates against gene control targets through:
 - internal drug discovery efforts focused on creating drugs targeting transcription factors, transcriptional kinases and other transcriptional and regulatory proteins; and
 - linking existing drugs to specific patient populations identified through our platform—a strategy designed to accelerate our clinical development path.



Mapping Gene Control Programs

We have invested significant resources in building capabilities to discover novel gene control targets and biomarkers. Our approach is disease-focused. Our platform consists of technologies and capabilities to map and analyze gene control programs directly from patient tissue samples. We do this by employing our expertise and technologies in computational, gene control and cellular biologies. We have inlicensed intellectual property from the laboratories of our scientific founders at Whitehead and Dana-Farber. We have significantly improved this licensed technology, including computational algorithms and tissue processing systems, which have produced a highly efficient, scalable approach to analyze gene control programs using small amounts of patient tissue. In addition, we are developing our own intellectual property related to this technology. These advancements have enabled us to generate large sets of maps of gene control programs in several other diseases, with the long-term goal of mapping gene control programs in all serious diseases where we believe currently underserved patients can benefit from gene control medicines.

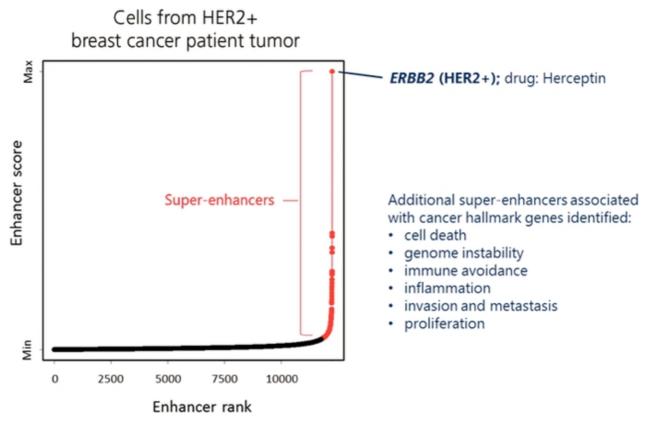
Gene Control Program Mapping

Generated	Ongoing and Planned	
AML	Colorectal cancer	
Breast cancer	Hepatocellular cancer	
Polycystic kidney disease	Melanoma	
Renal cell carcinoma	Non-small cell lung cancer	
Spinal muscular atrophy	Ovarian cancer	
Normal T-cells	Small cell lung cancer	
	Pancreatic cancer	
	Additional cancers	
	Alzheimer's disease	
	Inflammatory disorders, including autoimmune diseases and fibrotic diseases	
	Other rare genetic disorders	

We use our platform to pinpoint crucial genes in disease. We compare diseased cells to healthy cells and analyze the cells of different patient subsets within a disease to identify novel targets in genomically defined subsets of patients. We obtain human disease tissue samples from our network of academic and commercial collaborators. We then analyze these samples using a variety of genomic tools, including chromatin immunoprecipitation followed by whole genome sequencing, or ChIP-seq, and proprietary computational methods. The combination of these tools allows us to identify the location of DNA elements, including super-enhancers and their associated genes, on the genome. We validate this potential pool of targets by using biological methods for knocking down or out the target gene in cell lines, or by testing existing drugs against a specific target, to determine if the target represents an attractive point of therapeutic intervention.

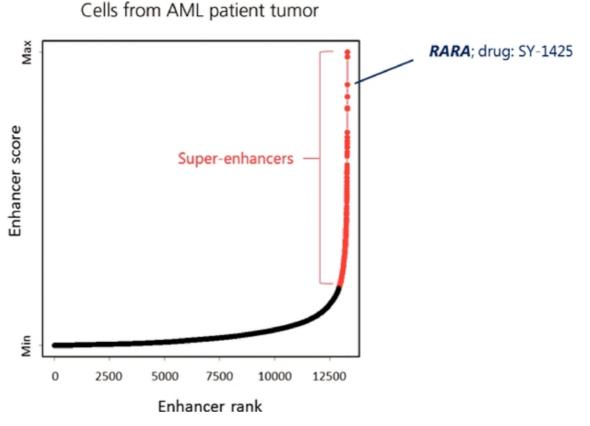
Validation of Our Approach

We have validated our approach by successfully linking known targets of successful, marketed drugs to super-enhancers in human tissue. For example, in breast cancer, we were able to recapitulate current knowledge of disease biology and identify clinically validated targets. In the graphic below, which represents a map of a tumor from a single breast cancer patient positive for overexpression of the *ERBB2* gene, which we refer to as HER2+ breast cancer, we illustrate how we use our maps of gene control programs to identify important targets in an individual's cancer. Based on the analysis, we generated a composite score for each enhancer in the sample based on its size and strength. This composite score allowed us to rank all of the enhancers found in the cancer cells and distinguish regular enhancers from super-enhancers. As shown below, a subset of enhancers—the super-enhancers—have significantly higher scores than other enhancers. Using this analysis, we identified 485 super-enhancers among the approximately 12,000 enhancers in this tumor. The unlabeled red dots in the graphic below represent super-enhancers associated with genes linked to hallmarks of cancer, including genes important in proliferation, invasion and metastasis and immune avoidance. Some of the products of these cancer drivers are targeted by existing drugs. HER2+ patients, for example, are treated with Herceptin (trastuzumab).



Similarly, in ER+, or estrogen receptor-positive, breast cancer patient samples, super-enhancers were associated with *ESR1*, a gene that produces estrogen receptor. Through this approach, we have identified novel targets in multiple segments of breast cancer, including breast cancer that is HER2-negative, ER-negative and progesterone receptor-negative, or PR-, also known as triple negative breast cancer.

In addition to replicating known targets, we have been able to link super-enhancers to novel patient populations to identify several targets for therapeutic intervention. As an example, the graphic below shows the map of enhancers in a tumor from a single patient with AML. The super-enhancer associated with the *RARA* gene is among the largest super-enhancers in this tumor. Similar to the HER2+ example above, the unlabeled red dots in the graphic below represent other super-enhancers that could enable us to identify potential novel drug targets and biomarkers. We have mapped multiple patients' tumor cells and have identified tissues from other AML patients with the same *RARA* super-enhancer.



Drugging Gene Control Targets

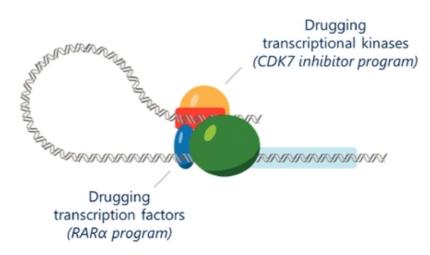
We develop product candidates against gene control targets through:

- internal drug discovery efforts focused on creating drugs targeting transcription factors, transcriptional kinases and other transcriptional and regulatory proteins; and
- linking existing drugs to specific patient populations identified through our platform—a strategy designed to accelerate our clinical development path.

We have developed core internal capabilities in computational biology, small molecule chemistry, biochemistry and structural biology to characterize the structure and function of transcription factors, transcriptional kinases and other transcriptional and regulatory proteins in order to generate novel chemical matter. Our capabilities enable us to pursue multiple drug discovery strategies to achieve

therapeutic gene control. The graphic below illustrates our areas of focus for development of product candidates.

Developing product candidates against gene control targets



Drugging Transcriptional Kinases

Our selective, potent and internally created inhibitors of CDK7 demonstrate our ability to identify tumors with transcriptional dependencies and to selectively drug transcriptional kinases. Using our core capabilities in gene control biology and biochemistry, we believe that we created the first selective, small molecule inhibitors of CDK7 with *in vivo* efficacy. We have generated a set of compounds from which we expect to select a development candidate for IND-enabling activities in the first half of 2016.

Drugging Transcription Factors

Leveraging our expertise in biology, biochemistry and chemistry, we have developed a suite of proprietary screens and assays to demonstrate direct binding of novel transcription factor inhibitors and to directly assess transcription factor inhibition in cells. Using our capabilities and expertise in X-ray crystallography and medicinal chemistry, we are developing proprietary atomic-level knowledge of the structural determinants of transcription factor inhibition by small molecules. We have generated novel molecules that are in early preclinical development and show biophysical evidence of potent direct transcription factor binding and robust cellular activity.

Linking Existing Drugs to Novel Patient Populations

SY-1425 demonstrates our ability to link existing drugs to novel genomically defined patient populations identified through our platform. We have established a process to systematically screen existing compounds for relationships between drug sensitivity and superenhancers that we identified in human disease tissue. To date, we have identified multiple drug and enhancer relationships, the most advanced leading to our SY-1425 program. We expect this approach to enable us to more rapidly enter clinical development by accessing compounds that serve as accelerated starting points for our own programs.

Advantages of our Platform and Approach

We believe that there are significant advantages to systematically mapping, identifying and drugging gene control targets for specific patient populations. Among these advantages are:

- Systematic, reproducible and unbiased approach to identifying core disease drivers in multiple serious diseases. We take a disease-centric approach. We start with human tissue and, through our platform, systematically identify the core drivers of disease. We identify optimal points of therapeutic intervention in a target- and pathway-agnostic manner.
- Ability to discover and develop medicines that address significant patient need. We are initially focused on difficult-totreat cancers or cancer subtypes for which current therapies are inadequate. Because gene control medicines affect multiple disease-driving genes, we believe they will be less susceptible to the development of resistance than other types of genomicbased targeted medicines, potentially resulting in a more profound and durable benefit for patients. This is evidenced by the proven durable benefits of the gene control medicines available today.
- **Potential for efficient clinical development.** We intend to enrich our clinical trials with genomically defined subsets of patients who are most likely to respond to our treatment, which we believe will enable us to determine if there are strong signals of efficacy early in clinical development and well before investments are made in expensive late-stage clinical studies. Subject to encouraging clinical results, we could be eligible to apply for Breakthrough Therapy designation and Fast Track designation which, if granted, could accelerate clinical development and regulatory review, allowing us to bring our therapies to patients expeditiously.

Our Clinical Programs

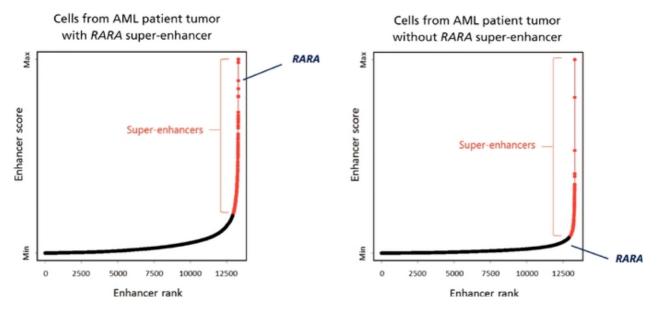
SY-1425

Overview

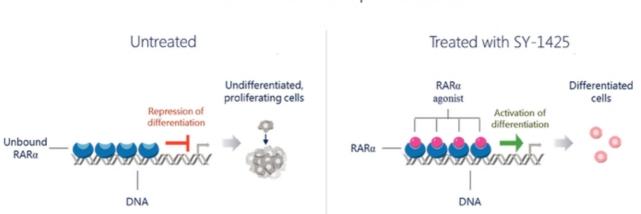
SY-1425 (tamibarotene) is an oral, potent and selective agonist of the transcription factor RAR a. In September 2015, we in-licensed rights to develop and commercialize SY-1425 for oncology indications in North America and Europe. In the first half of 2016, we plan to initiate a Phase 2 clinical trial that will enroll genomically defined patients with AML and MDS. We plan to select patients for this trial using the *RARA* biomarker we identified. We believe patients whose tumors have this biomarker will be more likely to experience a profound and durable clinical benefit from treatment with SY-1425.

Linking SY-1425 to a Novel Patient Population

We leveraged our platform to map gene control programs in primary AML and breast cancer patient tissue samples. We discovered that *RARA*, the gene that produces RARa, was associated with a super-enhancer in some patients' tumors but not in others, as illustrated in the graphic below.



The function of RARa differs depending on whether it is bound to its ligand. In the absence of a ligand, RARa represses differentiation. We believe that in tumors with the *RARA*-associated super-enhancer, there is an abundance of unliganded RARa, resulting in the repression of differentiation, thereby locking the cell in an immature, proliferative state. Introducing an RARa agonist, such as SY-1425, simulates the activity of a ligand, activating differentiation, as illustrated in the graphic below.



SY-1425 is an oral, selective RARa agonist. Based on experiments we conducted, we have concluded that the mechanism of action of SY-1425 on non-APL AML cells with an *RARA*-associated super-enhancer is very similar to the mechanism of approved retinoic acid agonists in APL, a subset of AML with a genetic alteration of the *RARA* gene. This gives us increased confidence that SY-1425 may also work on this new subset of AML and MDS patients identified by our platform.



Patient with RARA super-enhancer

We selected SY-1425 based on its superior potency on RARa, its selectivity for RARa over related proteins RAR**b** and RAR**g** and its superior pharmacokinetic profile compared to all trans retinoic acid, or ATRA, a pan-agonist of RARa, RARb, and RARg. SY-1425 is approved, as tamibarotene (marketed as Amnolake), in Japan for use in acute recurrent or intractable APL, in which it has demonstrated efficacy and a well-established safety profile. In recently published data, APL patients treated with tamibarotene as an add-on therapy to arsenic trioxide, a standard of care for APL, demonstrated an overall complete response rate of 80%, compared to 54% in patients treated with the non-selective retinoic acid agonist ATRA. Tamibarotene was generally well tolerated, with the most common adverse events, elevated cholesterol and lipids, skin rash, elevated liver enzymes and headache, being easily manageable. A severe adverse event known as retinoic acid syndrome was infrequently observed clinically. Retinoic acid syndrome, a side effect associated with retinoids and arsenic trioxide, can be mitigated by regular monitoring of clinical parameters, including white blood cell counts.

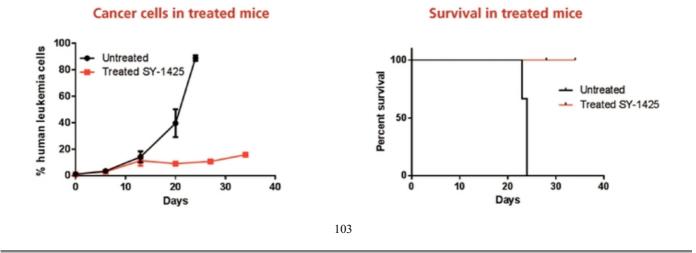
Through our platform, we have identified a biomarker for the *RARA* super-enhancer that we will use for patient selection. Our *in vivo* studies demonstrated that cancer cells with the *RARA* biomarker showed reduced rates of proliferation and differentiated to more mature cells when treated with SY-1425, while cancer cells without the biomarker continued to proliferate.

Our Preclinical Data

We have conducted multiple preclinical studies of SY-1425 in AML, excluding APL, and breast cancer. In certain studies, we use mouse models in which mice are implanted with human tumors, which are referred to as patient-derived xenograft models, or PDX models. In PDX models of AML, SY-1425 was observed to be effective in reducing the growth of tumors and prolonging survival in mice with tumors with the *RARA* biomarker, but did not appear to stop tumor growth or prolong survival in mice whose tumors did not appear to have the biomarker.

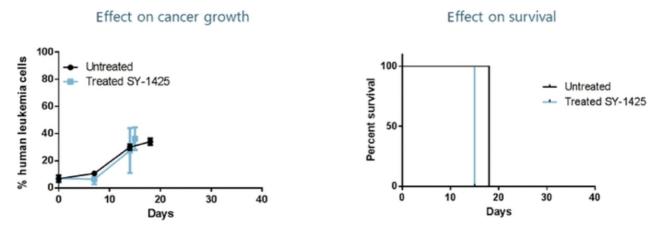
As shown below, in a PDX model derived from AML patient tumor cells with the *RARA* biomarker, referred to as biomarker-positive AML, half of the mice were treated with SY-1425, and the other half of the mice went untreated. In the untreated group, the cancer progressed, as measured by the percentage of human leukemia cells in the blood. Correspondingly, high levels of these cancer cells were measured in the bone marrow and spleen of the untreated mice. None of the untreated mice in the study survived beyond 25 days. In contrast, the cancer was observed to be controlled in the mice treated with SY-1425, as measured by the levels of human leukemia cancer cells detected in the blood. Similarly, low levels of these cancer cells were measured in the bone marrow and spleen. Notably, all of the mice treated with SY-1425 survived until the end of the 35-day study.

RARA Biomarker-Positive Model in AML



In contrast, as shown below, in a PDX model without the *RARA* biomarker, SY-1425 was observed to have no effect on tumor control or survival. In both the treated and untreated groups, the cancer progressed, as measured by the percentage of human leukemia cells detected in the blood. Correspondingly, high levels of these cancer cells were measured in the bone marrow and spleen in both groups of mice. None of the untreated mice survived beyond 20 days. These data demonstrate a strong link between the *RARA* biomarker and sensitivity to SY-1425, and provide meaningful evidence that patients with the *RARA* biomarker may be promising candidates for a clinical trial of SY-1425.

RARA Biomarker-Negative Model in AML



We have also compared the activity of SY-1425 to the activity of ATRA in the *RARA* biomarker-positive PDX model. We observed superior anti-tumor activity and survival with SY-1425 compared to ATRA, with ATRA-treated mice demonstrating similar survival to the untreated mice.

Additionally, in our preclinical studies in breast cancer, we observed a strong link between SY-1425 activity and breast cancer tumors with the *RARA* biomarker. SY-1425 was observed to result in significant tumor growth inhibition in PDX models derived from tumors with the *RARA* biomarker but was observed to have no effect in *RARA* biomarker-negative PDX models.

SY-1425 Clinical Development Plan

We plan to develop SY-1425 in North America and Europe for treatment of AML and MDS in genomically defined patient populations identified by our *RARA* biomarker. In the United States, we expect to submit an IND to the FDA and initiate a Phase 2 clinical trial in AML, excluding APL, and MDS in the first half of 2016. We expect that this Phase 2 clinical trial will be a multi-center, open-label trial exploring activity in two groups: (1) relapsed or refractory AML patients as well as AML patients who are elderly or unfit for treatment with standard therapies; and (2) relapsed or refractory MDS patients. We anticipate that we will enroll approximately 20 patients per group, who will have been prospectively selected using our *RARA* biomarker. We are evaluating a commercial provider to continue developing our novel *RARA* biomarker into a validated lab test using a well-established diagnostic platform and approach that may be used to prospectively enroll *RARA* biomarker-positive patients in our clinical trial. This lab test could become the basis for a commercial companion diagnostic. The primary endpoint for this trial will be overall response rate using established criteria for AML and MDS.

Tamibarotene (SY-1425) has been extensively studied and has a well-established safety profile. We expect to use the same dosage used in the treatment of APL in Japan in our Phase 2 clinical trial. This same dosage for SY-1425 was previously used in a U.S. trial in relapsed and refractory APL, for which



an IND was opened. We have in-licensed the IND package that was used for approval in Japan and the IND filing in the United States. We believe that this data, including established preclinical and chemistry and manufacturing controls, or CMC, data, will be sufficient for our IND application.

We chose AML and MDS for our initial indications due to high levels of observed efficacy in our preclinical models, the significant unmet medical need of these patients and the potential for accelerated development. We intend to pursue additional indications, including breast cancer, in the near future. Our preclinical data in breast cancer supports the development of SY-1425 in a genomically defined subset of patients with breast cancers with our *RARA* biomarker. We plan to initiate clinical trials in these patients upon establishing proof-of-concept in AML and MDS. We also believe there are subsets of patients with other tumor types with our *RARA* biomarker and continue to research the role of the *RARA* super-enhancer in additional cancers.

SY-1425 Market Opportunity

We believe that SY-1425 has the potential to address significant unmet medical need across a range of blood cancers and solid tumors. Based on our analysis of *RARA* super-enhancers in patient samples, and on *RARA* biomarker data in publicly available databases, we estimate that approximately 25% of AML and MDS patients and approximately 35% of breast cancer patients may benefit from RARa agonist therapy like SY-1425.

There are an estimated 33,000 new AML diagnoses in the United States, Canada and the five largest European countries each year. In the United States, newly diagnosed patients have a 25% five-year survival rate. There has been little improvement in treatment options for AML, with typical treatment including older chemotherapeutics and stem cell transplantation. AML remains an area of significant unmet medical need. Based on our analysis of AML patient samples, we believe that approximately 25% of, or approximately 8,250, patients in the countries listed above could benefit from treatment with a RARa agonist such as SY-1425. Our initial clinical trial will evaluate SY-1425 in relapsed or refractory patients and patients who are elderly or unfit for treatment with standard therapies, which we estimate to be 6,500 patients in the countries listed above.

There are approximately 32,000 new MDS diagnoses in the countries listed above each year, with up to one-third of these patients estimated to progress to AML. As with AML, treatment options are limited. In the United States, high-risk patients, who represent 23% of the total MDS patient population, have a median survival of only approximately two years. Based on our analysis of patient samples, we believe that approximately 25% of, or approximately 8,000, MDS patients in the countries listed above could benefit from treatment with a RARa agonist such as SY-1425. Our initial clinical study will evaluate SY-1425 in relapsed or refractory patients, which we estimate to be 6,000 patients in the countries listed above.

Approximately 485,000 women in the countries listed above are diagnosed with breast cancer annually, with 158,000 of these women categorized as metastatic and eligible for systemic therapies. Breast cancer is categorized and treated by the stage for risk of metastatic recurrence and by whether it is driven by estrogen receptor and progesterone receptor signaling, referred to as being hormone positive, driven by HER2 receptor signaling, referred to as being HER2+, or neither, which is referred to as being triple negative. Despite advances in treatments for hormone-positive and receptor-positive patients, the lack of similar advances in treatment options for triple negative breast cancer patients, which represent approximately 15 to 20% of all newly diagnosed breast cancer patients each year in the countries listed above, represents a significant unmet medical need. In the United States, the five-year survival rate of newly diagnosed metastatic breast cancer is approximately 26%. In the United States, 40,000 women die annually from breast cancer, making breast cancer one of the largest causes of cancer-related deaths. Based on our analysis of patient samples, we believe that approximately 35% of

metastatic patients, or 55,000 patients in the countries listed above, have the *RARA* biomarker and would benefit from a product candidate like SY-1425.

CDK7 Inhibitor Program

Overview

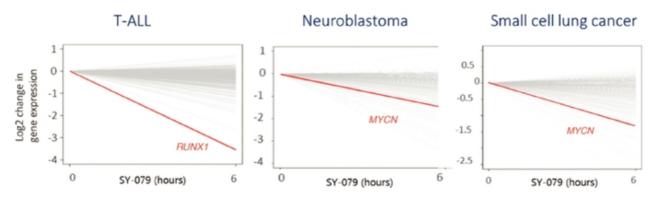
Our CDK7 inhibitor program is focused on cancers that are dependent on a high and constant expression of certain transcription factors for their growth and survival, a phenomenon known as transcriptional addiction. We have generated several first-in-class potent and highly selective small molecule inhibitors of CDK7 with evidence of *in vivo* efficacy. We expect to select our development candidate in the first half of 2016 and start IND-enabling activities in early 2016. We plan to submit an IND in the second half of 2016 and to initiate a Phase 1/2 clinical trial in patients with acute leukemias, including AML and ALL, in the first half of 2017.

Drugging Transcriptional Kinases

Using our CDK7 inhibitor SY-079, known in the scientific literature as THZ1, our scientific founders and collaborators demonstrated that transcriptionally addicted cancers are particularly sensitive to selective inhibition of CDK7. CDK7, a member of the cyclin-dependent kinase, or CDK, family, is a transcriptional kinase that plays a central role in the expression of transcription factors in these cancers. CDK7 is associated with super-enhancers that control the expression of the transcription factors driving the cancer's growth and survival. Inhibiting CDK7 preferentially lowers the expression of disease-driving transcription factors controlled by super-enhancers, resulting in the selective killing of cancer cells over normal cells.

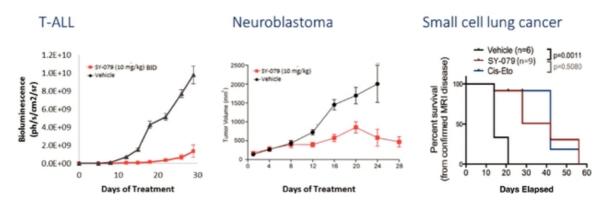
Our scientific founders and collaborators conducted preclinical studies in cell lines of T-ALL, a form of ALL that originates in T-cells, *MYCN*-amplified neuroblastoma, a form of neuroblastoma resulting from amplification of the gene *MYCN*, and small cell lung cancer. As shown in the graphic below, CDK7 inhibition resulted in reduced expression levels of the specific transcription factor contributing to each of these cancers: *RUNX1* in T-ALL and *MYCN* in neuroblastoma and small cell lung cancer. These findings have been published in *Cell*, *Nature* and *Cancer Cell*.

Impact of Inhibition of CDK7 on Expression of Oncogenic Transcription Factors Driving Transcriptionally Addicted Tumors



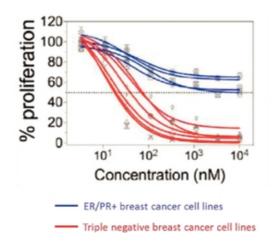
As shown below, in additional preclinical studies conducted by our scientific founders and collaborators, SY-079 also demonstrated significant anti-tumor activity in cell line-derived, or CDX, models of T-ALL and *MYCN*-amplified neuroblastoma, as well as a survival benefit similar to chemotherapy in a genetically engineered mouse model of small cell lung cancer. In the T-ALL model, the tumor size was measured by the bioluminescence, or the aggregate brightness of chemically tagged tumor cells in an imaging study. In the *MYCN*-amplified neuroblastoma model, tumor size was estimated by total volume. In the small cell lung cancer model, researchers demonstrated a survival benefit similar to chemotherapy in genetically engineered mice treated with SY-079.

Anti-Tumor Activity and Survival Benefit of SY-079 in Transcriptionally Addicted Cancers



Our scientific founders and collaborators have also demonstrated the strong potential of CDK7 inhibition, using SY-079, as a novel treatment strategy for triple negative breast cancer, a highly aggressive form of breast cancer that is transcriptionally addicted. In a PDX model of triple negative breast cancer, SY-079 selectively impacted the expression of a set of crucial genes, killing cancer cells and inhibiting tumor growth. This exemplifies our gene control approach of influencing multiple crucial genes driving cancer with one inhibitor in a targeted fashion. The graphic below illustrates the impact of increased exposure of SY-079 on cell growth on ER/PR+ breast cancer cell lines.

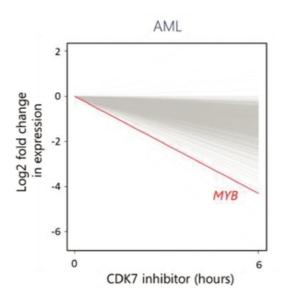




As illustrated above, SY-079 was observed to have a dramatic impact on cell growth in triple negative breast cancer cell lines, as measured by the estimated percentage of proliferating cells. The ER/PR+ breast cancer cell lines were significantly less sensitive to treatment with SY-079. These findings were published in *Cell*.

We have identified super-enhancers associated with the *MYB* transcription factor gene in nearly all AML patient samples we have analyzed. The *MYB* transcription factor gene contributes to AML. In AML cell lines treated with a CDK7 inhibitor, *MYB* is one of the most highly repressed genes.

Impact of Inhibition of CDK7 on Expression of MYB, an Oncogeneic Transcription Factor in AML



Our Preclinical Data

Using our internal drug discovery capabilities, we have generated several potent and selective small molecule CDK7 inhibitors with significantly enhanced drug-like characteristics beyond SY-079. We believe that selectivity is critical for a therapeutic index with CDK inhibition. CDK inhibitors known as pan-CDK inhibitors are not selective for a specific CDK. Though they have demonstrated anti-tumor activity, pan-CDK inhibitors have limited clinical utility due to dose-limiting toxicities. More recently, a selective inhibitor of CDK4/6, members of the CDK family involved in cell cycle, received accelerated approval in breast cancer, demonstrating the substantial clinical benefit of selective CDK inhibition.

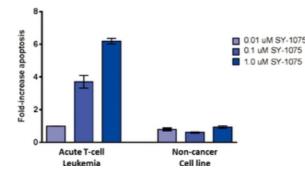
In preclinical studies, our CDK7 inhibitors were observed to have significant anti-tumor activity in *in vivo* models of AML, ALL, *MYCN*-amplified neuroblastoma, small cell lung cancer and triple negative breast cancer. Our CDK7 inhibitors are covalent, meaning that they bind irreversibly and selectively to CDK7.

We have conducted a comprehensive set of biochemical and cellular experiments to characterize the potency and selectivity of our CDK7 inhibitors. In those experiments, SY-1075, a representative compound from our CDK7 inhibitor program, demonstrated:

- Biochemical potency: Potent inhibition of CDK7 *in vitro* (IC₅₀, or the compound concentration at which 50% of activity is inhibited, equal to 77nM);
- Cellular potency: Potent inhibition of cell proliferation in an HL-60 AML cell line ($IC_{50} = 10-30$ nM); and
- Selectivity: A high degree of selectivity with significant binding (greater than 90% binding at a concentration of 1 μM) to only eight kinases, including CDK7, using DiscoveRx's KINOME*scan* methodology, which scans a panel of 468 kinase assays; notably, SY-1075 did not significantly bind to other members of the CDK family.

As shown below, in a comparative assay measuring a marker of apoptosis, or programmed cell death, SY-1075 preferentially kills cancer cells in acute T-cell leukemia, with a clear dose effect, meaning that as we increased the concentration of the drug, more apoptosis was observed. However, there was relatively little effect on non-cancerous cells regardless of dose.

Impact of SY-1075 on Preferential Killing of Cancer Cells

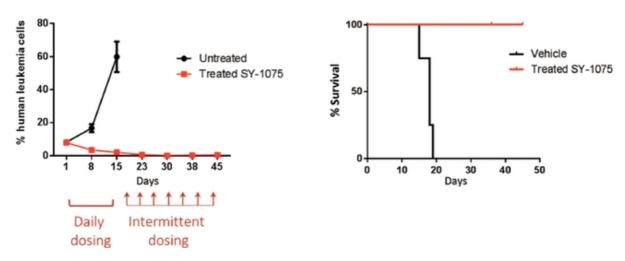


In *in vivo* studies that we conducted, our CDK7 inhibitors were observed to have complete responses and survival benefit in CDX and PDX models of AML. In one such study, which is summarized in the graphic below, SY-1075 was observed to have significant anti-tumor activity and survival benefit in a PDX model of AML. In this study, treated mice received a dose of SY-1075 daily for the first 14 days of the study and then were dosed intermittently, twice per week, through the 48th day of the study.

Mice treated with SY-1075 in this model experienced complete tumor regression, meaning that the percentage of human leukemia cells in the blood was measured at less than 1%. The treated mice showed no significant change to body weight. Maintaining stable body weight is an indicator of a promising safety profile, as well as an indicator of preclinical efficacy. In fact, at the end of the 48-day dosing period, all treated mice remained alive, and levels of human leukemia cells in the blood remained at less than 1%.

In the untreated mice, the cancer progressed, reaching levels of human leukemia cells of greater than 50% in blood and greater than 90% in tissues, at which point all mice had died of their disease or were humanely sacrificed due to excessive tumor burden.

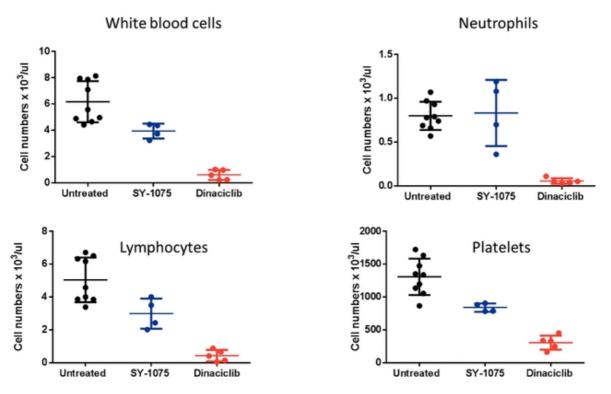
Anti-Tumor Activity and Survival Benefit of SY-1075 in PDX Model of AML



In preclinical studies, one of our CDK7 inhibitors, SY-1075, was observed to have markedly fewer negative effects on healthy cells than certain pan-CDK inhibitors. Pan-CDK inhibitors have been observed to result in blood cell death, or myelosuppression. As shown in the graphic below, when we compared the effect of SY-1075 on four types of blood cells in mice to the effect of a pan-CDK

inhibitor being developed for cancer, known as dinaciclib, the mice treated with SY-1075 did not demonstrate the same level of myelosuppression that occurred in mice treated with dinaciclib. Based on this data, we believe that our CDK7 inhibitors will have a more favorable safety profile than pan-CDK inhibitors.

Impact of SY-1075 on Blood Counts



CDK7 Clinical Development Plan

We are in the process of profiling several CDK7 inhibitors to select one as our lead development candidate in this program. We expect to nominate our lead development candidate in the first half of 2016 and start IND-enabling activities in the first half of 2016. Our goal is to submit an IND in the second half of 2016 and to initiate a Phase 1/2 clinical trial in patients with acute leukemias, including AML and ALL, in the first half of 2017. We have chosen to enroll patients with acute leukemias in our first trial based on the high degree of efficacy observed in our preclinical studies, the high degree of transcriptional dysregulation in these particular cancers, the significant unmet medical need of these patients and the potential for accelerated development. We believe there is a well-defined path to clinical proof-of-concept in acute leukemias. We then plan to expand into a broader set of molecularly defined patient populations using our gene control platform to identify patient subgroups with transcriptionally addicted cancers such as small cell lung cancer, triple negative breast cancer and *MYCN*-amplified neuroblastoma.

We are leveraging our platform to identify biomarkers that will predict patients most likely to respond to a CDK7 inhibitor. We intend to use a pharmacodynamics marker of target engagement in the tumor to guide our dosing in clinical trials.

CDK7 Market Opportunity

With our CDK7 inhibitors, we believe we have the opportunity to address significant unmet medical needs across a range of transcriptionally addicted blood cancers and solid tumors. We will initially pursue clinical development of our lead CDK7 inhibitor in AML and ALL.

There are an estimated 37,000 new AML diagnoses each year in the developed pharmaceutical markets. In the United States, newly diagnosed patients have a 25% five-year survival rate. There has been little improvement in treatment options for AML, with typical treatments including older chemotherapeutics and stem cell transplantation. AML remains an area of significant unmet medical need. Our initial clinical trial will include patients with relapsed and refractory AML and patients who are elderly or unfit for treatment with standard therapies. We estimate this population to be 29,000 patients.

ALL is characterized by an excess of lymphoblastic cells, and approximately 12,000 patients are diagnosed annually in the developed markets. Approximately 60% of patients diagnosed with ALL are younger than 20 years old. Eighty percent of these patients are cured by current treatments such as chemotherapy and stem cell transplantation. However, only approximately 50% of patients older than 20 years old are cured, highlighting the need for more effective therapies. Our initial clinical trial will include adult recurrent or refractory patients. We estimate there are 3,300 such patients in the developed pharmaceutical markets.

Within the broader AML and ALL patient populations, using our platform we expect to discover a biomarker that could enable us to identify patient subsets most likely to benefit from our therapies. Over time, we intend to evaluate our CDK7 inhibitor program in additional transcriptionally addicted cancers, including the following:

	Approximate Number of
	Patients Diagnosed
	Annually in the
	Developed Pharmaceutical
Metastatic Cancer	Markets
Triple Negative Breast Cancer	42,000
Small Cell Lung Cancer	65,000
MYCN-amplified Neuroblastoma	200

Other Programs

We are using our platform to map gene control programs across additional cancers, inflammatory diseases and other diseases. Using these maps, we are creating a pipeline of novel preclinical drug candidates targeting transcriptional kinases, transcription factors and other transcriptional and regulatory proteins, as well as linking existing drugs to novel genomically defined patient populations.

Intellectual Property

We file patent applications directed to our gene control platform, proprietary composition of matter and product candidates in an effort to establish intellectual property positions regarding all aspects of our business, including new chemical entities, or NCEs, and uses of these NCEs in the treatment of diseases. As of November 10, 2015, we own six pending U.S. provisional patent applications, one U.S. pending patent application, one foreign application pending in Europe, and six pending Patent Cooperation Treaty, or PCT, patent applications. In addition, as of November 10, 2015, we are exclusively licensed to four issued U.S. patents, seven U.S. pending patent applications, five issued foreign patents, 13 foreign patent applications pending in a number of jurisdictions, including Australia, Canada, China, Europe, and Japan, and one pending PCT patent application. A significant

portion of our owned and licensed pending patent applications pertain to our product candidates, key discovery programs, specifically our CDK7 inhibitor program and transcription factor modulators, and our gene control platform.

Our intellectual property portfolio as of November 10, 2015 is summarized below. For some of our pending patent applications, prosecution has yet to commence. Prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the USPTO is often significantly narrowed by the time they issue, if they issue at all. We expect this to be the case with respect to our pending patent applications referred to below.

SY-1425

The intellectual property portfolio for SY-1425 contains a provisional patent application directed to patient stratification methods, and methods of use for agonists of RARa, as well as several licensed patents directed to various aspects of that compound. As of November 10, 2015, we own one pending U.S. provisional patent application directed to this program, applications claiming priority to which, if issued, will have a statutory expiration date of 2036. In addition, we are exclusively licensed in North America and Europe to two issued U.S. patents, and five issued foreign patent applications in Canada and Europe directed to pharmaceutical kits and drug combinations comprising tamibarotene and certain other chemotherapeutic agents, certain formulations of tamibarotene, and crystal forms of tamibarotene and their preparation. One issued U.S. patent covering formulations has a statutory expiration date of April 2028. The other issued U.S. patent covering crystals has a statutory expiration date of August 2021. Patent term adjustments or patent term extensions could result in later expiration dates for each of these patents.

CDK7

The intellectual property portfolio for our CDK7 inhibitor program contains patent applications directed to compositions of matter for our three lead compounds and analogs, compositions of matter for CDK7 inhibitors having different structural features (*i.e.*, different compound families), as well as methods of use for these novel compounds. As of November 10, 2015, we own six pending PCT patent applications directed to this program. We are also exclusively licensed to two pending U.S. patent applications, five pending foreign patent applications in a number of jurisdictions, including Australia, Canada, Europe, and Japan; and one pending PCT application directed to this program. Any U.S. or ex-U.S. patents issuing from applications claiming priority to the pending PCT applications covering our compounds and related methods of use will have a statutory expiration date of either October 2034 or April 2035. Patent term adjustments or patent term extensions could result in later expiration dates.

Other Programs

The intellectual property portfolio for our other programs contains patents and patent applications directed to compositions of matter for inhibiting transcription factors in multiple compound families, methods of treating various diseases through inhibition of specific transcription factor(s), and patient stratification and treatment methods based on the identification of new disease targets. As of November 10, 2015, we own five pending U.S. provisional patent applications and were exclusively licensed to one issued U.S. patent, three U.S. and two pending foreign patent applications in Europe directed to our other programs. The licensed U.S. patent has a statutory expiration date of July 2032. Any U.S. or ex-U.S. patents issuing from the pending applications or applications claiming priority to the pending provisional applications covering transcription factor inhibitors and their use will have statutory expiration dates of February 2031, August 2032, November 2033 and June 2036. Any U.S. or ex-U.S. patents issuing from the applications that claim priority to the provisional applications covering patient stratification and treatment methods based on the identification of new disease targets will have a statutory expiration date of February 2036.

Platform

The intellectual property portfolio directed to our platform includes patent applications and patents directed to super-enhancers and their detection and uses thereof to detect novel disease targets, and methods for identifying protein binding sites in a genome. As of November 10, 2015, we own one pending U.S. patent application and one pending patent application in Europe directed to these technologies which, if issued, will have a statutory expiration date of March 2034. In addition, we have an exclusive license to one issued U.S. patent, two U.S. pending patent applications and six pending foreign patent applications in a number of jurisdictions, including Australia, Canada, China, Europe and Japan, directed to these technologies. The U.S. and foreign patent applications that we own are directed to the identification of new super-enhancer components and methods of treating diseases by targeting those novel components, and if issued, will have a statutory expiration date of March 2034. The licensed U.S. patent has a statutory expiration date of October 2033 and the licensed pending applications directed to super-enhancers and their detection and uses thereof to detect novel disease targets, if issued, will have a statutory expiration date of October 2033. The licensed U.S. and foreign patent applications directed to methods for identifying protein binding sites in a genome, if issued, will have a statutory expiration date of October 2033. The licensed U.S. and foreign patent applications directed to methods for identifying protein binding sites in a genome, if issued, will have a statutory expiration date of October 2033. The licensed U.S. and foreign patent applications directed to methods for identifying protein binding sites in a genome, if issued, will have a statutory expiration date of October 2033. The licensed U.S. and foreign patent applications directed to methods for identifying protein binding sites in a genome, if issued, will have a statutory expiration date of June 2033.

The term of individual patents depends upon the legal term for patents in the countries in which they are obtained. In most countries, including the United States, the patent term is 20 years from the earliest filing date of a non-provisional patent application. In the United States, a patent's term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the USPTO in examining and granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier filed patent. The term of a patent that covers a drug or biological product may also be eligible for patent term extension when FDA approval is granted, provided statutory and regulatory requirements are met. See "—Government Regulation and Product Approvals—Marketing Authorization and Exclusivity" below for additional information on such exclusivity. In the future, if and when our product candidates receive approval by the FDA or foreign regulatory authorities, we expect to apply for patent term extensions on issued patents covering those drugs, depending upon the length of the clinical trials for each drug and other factors. There can be no assurance that any of our pending patent applications will issue or that we will benefit from any patent term extension or favorable adjustment to the term of any of our patents.

As with other biotechnology and pharmaceutical companies, our ability to maintain and solidify our proprietary and intellectual property position for our product candidates and technologies will depend on our success in obtaining effective patent claims and enforcing those claims, if granted. However, our pending patent applications, and any patent applications that we may in the future file or license from third parties may not result in the issuance of patents. We also cannot predict the breadth of claims that may be allowed or enforced in our patents. Any issued patents that we may receive in the future may be challenged, invalidated or circumvented. For example, we cannot be certain of the priority of inventions covered by pending third-party patent applications. If third parties prepare and file patent applications in the United States that also claim technology or therapeutics to which we have rights, we may have to participate in interference proceedings in the USPTO to determine priority of invention, which could result in substantial costs to us, even if the eventual outcome is favorable to us, which is highly unpredictable. In addition, because of the extensive time required for clinical development and regulatory review of a product candidate we may develop, it is possible that, before any of our product candidates can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby limiting protection such patent would afford the respective product and any competitive advantage such patent may provide.

In addition to patents, we rely upon unpatented trade secrets and know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, by executing confidentiality agreements with our collaborators and

scientific advisors, and non-competition, non-solicitation, confidentiality, and invention assignment agreements with our employees and consultants. We have also executed agreements requiring assignment of inventions with selected scientific advisors and collaborators. The confidentiality agreements we enter into are designed to protect our proprietary information and the agreements or clauses requiring assignment of inventions to us are designed to grant us ownership of technologies that are developed through our relationship with the respective counterparty. We cannot guarantee, however, that these agreements will afford us adequate protection of our intellectual property and proprietary information rights.

License Agreements

We are a party to a number of license agreements under which we license patents, patent applications and other intellectual property from third parties. We enter into these agreements to augment our proprietary intellectual property portfolio. The licensed intellectual property covers some of the compounds that we are researching and developing and some of the scientific processes that we use. These licenses impose various diligence and financial payment obligations on us. We expect to continue to enter into these types of license agreements in the future.

Dana-Farber Cancer Institute, Inc.

In February 2013, we entered into a license agreement with Dana-Farber Cancer Institute, Inc., or Dana-Farber, pursuant to which we were granted an exclusive worldwide, sublicensable license under specified patents relating to CDK7 inhibitors and JNK inhibitors owned or controlled by Dana-Farber. The license is for all fields of use and subject to certain rights retained by Dana-Farber for internal noncommercial research, academic/teaching and government purposes. Subject to certain restrictions, Dana-Farber granted us an option to obtain an exclusive commercial license to certain improvements created by Dana-Farber during the first three years of the agreement, which would be negotiated in good faith and incorporated into this agreement. In connection with the agreement, we paid Dana-Farber an upfront licensing fee and a milestone payment based on our first round of funding, such payments totaling \$175,000, in addition to past patent expenses. We are obligated to pay Dana-Farber annual license maintenance fees that are creditable against other payments and royalties due under the agreement and to make milestone payments of up to an aggregate of \$3.4 million for each of the first two products in connection with the achievement of certain clinical and regulatory milestones. In addition, we are required to pay Dana-Farber a tiered royalty on net sales by us, our affiliates and sublicensees ranging from low single digit to mid-single digit percentages, subject to certain adjustments, as well as a tiered mid-single digit to low double digit percentage of sublicense income. Our royalty and sublicensing income payment obligations are further subject to apportionment between designated agreements existing among us, Dana-Farber and the Whitehead Institute for Biomedical Research, or Whitehead. We are required to meet certain diligence milestones and to use commercially reasonable efforts to, among other things, develop and commercialize one or more licensed products or processes and to make one or more licensed products or processes reasonably available to the public. The agreement contains specified diligence activities that if met on an annual basis would be deemed to satisfy some of our diligence obligations for the particular year. The agreement, unless earlier terminated by us or Dana-Farber, will remain in effect until the expiration or abandonment of the licensed patent rights. We have the right to terminate the agreement for any reason provided that we provide Dana-Farber the required notice and we pay all undisputed amounts due to Dana-Farber at the time of termination. Dana-Farber has the right to terminate the agreement if we cease doing business, or if we do not pay them the amounts owed under the agreement and fail to cure, or if we commit and fail to cure a material breach under the agreement, or if our successor does not agree in writing to be bound by this agreement within the designated period following assignment.

Whitehead Institute for Biomedical Research and Dana-Farber Cancer Institute, Inc.

In April 2013, we entered into a license agreement with Whitehead and Dana-Farber, pursuant to which we were granted a worldwide, sublicensable with certain restrictions, license under specified patents relating to Chem-Seq or modulators of Mvc/Max Screen owned or controlled by Whitehead and Dana-Farber, to make, have made, use, sell, offer for sale and import products and to perform and have performed licensed processes, in each case, in the applicable field. This license is exclusive, on a patent-by-patent basis in the designated fields, (i) during the term, with respect to patent rights relating to Myc/Max Screen, (ii) during the term, for use of Chem-Seq for human health and therapeutics, (iii) for a period of three years, with respect to Chem-Seq outside of human health and therapeutics and (iv) during the term, for other specified patent rights, with limited exceptions, including non-exclusive rights for research use reagents. We can automatically extend the period of exclusive rights with respect to Chem-Seq for an additional two years in exchange for an extension payment and we have been granted the first right for a limited extension after such period. We were granted a non-exclusive license to certain materials for the practice of our exclusive licenses. The licenses are subject to certain rights retained by Dana-Farber and Whitehead for internal non-commercial research, academic/teaching and government purposes. Subject to certain restrictions, we were granted an option to obtain an exclusive commercial license to certain improvements created by Whitehead or Dana-Farber during the first three years of the agreement. The option is exercisable within a certain period from the date of disclosure, and the license would be negotiated in good faith and incorporated into this agreement. Commencing five years after the effective date and subject to certain terms and conditions, the agreement requires us to negotiate and potentially issue mandatory sublicenses under the patent rights outside of human health and therapeutics for fields and products that are not directly competitive with products in active development or commercialization by us, our affiliates or sublicensees.

In connection with the agreement, we paid Whitehead an upfront licensing fee, and a milestone payment based on our first round of funding, such payments totaling \$100,000, in addition to past patent expenses. We are obligated to pay Whitehead annual license maintenance fees that are creditable against other payments and royalties due under the agreement and to make milestone payments of up to an aggregate of \$3.4 million in connection with the achievement of certain clinical and regulatory milestones. In addition, we are required to pay Whitehead a royalty on net sales of the various products by us, our affiliates and sublicensees ranging from low single digit to midsingle digit percentages, subject to certain adjustments, including a lower royalty on products identified through the use of certain licensed products or processes. In addition, we are required to pay a tiered mid-single digit to low double digit percentage of our and our affiliates' sublicense income and income we receive from the performance of licensed processes. Our royalty, sublicensing and licensed process income payment obligations are further subject to apportionment between designated agreements existing among us, Dana-Farber and Whitehead. In connection with the agreement, we also issued an aggregate of 367,875 shares of our common stock to Whitehead. We are required to achieve certain diligence milestones within the specified timeframes, and failure to do so may result in our license under certain patent rights being converted to non-exclusive or otherwise be deemed a material breach of the agreement. The agreement further requires that we use commercially reasonable efforts to, among other things, develop and commercialize one or more licensed products or processes and to make one or more licensed products or processes reasonably available to the public. The agreement contains specified diligence activities that if met on an annual basis would be deemed to satisfy some of our diligence obligations for the particular year. The agreement, unless earlier terminated by us, Whitehead or Dana-Farber, will remain in effect until the expiration or abandonment of the licensed patent rights. We have the right to terminate the agreement for any reason, provided that we provide Dana-Farber and Whitehead the required notice and we pay all undisputed amounts due to Whitehead and Dana-Farber at the time of termination. Whitehead and Dana-Farber have the right to terminate the agreement if we cease doing business, or if we do not pay them the amounts owed under the

agreement and fail to cure, or if we commit and fail to cure a material breach under the agreement, or if our successor does not agree in writing to be bound by this agreement within the designated period following assignment.

Whitehead Institute for Biomedical Research

In April 2013, we entered into a license agreement with Whitehead, which we refer to as the Whitehead license agreement, pursuant to which we were granted a worldwide license under specified patents relating to super-enhancers owned or controlled by Whitehead. This license is exclusive in all fields until April 2016, and can remain exclusive thereafter, on a field-by-field basis, as long as we can demonstrate that we are using commercially reasonable efforts in the applicable field, and if we are not using such commercially reasonable efforts in such applicable field, our license rights would become non-exclusive with respect to such field. We were also granted a nonexclusive license to use certain Whitehead materials in connection with the practice of the licensed Whitehead patents. In connection with the Whitehead license agreement, we paid Whitehead an upfront licensing fee of \$30,000. In connection with the agreement, we also issued an aggregate of 275,907 shares of our common stock to Whitehead. We are obligated to pay Whitehead annual license maintenance fees that are creditable against other payments and royalties due under the agreement. In addition, we are required to pay Whitehead a tiered royalty on our net sales ranging from low single digit to mid-single digit percentages, a lower royalty on products identified through the use of licensed products or processes, and a tiered mid-single digit to low double digit percentage of sublicense income, which steps down depending on time, development stage of the products or processes and payments made to Whitehead, and patent expenses of Whitehead in connection with the licensed patents. We are required to use commercially reasonable efforts to, among other things, develop and commercialize one or more licensed products or processes and to make one or more licensed products or products reasonably available to the public. The Whitehead license agreement, unless earlier terminated by us or Whitehead, will remain in effect until the expiration or abandonment of the licensed patent rights. We have the right to terminate the Whitehead license agreement for any reason upon three months' notice to Whitehead, provided that we pay all undisputed amounts due to Whitehead at the time of termination. Whitehead has the right to terminate the Whitehead license agreement immediately if we cease doing business, or if we do not pay Whitehead the amounts owed under the agreement or commit a material breach under the agreement, Whitehead has the right to terminate after we have had an opportunity to cure the breach.

TMRC

In September 2015, we entered into a license agreement with TMRC, which we refer to as the TMRC license agreement, pursuant to which TMRC granted us an exclusive license, with the right to sublicense, under TMRC patent rights, data, regulatory filings and other intellectual property for the North American and European development and commercialization of SY-1425 (tamibarotene) products for the treatment of human cancer indications. Under the TMRC license agreement, we have agreed to pay TMRC single-digit royalties based on net sales if TMRC's patents cover our product, and to make payments to TMRC upon meeting specified clinical and regulatory milestones in an aggregate amount of approximately \$13.0 million per indication. In addition, pursuant to the TMRC license agreement, we and TMRC have agreed to use commercially reasonable efforts to negotiate and enter into a supply agreement pursuant to which we would agree to purchase all of our requirements of active pharmaceutical ingredient for clinical and commercial development of SY-1425 from TMRC. Under the TMRC license agreement, we must use commercially reasonable efforts to, among other things, commence development activities within one year, to develop SY-1425 in at least one cancer indication, and, following marketing approval, to market the product. The license agreement expires on the expiration of the subject patent rights or 15 years after the date of first commercial sale of product, whichever is later. The TMRC license agreement may be terminated by either party if the other party is

in breach and the breach is not cured within a required amount of time or if the other party is in bankruptcy. We have the right to terminate the agreement in the event that we and TMRC have not entered into the supply agreement within 60 days of the date of the agreement. If we have reason to do so, we may also terminate the agreement after one year at our sole discretion.

Competition

The pharmaceutical and biotechnology industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our technology, development experience, and scientific knowledge provide us with competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

We compete in the segments of the pharmaceutical, biotechnology and other related markets that address gene control and cancer. There are other companies working to develop therapies in the fields of gene control and cancer. These companies include divisions of large pharmaceutical companies and biotechnology companies of various sizes.

The most common methods of treating patients with cancer are surgery, radiation and drug therapy, including chemotherapy, hormone therapy and targeted drug therapy. There are a variety of available drug therapies marketed for cancer. In many cases, these drugs are administered in combination to enhance efficacy. While our product candidates may compete with many existing drug and other therapies, they may also be used in combination with or as an adjunct to these therapies. Some of the currently approved drug therapies are branded and subject to patent protection, and others are available on a generic basis. Many of these approved drugs are well-established therapies and are widely accepted by physicians, patients and third-party payors. In general, although there has been considerable progress over the past few decades in the treatment of cancer and the currently marketed therapies provide benefits to many patients, these therapies all are limited to some extent in their efficacy and frequency of adverse events. As a result, the level of morbidity and mortality from cancer remains high.

In addition to currently marketed therapies, there are also a number of medicines in late stage clinical development to treat cancer. These medicines in development may provide efficacy, safety, convenience and other benefits that are not provided by currently marketed therapies. As a result, they may provide significant competition for any of our product candidates for which we obtain market approval.

Many of our competitors may have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved medicines than we do. Mergers and acquisitions in the pharmaceutical, biotechnology and diagnostic industries may result in even more resources being concentrated among a smaller number of our competitors. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

The key competitive factors affecting the success of all of our product candidates, if approved, are likely to be their efficacy, safety, convenience, price, the effectiveness of companion diagnostics in guiding the use of related therapeutics, the level of generic competition and the availability of reimbursement from government and other third-party payors.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize medicines that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any medicines that we may develop. Our competitors also may obtain FDA or other regulatory approval for their medicines more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers or other third-party payors seeking to encourage the use of generic medicines. There are many generic medicines currently on the market for the indications that we are pursuing, and additional medicines are expected to become available on a generic basis over the coming years. If our therapeutic product candidates are approved, we expect that they will be priced at a significant premium over competitive generic medicines.

If the drug candidates of our priority programs are approved for the indications for which we are currently planning clinical trials, they will compete with the drugs discussed below and will likely compete with other drugs currently in development.

SY-1425

We plan to initially develop SY-1425, our RARa agonist, for patients with relapsed or refractory AML or MDS. We will select patients for our clinical trials based on high-levels of RARa as measured by our proprietary biomarker. There has been little advancement in treatment options for patients with these cancers. Typical treatment includes chemotherapy followed by stem cell transplantation. SY-1425 may face competition from other drug candidates currently in clinical development for relapsed or refractory AML and MDS. Several companies are developing drugs for AML, including Daiichi Sankyo Company, Limited, Boehringer Ingelheim GmbH, Agios Pharmaceuticals, Inc., Novartis AG, Astellas Pharma Inc. and Karyopharm Therapeutics Inc. We believe that SY-1425 will be the only selective RARa agonist in clinical development for relapsed or refractory AML in North America and Europe. Because the mechanism of action is different than the others currently on the market and in development, we believe that SY-1425 could be first-in-class and could be used in combination with other therapies, which could minimize competition, assuming that data from a registration-enabling trial warrants such use. We are aware of only one other selective RARa program, being pursued by IO Therapeutics, Inc. This program appears to be in clinical development.

CDK7 Inhibitor Program

The clinical development of our CDK7 inhibitor program will initially focus on patients with relapsed or refractory AML or recurrent or refractory ALL.

The competitive landscape for AML is described above. In ALL, patients are typically treated with older chemotherapeutics. Targeted therapies such as kinase inhibitors, including imatinib and dasatinib, and monoclonal antibodies, including rituximab and blinatumamab, have been developed and used successfully for certain patient populations within ALL. If our CDK7 inhibitor program receives marketing approval, it may face competition from other drug candidates currently in development for relapsed and refractory ALL from several companies including Amgen Inc., Novartis and Juno Therapeutics, Inc.

We believe that our CDK7 inhibitor program will be the only selective mechanism of its kind in clinical development. Because the mechanism of action is different than the others currently on the market and in development, we believe that it could be first-in-class and used in combination with other therapies, which could minimize competition, assuming that data from a registration-enabling trial warrants such use. We are aware of only one other CDK7 inhibitor program, being pursued by a German academic group, Lead Discovery Center. This program appears to be in early preclinical development.

Sales and Marketing

We hold North American and European commercialization rights to SY-1425 and worldwide rights to our CDK7 inhibitor program and all of our other preclinical programs. Subject to receiving marketing approval, we intend to build a focused sales and marketing organization in the United States and potentially in Europe to sell our products. We believe that such an organization will be able to address the community of physicians who are key specialists in treating the patient populations for which our product candidates are being developed.

We also plan to build a marketing and sales management organization to create and implement marketing strategies for any products that we market through our own sales organization and to oversee and support our sales force. The responsibilities of the marketing organization would include developing educational initiatives with respect to approved products and establishing relationships with researchers and practitioners in relevant fields of medicine.

Outside of the United States and potentially Europe, where appropriate, we may elect in the future to utilize strategic partners, distributors or contract sales forces to assist in the commercialization of our products. In certain instances, we may consider building our own commercial infrastructure.

Manufacturing

We do not currently own or operate manufacturing facilities for the production of clinical or commercial quantities of our product candidates. Although we intend to rely on third-party contract manufacturers to produce our product candidates and any products we may develop in the future, we have recruited personnel with experience to manage these third-party contract manufacturers. Under the TMRC license agreement, we agreed to enter into negotiations for a supply agreement obligating us to purchase all of our clinical and commercial requirements for active pharmaceutical ingredients for SY-1425 from TMRC. We anticipate entering into this agreement prior to the commencement of our Phase 2 clinical trial. We believe we currently have access to sufficient active pharmaceutical ingredients to create the drug supply for our Phase 2 clinical trial.

Government Regulation and Product Approvals

Government authorities in the United States, at the federal, state and local level, and in other countries and jurisdictions, including the European Union, extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of pharmaceutical products. The processes for obtaining marketing approvals in the United States and in foreign countries and jurisdictions, along with subsequent compliance with applicable statutes and regulations and other regulatory authorities, require the expenditure of substantial time and financial resources.

Review and Approval of Drugs in the United States

In the United States, the FDA approves and regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and implementing regulations. The failure to comply with requirements under the FDCA and other applicable laws at any time during the product development process, approval process or after approval may subject an applicant and/or sponsor to a variety of administrative or judicial sanctions, including refusal by the FDA to approve pending applications, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters and other types of letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement of profits, or civil or criminal investigations and penalties brought by the FDA and the Department of Justice or other governmental entities.

An applicant seeking approval to market and distribute a new drug product in the United States must typically undertake the following:

- completion of preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's GLP regulations;
- submission to the FDA of an IND, which must take effect before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, representing each clinical site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practices, or GCP, to establish the safety and efficacy of the proposed drug product for each indication;
- preparation and submission to the FDA of an NDA, requesting marketing for one or more proposed indications;
- review by an FDA advisory committee, where appropriate or if applicable;
- satisfactory completion of one or more FDA inspections of the manufacturing facility or facilities at which the product, or components thereof, are produced to assess compliance with current Good Manufacturing Practices, or cGMP, requirements and to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and purity;
- satisfactory completion of FDA audits of clinical trial sites to assure compliance with GCPs and the integrity of the clinical data;
- payment of user fees and securing FDA approval of the NDA; and
- compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy, or REMS, and the potential requirement to conduct post-approval studies.

Preclinical Studies

Before an applicant begins testing a compound with potential therapeutic value in humans, the drug candidate enters the preclinical testing stage. Preclinical studies include laboratory evaluation of product chemistry, toxicity and formulation, as well as *in vitro* and animal studies to assess the potential safety and activity of the drug for initial testing in humans and to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations. The results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, are submitted to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, may continue after the IND is submitted.

Human Clinical Trials in Support of an NDA

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include, among other things, the requirement that all research subjects provide their informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written study protocols detailing, among other things, the inclusion and exclusion criteria, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. An IND automatically becomes effective 30 days after receipt by the FDA, unless before



that time the FDA raises concerns or questions related to a proposed clinical trial and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA can place an IND on clinical hold at any point in development, and depending upon the scope of the hold, clinical trial(s) may not restart until resolution of the outstanding concerns to the FDA's satisfaction.

In addition, an IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct a continuing review and reapprove the study at least annually. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with FDA regulations. Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health for public dissemination on their ClinicalTrials.gov website.

Human clinical trials are typically conducted in four sequential phases, which may overlap or be combined:

- *Phase 1.* The drug is initially introduced into healthy human subjects or, in certain indications such as cancer, patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early indication of its effectiveness and to determine optimal dosage.
- *Phase 2.* The drug is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.
- *Phase 3.* The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to statistically evaluate the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product and to provide adequate information for the labeling of the product.
- *Phase 4.* Post-approval studies may be conducted after initial marketing approval. These studies are used to gain additional experience from the treatment of patients in the intended therapeutic indication.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if serious adverse events occur. In addition, IND safety reports must be submitted to the FDA for any of the following: serious and unexpected suspected adverse reactions; findings from other studies or animal or *in vitro* testing that suggest a significant risk in humans exposed to the drug; and any clinically important increase in the case of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The FDA or the sponsor or the data monitoring committee may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. The FDA will typically inspect one or more clinical sites to assure compliance with GCP and the integrity of the clinical data submitted.

Concurrent with clinical trials, companies often complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, must develop methods for testing the identity, strength,

quality, purity, and potency of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

Review of an NDA by the FDA

Assuming successful completion of required clinical testing and other requirements, the results of the preclinical studies and clinical trials, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the drug product for one or more indications. Under federal law, the submission of most NDAs is additionally subject to an application user fee, and the sponsor of an approved NDA is also subject to annual product and establishment user fees. These fees are typically increased annually. Certain exceptions and waivers are available for some of these fees, such as an exception from the application fee for drugs with orphan designation and a waiver for certain small businesses, an exception from the establishment fee when the establishment does not engage in manufacturing the drug during a particular fiscal year, and an exception from the product fee for a drug that is the same as another drug approved under an abbreviated pathway.

The FDA conducts a preliminary review of an NDA generally within 60 calendar days of its receipt and strives to inform the sponsor by the 74th day after the FDA's receipt of the submission to determine whether the application is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA has agreed to specified performance goals in the review process of NDAs. Under that agreement, 90% of applications seeking approval of New Molecular Entities, or NMEs, are meant to be reviewed within ten months from the date on which FDA accepts the NDA for filing date. For applications for NMEs that have been designated for "priority review" are meant to be reviewed within six months of the filing date. For applications seeking approval of drugs that are not NMEs, the ten-month and six-month review periods run from the date that FDA receives the application. The review process and the Prescription Drug User Fee Act goal date may be extended by the FDA for three additional months to consider new information or clarification provided by the applicant to address an outstanding deficiency identified by the FDA following the original submission.

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is or will be manufactured. These pre-approval inspections may cover all facilities associated with an NDA submission, including drug component manufacturing (e.g., active pharmaceutical ingredients), finished drug product manufacturing, and control testing laboratories. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP.

In addition, as a condition of approval, the FDA may require an applicant to develop a REMS. REMS use risk minimization strategies beyond the professional labeling to ensure that the benefits of the product outweigh the potential risks. To determine whether a REMS is needed, the FDA will consider the size of the population likely to use the product, seriousness of the disease, expected benefit of the product, expected duration of treatment, seriousness of known or potential adverse events, and whether the product is a new molecular entity. REMS can include medication guides, physician communication plans for healthcare professionals, and elements to assure safe use, or ETASU. ETASU may include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patient registries. The FDA may require a REMS before approval or post-approval if it becomes aware of a

serious risk associated with use of the product. The requirement for a REMS can materially affect the potential market and profitability of a product.

The FDA is required to refer an application for a novel drug to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Fast Track, Breakthrough Therapy and Priority Review Designations

The FDA is authorized to designate certain products for expedited review if they are intended to address an unmet medical need in the treatment of a serious or life-threatening disease or condition. These programs are Fast Track designation, Breakthrough Therapy designation and priority review designation.

Specifically, the FDA may designate a product for Fast Track review if it is intended, whether alone or in combination with one or more other products, for the treatment of a serious or life-threatening disease or condition, and it demonstrates the potential to address unmet medical needs for such a disease or condition. For Fast Track products, sponsors may have greater interactions with the FDA and the FDA may initiate review of sections of a Fast Track product's application before the application is complete. This rolling review may be available if the FDA determines, after preliminary evaluation of clinical data submitted by the sponsor, that a Fast Track product may be effective. The sponsor must also provide, and the FDA must approve, a schedule for the submission of the remaining information and the sponsor must pay applicable user fees. However, the FDA's time period goal for reviewing a Fast Track application does not begin until the last section of the application is submitted. In addition, the Fast Track designation may be withdrawn by the FDA if the FDA believes that the designation is no longer supported by data emerging in the clinical trial process.

Second, a product may be designated as a Breakthrough Therapy if it is intended, either alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The FDA may take certain actions with respect to Breakthrough Therapies, including holding meetings with the sponsor throughout the development process; providing timely advice to the product sponsor regarding development and approval; involving more senior staff in the review process; assigning a cross-disciplinary project lead for the review team; and taking other steps to design the clinical trials in an efficient manner.

Third, the FDA may designate a product for priority review if it is a product that treats a serious condition and, if approved, would provide a significant improvement in safety or effectiveness. The FDA determines, on a case- by-case basis, whether the proposed product represents a significant improvement when compared with other available therapies. Significant improvement may be illustrated by evidence of increased effectiveness in the treatment of a condition, elimination or substantial reduction of a treatment-limiting product reaction, documented enhancement of patient compliance that may lead to improvement in serious outcomes, and evidence of safety and effectiveness in a new subpopulation. A priority designation is intended to direct overall attention and resources to the evaluation of such applications, and to shorten the FDA's goal for taking action on a marketing application from ten months to six months.



Accelerated Approval Pathway

The FDA may grant accelerated approval to a product for a serious or life-threatening condition that provides meaningful therapeutic advantage to patients over existing treatments based upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit. The FDA may also grant accelerated approval for such a condition when the product has an effect on an intermediate clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality, or IMM, and that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. Products granted accelerated approval must meet the same statutory standards for safety and effectiveness as those granted traditional approval.

For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. Surrogate endpoints can often be measured more easily or more rapidly than clinical endpoints. An intermediate clinical endpoint is a measurement of a therapeutic effect that is considered reasonably likely to predict the clinical benefit of a product, such as an effect on IMM. The FDA has limited experience with accelerated approvals based on intermediate clinical endpoints, but has indicated that such endpoints generally may support accelerated approval where the therapeutic effect measured by the endpoint is not itself a clinical benefit and basis for traditional approval, if there is a basis for concluding that the therapeutic effect is reasonably likely to predict the ultimate clinical benefit of a product.

The accelerated approval pathway is most often used in settings in which the course of a disease is long and an extended period of time is required to measure the intended clinical benefit of a product, even if the effect on the surrogate or intermediate clinical endpoint occurs rapidly. Thus, accelerated approval has been used extensively in the development and approval of products for treatment of a variety of cancers in which the goal of therapy is generally to improve survival or decrease morbidity and the duration of the typical disease course requires lengthy and sometimes large trials to demonstrate a clinical or survival benefit.

The accelerated approval pathway is usually contingent on a sponsor's agreement to conduct, in a diligent manner, additional postapproval confirmatory studies to verify and describe the product's clinical benefit. As a result, a product candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies, or confirm a clinical benefit during post-marketing studies, would allow the FDA to withdraw the product from the market on an expedited basis. All promotional materials for product candidates approved under accelerated regulations are subject to prior review by the FDA.

The FDA's Decision on an NDA

On the basis of the FDA's evaluation of the NDA and accompanying information, including the results of the inspection of the manufacturing facilities, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

If the FDA approves a product, it may limit the approved indications for use for the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess the drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs. After approval, many types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements and FDA review and approval.

Post-Approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing, annual user fee requirements for any marketed products and the establishments at which such products are manufactured, as well as new application fees for supplemental applications with clinical data.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product, suspension of the approval, or complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending NDAs or supplements to approved NDAs;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and

regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

In addition, the distribution of prescription pharmaceutical products is subject to the Prescription Drug Marketing Act, or PDMA, and its implementing regulations, as well as the Drug Supply Chain Security Act, or DSCA, which regulate the distribution and tracing of prescription drugs and prescription drug samples at the federal level, and set minimum standards for the regulation of drug distributors by the states. The PDMA, its implementing regulations and state laws limit the distribution of prescription pharmaceutical product samples, and the DSCA imposes requirements to ensure accountability in distribution and to identify and remove counterfeit and other illegitimate products from the market.

Abbreviated New Drug Applications for Generic Drugs

In 1984, with passage of the Hatch-Waxman Amendments to the FDCA, Congress established an abbreviated regulatory scheme authorizing the FDA to approve generic drugs that are shown to contain the same active ingredients as, and to be bioequivalent to, drugs previously approved by the FDA pursuant to NDAs. To obtain approval of a generic drug, an applicant must submit an abbreviated new drug application, or ANDA, to the agency. An ANDA is a comprehensive submission that contains, among other things, data and information pertaining to the active pharmaceutical ingredient, bioequivalence, drug product formulation, specifications and stability of the generic drug, as well as analytical methods, manufacturing process validation data and quality control procedures. ANDAs are "abbreviated" because they generally do not include preclinical and clinical data to demonstrate safety and effectiveness. Instead, in support of such applications, a generic manufacturer may rely on the preclinical and clinical testing previously conducted for a drug product previously approved under an NDA, known as the reference-listed drug, or RLD.

Specifically, in order for an ANDA to be approved, the FDA must find that the generic version is identical to the RLD with respect to the active ingredients, the route of administration, the dosage form, the strength of the drug and the conditions of use of the drug. At the same time, the FDA must also determine that the generic drug is "bioequivalent" to the innovator drug. Under the statute, a generic drug is bioequivalent to a RLD if "the rate and extent of absorption of the drug do not show a significant difference from the rate and extent of absorption of the listed drug..."

Upon approval of an ANDA, the FDA indicates whether the generic product is "therapeutically equivalent" to the RLD in its publication "Approved Drug Products with Therapeutic Equivalence Evaluations," also referred to as the "Orange Book." Physicians and pharmacists consider a therapeutic equivalent generic drug to be fully substitutable for the RLD. In addition, by operation of certain state laws and numerous health insurance programs, the FDA's designation of therapeutic equivalence often results in substitution of the generic drug without the knowledge or consent of either the prescribing physician or patient.

Under the Hatch-Waxman Amendments, the FDA may not approve an ANDA until any applicable period of non-patent exclusivity for the RLD has expired. The FDCA provides a period of five years of non-patent data exclusivity for a new drug containing a new chemical entity. For the purposes of this provision, a new chemical entity, or NCE, is a drug that contains no active moiety that has previously been approved by the FDA in any other NDA. An active moiety is the molecule or ion responsible for the physiological or pharmacological action of the drug substance. In cases where such NCE exclusivity has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification, in which case the applicant may submit its application four years following the original product approval.

The FDCA also provides for a period of three years of exclusivity if the NDA includes reports of one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were

conducted by or for the applicant and are essential to the approval of the application. This three-year exclusivity period often protects changes to a previously approved drug product, such as a new dosage form, route of administration, combination or indication. Three-year exclusivity would be available for a drug product that contains a previously approved active moiety, provided the statutory requirement for a new clinical investigation is satisfied. Unlike five-year NCE exclusivity, an award of three-year exclusivity does not block the FDA from accepting ANDAs seeking approval for generic versions of the drug as of the date of approval of the original drug product. The FDA typically makes decisions about awards of data exclusivity shortly before a product is approved.

505(b)(2) NDAs

As an alternative path to FDA approval for modifications to formulations or uses of products previously approved by the FDA pursuant to an NDA, an applicant may submit an NDA under Section 505(b)(2) of the FDCA. Section 505(b)(2) was enacted as part of the Hatch-Waxman Amendments and permits the filing of an NDA where at least some of the information required for approval comes from studies not conducted by, or for, the applicant. If the 505(b)(2) applicant can establish that reliance on FDA's previous findings of safety and effectiveness is scientifically and legally appropriate, it may eliminate the need to conduct certain preclinical or clinical studies of the new product. The FDA may also require companies to perform additional studies or measurements, including clinical trials, to support the change from the previously approved reference drug. The FDA may then approve the new product candidate for all, or some, of the label indications for which the reference drug has been approved, as well as for any new indication sought by the 505(b)(2) applicant.

Hatch-Waxman Patent Certification and the 30-Month Stay

Upon approval of an NDA or a supplement thereto, NDA sponsors are required to list with the FDA each patent with claims that cover the applicant's product or an approved method of using the product. Each of the patents listed by the NDA sponsor is published in the Orange Book. When an ANDA applicant files its application with the FDA, the applicant is required to certify to the FDA concerning any patents listed for the reference product in the Orange Book, except for patents covering methods of use for which the ANDA applicant is not seeking approval. To the extent that the Section 505(b)(2) applicant is relying on studies conducted for an already approved product, the applicant is required to certify to the FDA concerning any patents listed for the approved product in the Orange Book to the same extent that an ANDA applicant would.

Specifically, the applicant must certify with respect to each patent that:

- the required patent information has not been filed;
- the listed patent has expired;
- the listed patent has not expired, but will expire on a particular date and approval is sought after patent expiration; or
- the listed patent is invalid, unenforceable or will not be infringed by the new product.

A certification that the new product will not infringe the already approved product's listed patents or that such patents are invalid or unenforceable is called a Paragraph IV certification. If the applicant does not challenge the listed patents or indicates that it is not seeking approval of a patented method of use, the application will not be approved until all the listed patents claiming the referenced product have expired (other than method of use patents involving indications for which the applicant is not seeking approval).

If the ANDA or 505(b)(2) applicant has provided a Paragraph IV certification to the FDA, the applicant must also send notice of the Paragraph IV certification to the NDA and patent holders once the ANDA or the 505(b)(2) application has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the Paragraph IV certification. The filing of a patent infringement lawsuit within 45 days after the receipt of a Paragraph IV certification automatically prevents the FDA from approving the application until the earlier of 30 months after the receipt of the Paragraph IV notice, expiration of the patent, or a decision in the infringement case that is favorable to the applicant. The ANDA or 505(b)(2) application also will not be approved until any applicable non-patent exclusivity listed in the Orange Book for the branded reference drug has expired.

Pediatric Studies and Exclusivity

Under the Pediatric Research Equity Act, an NDA or supplement thereto must contain data that are adequate to assess the safety and effectiveness of the drug product for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. With enactment of the Food and Drug Safety and Innovation Act, or the FDASIA, in 2012, sponsors must also submit pediatric study plans prior to the assessment data. Those plans must contain an outline of the proposed pediatric study or studies the applicant plans to conduct, including study objectives and design, any deferral or waiver requests, and any other information required by regulation. The applicant, the FDA, and the FDA's internal review committee must then review the information submitted, consult with each other, and agree upon a final plan. The FDA or the applicant may request an amendment to the plan at any time.

The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements. Additional requirements and procedures relating to deferral requests and requests for extension of deferrals are contained in FDASIA. Unless and until FDA promulgates a regulation stating otherwise, the pediatric data requirements do not apply to products with orphan designation.

Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the non-patent and orphan exclusivity. This six-month exclusivity may be granted if an NDA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the statutory time limits, whatever statutory or regulatory periods of exclusivity or patent protection cover the product are extended by six months. This is not a patent term extension, but it effectively extends the regulatory period during which the FDA cannot approve another application. With regard to patents, the six-month pediatric exclusivity period will not attach to any patents for which an ANDA or 505(b)(2) applicant submitted a paragraph IV patent certification, unless the NDA sponsor or patent owner first obtains a court determination that the patent if valid and infringed by the proposed product.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may designate a drug product as an "orphan drug" if it is intended to treat a rare disease or condition, generally meaning that it affects fewer than 200,000 individuals in the United States, or more in cases in which there is no reasonable expectation that the cost of developing and making a drug product available in the United States for treatment of the disease or condition will be recovered from sales of the product. A company must request orphan drug

designation before submitting an NDA for the drug and rare disease or condition. If the request is granted, the FDA will disclose the identity of the therapeutic agent and its potential use. Orphan drug designation does not shorten the goal dates under the Prescription Drug User Fee Act, or PDUFA, for the regulatory review and approval process, although it does convey certain advantages such as tax benefits and exemption from the PDUFA application fee.

If a product with orphan designation receives the first FDA approval for the disease or condition for which it has such designation or for a select indication or use within the rare disease or condition for which it was designated, the product generally will receive orphan drug exclusivity. Orphan drug exclusivity means that the FDA may not approve another sponsor's marketing application for the same drug for the same indication for seven years, except in certain limited circumstances. Orphan exclusivity does not block the approval of a different drug for the same rare disease or condition, nor does it block the approval of the same drug for different indications. If a drug designated as an orphan drug ultimately receives marketing approval for an indication broader than what was designated in its orphan drug application, it may not be entitled to exclusivity. Orphan exclusivity will not bar approval of another product under certain circumstances, including if a subsequent product with the same drug for the same indication is shown to be clinically superior to the approved product on the basis of greater efficacy or safety, or providing a major contribution to patient care, or if the company with orphan drug exclusivity is not able to meet market demand.

Patent Term Restoration and Extension

A patent claiming a new drug product may be eligible for a limited patent term extension, also known as patent term restoration, under the Hatch-Waxman Act, which permits a patent restoration of up to five years for patent term lost during product development and the FDA regulatory review. Patent term extension is generally available only for drug products whose active ingredient has not previously been approved by the FDA. The restoration period granted is typically one-half the time between the effective date of an IND and the submission date of an NDA, plus the time between the submission date of an NDA and the ultimate approval date. Patent term extension cannot be used to extend the remaining term of a patent past a total of 14 years from the product's approval date. Only one patent applicable to an approved drug product is eligible for the extension, and the application for the extension must be submitted prior to the expiration of the patent in question. A patent that covers multiple drugs for which approval is sought can only be extended in connection with one of the approvals. The United States PTO reviews and approves the application for any patent term extension in consultation with the FDA.

Review and Approval of Drugs in Europe and other Foreign Jurisdictions

In addition to regulations in the United States, a manufacturer is subject to a variety of regulations in foreign jurisdictions to the extent they choose to sell any drug products in those foreign countries. Even if a manufacturer obtains FDA approval of a product, it must still obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. For other countries outside of the European Union, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary.

Clinical Trial Approval in the European Union

Pursuant to the currently applicable Clinical Trials Directive 2001/20/EC and the Directive 2005/28/EC on Good Clinical Practice, an applicant must obtain the approval from the competent national authority of the EU Member State in which the clinical trial is to be conducted. Furthermore, the applicant may only start a clinical trial at a specific study site after the competent ethics committee has issued a favorable opinion. In April 2014, the European Union adopted a new Clinical Trials Regulation (EU) No 536/2014, which is set to replace the current Clinical Trials

Directive 2001/20/EC. The new Clinical Trials Regulation will overhaul the current system of approvals for clinical trials in the European Union, and it intended to simplify and streamline the approval of clinical trials in the European Union. Under the new coordinated procedure for the approval of clinical trials, the sponsor of a clinical trial will be required to submit a single application for approval of a clinical trial trial to a reporting EU Member State, or RMS, through an EU Portal. The new Regulation also aims to streamline and simplify the rules on safety reporting for clinical trials.

Marketing Authorization and Exclusivity

In the European Union, marketing authorizations for medicinal products may be obtained through different procedures founded on the same basic regulatory process. The centralized procedure provides for the grant of a single marketing authorization that is valid for all EU Member States. The centralized procedure is compulsory for medicinal products produced by certain biotechnological processes, products designated as orphan medicinal products, and products with a new active substance indicated for the treatment of certain diseases. On the other hand, a decentralized procedure provides for approval by one or more other concerned EU Member States of an assessment of an application for marketing authorization conducted by one EU Member State, known as the reference EU Member State. In accordance with the mutual recognition procedure, the sponsor applies for national marketing authorization in one EU Member State. Upon receipt of this authorization the sponsor can then seek the recognition of this authorization by other EU Member States.

A marketing authorization is valid for five years, in principle, and it may be renewed after five years on the basis of a reevaluation of the risk-benefit balance by the EMA or by the competent authority of the relevant EU Member State. Once renewed, the marketing authorization is valid for an unlimited period, unless the European Commission or the relevant competent authority of the EU Member State decides, on justified grounds relating to pharmacovigilance, to proceed with one additional five-year renewal period. Any marketing authorization that is not followed by the marketing of the medicinal product on the EU market (in the case of the centralized procedure) or on the market of the EU Member State which delivered the marketing authorization within three years after authorization ceases to be valid.

In the European Union, innovative medicinal products authorized in the European Union on the basis of a full marketing authorization are entitled to eight years of data exclusivity. During this period, applicants for authorization of generics of these innovative products cannot rely on data contained in the marketing authorization dossier submitted for the innovative medicinal product. Innovative medicinal products are also entitled to ten years' market exclusivity. During this ten year period no generic of this medicinal product can be placed on the EU market. The overall ten-year period will be extended to a maximum of eleven years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to authorization, is held to bring a significant clinical benefit in comparison with existing therapies.

Regulatory Requirements after Marketing Authorization

As in the U.S., both marketing authorization holders and manufacturers of medicinal products are subject to comprehensive regulatory oversight by the EMA and the competent authorities of the individual EU Member States both before and after grant of the manufacturing and marketing authorizations. The holder of an EU marketing authorization for a medicinal product must, for example, comply with EU pharmacovigilance legislation and its related regulations and guidelines which entail many requirements for conducting pharmacovigilance, or the assessment and monitoring of the safety of medicinal products. The manufacturing process for medicinal products in the European Union is also highly regulated and regulators may shut down manufacturing facilities that they believe do not comply with regulations. Manufacturing authorization, and the manufacturing

authorization holder must comply with various requirements set out in the applicable EU laws, including compliance with EU cGMP standards when manufacturing medicinal products and active pharmaceutical ingredients.

In the European Union, the advertising and promotion of approved products are subject to EU Member States' laws governing promotion of medicinal products, interactions with physicians, misleading and comparative advertising and unfair commercial practices. In addition, other legislation adopted by individual EU Member States may apply to the advertising and promotion of medicinal products. These laws require that promotional materials and advertising in relation to medicinal products comply with the product's Summary of Product Characteristics, or SmPC, as approved by the competent authorities. Promotion of a medicinal product that does not comply with the SmPC is considered to constitute off-label promotion, which is prohibited in the European Union.

Orphan Drug Designation and Exclusivity in the European Union

Under the relevant EU Regulations, a product can be designated as an orphan medicinal product by the European Commission if its sponsor can establish: that the product is intended for the diagnosis, prevention or treatment of (1) a life-threatening or chronically debilitating condition affecting not more than five in ten thousand persons in the European Union when the application is made, or (2) a life-threatening, seriously debilitating or serious and chronic condition in the European Union and that without incentives the medicinal product is unlikely to be developed. For either of these conditions, the applicant must demonstrate that there exists no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized in the European Union or, if such method exists, the medicinal product will be of significant benefit to those affected by that condition. Once authorized, orphan medicinal products are entitled to ten years of market exclusivity in all EU Member States, along with a range of other benefits. However, marketing authorization may also be granted to a similar medicinal product with the same orphan indication if this product is safer, more effective or otherwise clinically superior to the original orphan medicinal product.

Pharmaceutical Coverage, Pricing and Reimbursement

In the United States and markets in other countries, patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover at least a significant portion of the cost of our products. Significant uncertainty exists as to the coverage and reimbursement status of products approved by the FDA and other foreign government authorities. Even if our product candidate is approved, sales of our products will depend, in part, on the extent to which third-party payors, including government health programs in the United States such as Medicare and Medicaid, commercial health insurers and managed care organizations, provide coverage, and establish adequate reimbursement levels for, such products. The process for determining whether a payor will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payor will pay for the product once coverage is approved. Third-party payors are increasingly challenging the prices charged, examining the medical necessity, and reviewing the cost-effectiveness of medical products and services and imposing controls to manage costs. Third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the approved products for a particular indication.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable marketing approvals. Nonetheless, product candidates may not be considered medically necessary or cost effective. A decision by a third-party payor not to cover our product

candidate could reduce physician utilization and/or patient acceptance of our products once approved and have a material adverse effect on our sales, results of operations and financial condition. Additionally, a payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a drug product does not assure that other payors will also provide coverage and reimbursement for the product, and the level of coverage and reimbursement can differ significantly from payor to payor. Third-party reimbursement and coverage may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

The containment of healthcare costs also has become a priority of federal, state and foreign governments and the prices of drugs have been a focus in this effort. Governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit a company's revenue generated from the sale of any approved products. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which a company or its collaborators receive marketing approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Outside the United States, ensuring adequate coverage and payment for our product candidate will face challenges. Pricing of prescription pharmaceuticals is subject to governmental control in many countries. Pricing negotiations with governmental authorities can extend well beyond the receipt of regulatory marketing approval for a product and may require us to conduct a clinical trial that compares the cost effectiveness of our product candidate or products to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in our commercialization efforts.

In the European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular drug candidate to currently available therapies or so called health technology assessments, in order to obtain reimbursement or pricing approval. For example, the European Union provides options for its member states to restrict the range of products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. European Union member states may approve a specific price for a product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other member states allow companies to fix their own prices for products, but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. Recently, many countries in the European Union have increased the amount of discounts required on pharmaceuticals and these efforts could continue as countries attempt to manage healthcare expenditures, especially in light of the severe fiscal and debt crises experienced by many countries in the European Union. The downward pressure on health care costs in general, particularly prescription drugs, has become intense. As a result, increasingly high barriers are being erected to the entry of new products. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various European Union member states, and parallel trade, i.e., arbitrage between low-priced and highpriced member states, can further reduce prices. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products, if approved in those countries.

Healthcare Law and Regulation

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of drug products that are granted marketing approval. Arrangements with providers, consultants, third-party payors and customers are subject to broadly applicable fraud and abuse, anti-kickback, false claims laws, reporting of payments to physicians and teaching physicians and patient data privacy and security laws and regulations and other healthcare laws and regulations that may constrain our business and/or financial arrangements. Restrictions under applicable federal and state healthcare laws and regulations include the following:

- the United States federal Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, paying, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made, in whole or in part, under a federal healthcare program such as Medicare and Medicaid;
- the federal civil and criminal false claims laws, including the civil False Claims Act, and civil monetary penalties laws, which prohibit individuals or entities from, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false, fictitious or fraudulent or knowingly making, using or causing to made or used a false record or statement to avoid, decrease or conceal an obligation to pay money to the federal government.
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal laws that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and their respective implementing regulations, including the Final Omnibus Rule published in January 2013, which impose obligations, including mandatory contractual terms, on certain types of people and entities with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal transparency requirements known as the federal Physician Payments Sunshine Act, under the Patient Protection and Affordable Care Act, as amended by the Health Care Education Reconciliation Act, or collectively the Affordable Care Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, within the United States Department of Health and Human Services, information related to payments and other transfers of value made by that entity to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, which may apply to healthcare items or services that are reimbursed by non-governmental third-party payors, including private insurers.

Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to certain health care providers or marketing expenditures. State and foreign laws also govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Healthcare Reform

A primary trend in the United States healthcare industry and elsewhere is cost containment. There have been a number of federal and state proposals during the last few years regarding the pricing of pharmaceutical and biopharmaceutical products, limiting coverage and reimbursement for drugs and other medical products, government control and other changes to the healthcare system in the United States.

By way of example, the United States and state governments continue to propose and pass legislation designed to reduce the cost of healthcare. In March 2010, the United States Congress enacted the Affordable Care Act, which, among other things, includes changes to the coverage and payment for products under government health care programs. Among the provisions of the Affordable Care Act of importance to our potential drug candidates are:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs, although this fee would not apply to sales of certain products approved exclusively for orphan indications;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program by increasing the minimum rebate for both branded and generic drugs and revising the definition of "average manufacturer price," or AMP, for calculating and reporting Medicaid drug rebates on outpatient prescription drug prices and extending rebate liability to prescriptions for individuals enrolled in Medicare Advantage plans;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- expansion of the types of entities eligible for the 340B drug discount program;
- establishment of the Medicare Part D coverage gap discount program by requiring manufacturers to provide a 50% point-ofsale-discount off the negotiated price of applicable brand drugs to eligible beneficiaries during their coverage gap period as a condition for the manufacturers' outpatient drugs to be covered under Medicare Part D;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- the Independent Payment Advisory Board, or IPAB, which has authority to recommend certain changes to the Medicare program to reduce expenditures by the program that could result in reduced payments for prescription drugs. However, the IPAB implementation has been not been clearly defined. The Affordable Care Act provided that under certain circumstances, IPAB recommendations will become law unless Congress enacts legislation that will achieve the same or greater Medicare cost savings; and
- establishment of the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending. Funding has been allocated to support the mission of the Center for Medicare and Medicaid Innovation from 2011 to 2019.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. For example, in August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee



on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for fiscal years 2012 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of up to 2% per fiscal year, which went into effect in April 2013 and will remain in effect through 2024 unless additional Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. Such reforms could have an adverse effect on anticipated revenues from product candidates that we may successfully develop and for which we may obtain marketing approval and may affect our overall financial condition and ability to develop product candidates.

Employees

As of September 30, 2015 we had 40 full-time employees, including 19 employees with M.D. or Ph.D. degrees. Of these full-time employees, 32 employees are engaged in research and development activities and eight employees are engaged in general and administrative activities. None of our employees is represented by a labor union or covered by a collective bargaining agreement. We consider our relationship with our employees to be good.

Facilities

We occupy approximately 21,488 rentable square feet of office and laboratory space in Cambridge, Massachusetts under a lease that expires on October 31, 2020. We have an option to extend the lease term for five additional years. We believe that this office and laboratory space is sufficient to meet our current needs and that suitable additional space will be available as and when needed.

Legal

We are not currently party to any legal proceedings.

MANAGEMENT

The following table sets forth the name, age as of September 30, 2015 and position of each of our executive officers and directors.

Name	Age	Position
Nancy Simonian, M.D.		President, Chief Executive Officer and Director
Kyle D. Kuvalanka	47	Chief Operating Officer
Eric R. Olson, Ph.D.	58	Chief Scientific Officer
Jorge Conde	38	Chief Financial Officer and Chief Product Officer
Jonathan Garen	50	Chief Business Officer
Stéphane Bancel	43	Director
Marsha H. Fanucci	62	Director
Robert Nelsen	52	Director
Vicki L. Sato, Ph.D.	67	Director
Phillip A. Sharp, Ph.D.	71	Director
Richard A. Young, Ph.D.	61	Director

- (1) Member of compensation committee
- (2) Member of nominating and corporate governance committee
- (3) Member of audit committee

Executive Officers

Nancy Simonian, M.D., has been our chief executive officer since July 2012. From 2001 to October 2011, Dr. Simonian was employed by Takeda Pharmaceuticals Company, a pharmaceutical company, and at Millennium Pharmaceuticals, Inc., a biopharmaceutical company, prior to its acquisition by Takeda, most recently serving as chief medical officer and senior vice president of clinical, medical and regulatory affairs. From 1995 to 2001, Dr. Simonian was at Biogen, Inc., a biotechnology company, and most recently served as vice president of clinical development. She is a member of the board of directors of Seattle Genetics, Inc., a biotechnology company. Prior to joining the biopharmaceutical industry, Dr. Simonian was on the faculty of Massachusetts General Hospital and Harvard Medical School as an assistant professor of neurology. She received a B.A. in biology from Princeton University and an M.D. from the University of Pennsylvania School of Medicine. Our board of directors believes Dr. Simonian is qualified to serve on our board because of her role as our chief executive officer, her experience in the biopharmaceutical industry and her other executive leadership and board of directors experience.

Kyle D. Kuvalanka has served as our chief operating officer since September 2015. Prior to joining Syros, Mr. Kuvalanka served as chief business officer and principal financial and accounting officer of Blueprint Medicines Corporation, a biopharmaceutical company, from September 2013 to September 2015. From 2002 to September 2013, Mr. Kuvalanka worked at Takeda and at Millennium prior to its takeover by Takeda, including as vice president, corporate strategy, business development and alliance management from 2009 to September 2013. Mr. Kuvalanka holds a B.A. from Wesleyan University and an M.B.A. from The Wharton Business School of the University of Pennsylvania.

Eric R. Olson, Ph.D., has been our chief scientific officer since April 2013. He previously served as research vice president for respiratory diseases at Vertex Pharmaceuticals Incorporated, a biotechnology company, from 2001 to May 2013. Dr. Olson has also held positions as the director of antibacterials and molecular sciences departments at Warner-Lambert as well as a research scientist focused on gene expression systems with The Upjohn Company, both of which were acquired by Pfizer, Inc., a



pharmaceutical company. Dr. Olson received a B.S. in microbiology and immunology from the University of Minnesota and a Ph.D. in microbiology and immunology from the University of Michigan.

Jorge Conde has been our chief financial officer and chief product officer since May 2014. Prior to joining Syros, from 2007 to May 2014, Mr. Conde served in various roles at Knome, Inc., a genomics company, including founding chief executive officer, chief financial officer and chief product officer. Prior to Knome, Mr. Conde worked in marketing and operations at MedImmune, Inc. a biopharmaceutical company which was subsequently acquired by AstraZeneca, from 2006 to 2007. He has also worked in the life sciences group at Flagship Ventures and managed the business development function at Helicos Biosciences Corporation, a DNA sequencing company. Previously, he was an investment banker at Morgan Stanley & Co. where he advised biotechnology and genomics companies on strategy, M&A and capital fundraising. Mr. Conde received a B.A. in biology from Johns Hopkins University, an M.B.A. from Harvard Business School and an M.S. from the Harvard-MIT Division of Health Sciences and Technology.

Jonathan Garen has been our chief business officer since April 2015. Previously, he served as assistant vice president of corporate development of Actavis plc, a pharmaceutical company, following Actavis' acquisition of Forest Laboratories, Inc. in 2014. Prior to the acquisition, he was assistant vice president of business development at Forest Laboratories, a pharmaceutical company, since 2003. Prior to Forest Laboratories, Mr. Garen was a director in the global licensing department at Pharmacia Corporation, a biotechnology company that was subsequently acquired by Pfizer. He was also a founder and vice president of TechEx, an online exchange service matching licensing opportunities from academic research institutions with potential life sciences licensors and investors. Mr. Garen received a B.S. in physics from the Massachusetts Institute of Technology and an M.S. in environmental sciences from Yale University.

Non-Management Directors

Stéphane Bancel has served as a member of our board of directors since November 2013. He has been president and founding chief executive officer of Moderna Therapeutics, a biotechnology company since July 2011. Mr. Bancel was previously chief executive officer of bioMérieux, a diagnostics company from 2006 to July 2011. Prior to his time at bioMérieux, Mr. Bancel was managing director of Eli Lilly in Belgium and executive director of global manufacturing strategy and supply chain at Eli Lilly in Indianapolis, Indiana. Mr. Bancel serves as a supervisory director of Qiagen N.V., a biotechnology company. Mr. Bancel holds a M.E. from École Central Paris, a M.S. in chemical engineering from the University of Minnesota and an M.B.A. from Harvard Business School. We believe Mr. Bancel is qualified to serve on our board because of his experience as a senior executive and his knowledge of our industry.

Marsha H. Fanucci has been a member of our board of directors since October 2015. Since 2009, Ms. Fanucci has been an independent consultant. From 2004 through 2009, she served as senior vice president and chief financial officer of Millennium, which was subsequently acquired by Takeda. She previously served in various other roles at Millennium, including as vice president, finance and corporate strategy and vice president, corporate development. Ms. Fanucci is a member of the boards of directors of Alnylam Pharmaceuticals, Inc., Ironwood Pharmaceuticals, Inc. and Momenta Pharmaceuticals, Inc. She received her B.S. in pharmacy from West Virginia University and her M.B.A. from Northeastern University. We believe Ms. Fanucci is qualified to serve on our board of directors due to her expertise with public and financial accounting matters and her experience leading financial organizations in biotechnology companies.

Robert Nelsen has served on our board of directors since our inception in November 2011. Mr. Nelsen was a co-founder of ARCH Venture Partners, a venture capital firm, and has served in various capacities for ARCH and affiliated entities since 1986. He is currently a managing director of

ARCH Venture Corporation. Mr. Nelsen is a director of Agios Pharmaceuticals, Inc., Bellerophon Therapeutics, Inc., Juno Therapeutics, Inc. and Sage Therapeutics, Inc., as well as a director of various private companies. Mr. Nelsen also serves as a trustee of the Fred Hutchinson Cancer Research Institute, a trustee of the Institute for Systems Biology, and a director of the National Venture Capital Association. Mr. Nelsen received a B.S. with majors in biology and economics from the University of Puget Sound and an M.B.A. from the University of Chicago. We believe Mr. Nelsen is qualified to serve on our board of directors due to his extensive experience as an investor in, and director of, early stage biopharmaceutical and life sciences companies.

Vicki L. Sato, Ph.D., has served on our board of directors since August 2013. She has been a professor of management practice at Harvard Business School since September 2006 and was a professor in the Department of Molecular and Cell Biology at Harvard University from July 2005 until October 2015. She was previously president of Vertex. Dr. Sato is a member of the boards of directors of Bristol Myers Squibb Company, PerkinElmer Corporation and BorgWarner, Inc. Prior to becoming president of Vertex, she was the chief scientific officer and senior vice president of research and development. She joined Vertex in 1992, after serving as vice president of research at Biogen Inc., a biotechnology company. Dr. Sato received her A.B. from Radcliffe College and her A.M. and Ph.D. degrees from Harvard University. She conducted her postdoctoral work at both the University of California Berkeley and Stanford Medical Center. We believe Dr. Sato is qualified to serve on our board of directors because of her experience as a senior executive and as a director of several life sciences companies, and because of her knowledge of our industry.

Phillip A. Sharp, Ph.D., has served on our board of directors since December 2012. Dr. Sharp has been an institute professor at the Massachusetts Institute of Technology since 1999. Much of Dr. Sharp's scientific work has been conducted at MIT's Center for Cancer Research (now the Koch Institute), which he joined in 1974 and directed from 1985 to 1991. He subsequently led the Department of Biology from 1991 to 1999 before assuming the directorship of the McGovern Institute from 2000 to 2004. Dr. Sharp is the winner of the 1993 Nobel Prize in Physiology or Medicine. Dr. Sharp has served on the board of directors of Alnylam Pharmaceuticals, Inc., a biopharmaceutical company, since 2002. He earned his B.A. from Union College in 1966 and a Ph.D. in chemistry from the University of Illinois, Champaign-Urbana in 1969. He did his postdoctoral training at the California Institute of Technology. We believe Dr. Sharp is qualified to serve on our board of directors due to his scientific expertise and his experience as a director of a publicly traded company.

Richard A. Young, Ph.D., has served on our board of directors since our inception in November 2011. He is also one of our scientific co-founders and a member of our scientific advisory board. He has been a member of the Whitehead Institute and professor of Biology at the Massachusetts Institute of Technology since 1984. In May 2012, he was elected into the National Academy of Sciences. Dr. Young has served as an advisor to *Science* magazine and the World Health Organization. Dr. Young received his Ph.D. in molecular biophysics and biochemistry from Yale University. We believe Dr. Young is qualified to serve on our board of directors because of his scientific expertise and his role as one of our scientific co-founders.

Board Composition and Election of Directors

Board Composition

Our board of directors currently consists of seven members. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal.

Our directors were elected to and currently serve on the board of directors pursuant to a voting agreement among us and our stockholders. This agreement will terminate upon the closing of this offering, after which there will be no further contractual obligations regarding the election of our directors.

In accordance with the terms of our restated certificate of incorporation and amended and restated bylaws that will become effective upon the closing of this offering, our board of directors will be divided into three classes, class I, class II and class III, with members of each class serving staggered three-year terms. Upon the closing of this offering, the members of the classes will be divided as follows:

- the class I directors will be and held after the closing of this offering; , and their term will expire at the first annual meeting of stockholders
- the class II directors will be and held after the closing of this offering; and , and their term will expire at the second annual meeting of stockholders
- the class III directors will be and , and their term will expire at the third annual meeting of stockholders held after the closing of this offering.

Our restated certificate of incorporation and amended and restated bylaws that will become effective upon the closing of this offering provide that the authorized number of directors may be changed only by resolution of our board of directors. Our restated certificate of incorporation and amended and restated bylaws will also provide that our directors may be removed only for cause by the affirmative vote of the holders of 75% of our shares of capital stock present in person or by proxy and entitled to vote, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

Director Independence

Applicable NASDAQ Stock Market, or NASDAQ, rules require a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the NASDAQ rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act, and compensation committee members must also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act and be a non-employee member of our board of directors as defined in Rule 16b-3 under the Exchange Act. Under applicable NASDAQ rules, a director will only qualify as an "independent director" if, in the opinion of the listed company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries. In order to be considered independent for purposes of Rule 10C-1, the board must consider, for each member of a compensation committee of a listed company, all factors specifically relevant to determining whether a director has a relationship to such company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: the source of compensation of the director, including any consulting advisory or other compensatory fee paid by such company to the director; and whether the director is affiliated with the company or any of its subsidiaries or affiliates.

In , 2015, our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that each of

, , , , and is an "independent director" as defined under applicable NASDAQ rules, including, in the case of all the members of our audit committee, the independence criteria set forth in Rule 10A-3 under the Exchange Act, and in the case of all the members of our compensation committee, the independence criteria set forth in Rule 10C-1 under the Exchange Act and the criteria to be a non-employee director as defined in Rule 16b-3 under the Exchange Act. In making such determination, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining his or her independence, including the beneficial ownership of our capital stock by each non-employee director. Dr. Simonian is not deemed to be an independent director under these rules because she is our president and chief executive officer.

There are no family relationships among any of our directors or executive officers.

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee. Each of these committees will operate under a charter that has been approved by our board of directors. The composition of each committee will be effective as of the date of this prospectus.

Audit Committee

The members of our audit committee are , and , and is the chair of the audit committee. Effective at the time of this offering, our audit committee's responsibilities will include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our independent registered public accounting firm, including through the receipt and consideration of reports from that firm;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- overseeing our internal audit function, if any;
- overseeing our risk assessment and risk management policies;
- establishing policies regarding hiring employees from our independent registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our internal auditing staff, if any, our independent registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by Securities and Exchange Commission, or SEC, rules.

All audit and non-audit services, other than *de minimis* non-audit services, to be provided to us by our independent registered public accounting firm must be approved in advance by our audit committee.

Our board of directors has determined that is an "audit committee financial expert" as defined in applicable SEC rules and that each of the members of our audit committee possesses the financial sophistication required for audit committee members under NASDAQ rules. We believe that the composition of our audit committee will meet the requirements for independence under current NASDAQ and SEC rules and regulations.

Compensation Committee

The members of our compensation committee are , and , and is the chair of the compensation committee. Effective at the time of this offering, our compensation committee's responsibilities will include:

- reviewing and approving, or making recommendations to our board of directors with respect to, the compensation of our chief executive officer and our other executive officers;
- overseeing an evaluation of our senior executives;
- overseeing and administering our cash and equity incentive plans;
- reviewing and making recommendations to our board of directors with respect to director compensation and management succession planning;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis" disclosure if and to the extent then required by SEC rules; and
- preparing the compensation committee report if and to the extent then required by SEC rules.

We believe that the composition of our compensation committee will meet the requirements for independence under current NASDAQ and SEC rules and regulations.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are , and , and is the chair of the nominating and corporate governance committee. Effective at the time of this offering, our nominating and corporate governance committee's responsibilities will include:

- identifying individuals qualified to become members of our board of directors;
- recommending to our board of directors the persons to be nominated for election as directors and to each of our board's committees;
- reviewing and making recommendations to our board of directors with respect to our board leadership structure and board committee structure;
- making recommendations to our board of directors with respect to accepting director resignations;
- reviewing and making recommendations to our board of directors with respect to management succession planning;
- · developing and recommending to our board of directors corporate governance principles; and
- overseeing an annual evaluation of our board of directors and an annual review of succession planning for senior executives.

We believe that the composition of our nominating and corporate governance committee will meet the requirements for independence under current NASDAQ and SEC rules and regulations.



Compensation Committee Interlocks and Insider Participation

None of our executive officers serves, or in the past year has served, as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our board of directors or our compensation committee. None of the members of our compensation committee is, or has ever been, an officer or employee of our company.

Code of Business Conduct and Ethics

Prior to the closing of this offering, we will adopt a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Following this offering, we will post a copy of the code on the Corporate Governance section of our website, which is located at www.syros.com. Our board of directors will be responsible for overseeing the code of business conduct and ethics and must approve any waivers of the code for directors, officers and employees. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K.

EXECUTIVE COMPENSATION

This section describes the material elements of compensation awarded to, earned by or paid to each of our named executive officers in 2014. Our named executive officers for 2014 are Nancy Simonian, M.D., Eric R. Olson, Ph.D., and Jorge Conde. This section also provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our executive officers and is intended to place in perspective the data presented in the tables and narrative that follow.

Summary Compensation Table

The following table sets forth information regarding compensation awarded to, earned by or paid to our named executive officers during 2014.

Name and principal position	Salary (\$)	Option Awards (\$)(1)	All Other Compensation (\$)(2)	Total (\$)
Nancy Simonian, M.D.	425,000	43,540	263	468,803
President and Chief Executive Officer(3)				
Eric R. Olson, Ph.D.	340,000	4,575	263	344,838
Chief Scientific Officer				
Jorge Conde	173,628	153,155	151	326,934
Chief Financial Officer and Chief Product Officer(4)				

(1) The amounts reported in the "Option Awards" column reflect the aggregate grant date fair value of stock-based compensation awarded during the year computed in accordance with the provisions of Financial Accounting Standards Board Accounting Standard Codification, or ASC, Topic 718. Unlike the calculations contained in our consolidated financial statements, this calculation does not give effect to any estimate of forfeitures related to service-based vesting, but assumes that the named executive officer will perform the requisite service for the award to vest in full. See Note 11 to our financial statements included elsewhere in this prospectus regarding assumptions underlying the valuation of equity awards.

- (2) The amounts reported in the "All Other Compensation" column reflect, for each named executive officer, the cost to us of life insurance premiums paid for the named executive officer.
- (3) Dr. Simonian also serves as a member of our board of directors but does not receive any additional compensation for her service as a director.
- (4) Mr. Conde commenced employment with us on May 14, 2014. Amounts shown represent compensation earned by Mr. Conde during that partial year of employment.

Narrative to Summary Compensation Table

In 2014, we paid base salaries of \$425,000, \$340,000 and \$173,628 to Dr. Simonian, Dr. Olson and Mr. Conde, respectively. Mr. Conde's annualized base salary was \$290,000. We use base salaries to recognize the experience, skills, knowledge and responsibilities required of all our employees, including our named executive officers. None of our named executive officers is currently party to an employment agreement or other agreement or arrangement that provides for automatic or scheduled increases in base salary.

We do not have a formal performance-based bonus plan. Our offer letters with our executive officers provide that they will be eligible for annual performance-based bonuses up to a specific percentage of their salary, subject to approval by our board of directors. No such bonuses were paid in 2014.

In 2014, we also made equity incentive grants to our executive officers, including Dr. Simonian, Dr. Olson and Mr. Conde. Dr. Simonian was granted an option to purchase up to 75,000 shares of our common stock, which vested as to 25% of the shares on September 29, 2015 with the remaining shares vesting in equal monthly installments thereafter through September 29, 2018. Dr. Olson was granted an option to purchase up to 17,000 shares of our common stock, which vested as to 25% of the shares on July 1, 2015 with the remaining shares vesting in equal monthly installments thereafter through September 29, 2015 with the remaining shares of our common stock, which vested as to 25% of the shares on July 1, 2015 with the remaining shares vesting in equal monthly installments thereafter through July 1, 2018. Mr. Conde was granted two options to purchase up to 454,938 and up to 113,734 shares of our common stock. The first of Mr. Conde's grants vested as to 25% of the shares on May 27, 2015 with the remaining shares vesting in equal monthly installments thereafter through May 27, 2018. The second of Mr. Conde's grants vests upon the achievement of performance-based criteria, and in any event will vest in full on May 27, 2020.

Although we do not have a formal policy with respect to the grant of equity incentive awards to our executive officers, or any formal equity ownership guidelines applicable to them, we believe that equity grants provide our executives with a strong link to our long-term performance, create an ownership culture and help to align the interests of our executives and our stockholders. In addition, we believe that equity grants with a time-based vesting feature promote executive retention because this feature incents our executive officers to remain in our employment during the vesting period, and equity grants with a performance-based feature incents our executive officers to focus on what we see as key business goals. Accordingly, our board of directors periodically reviews the equity incentive compensation of our named executive officers and from time to time may grant equity incentive awards to them in the form of stock options.

Outstanding Equity Awards at Fiscal Year End

The following table sets forth information regarding outstanding equity awards held by our named executive officers as of December 31, 2014, which consisted entirely of stock options:

<u>Name</u>	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price (\$/share)	Option Expiration Date
Nancy Simonian, M.D.	850,176(1) 140,719(2)	557,013(1) 422,157(2) 75,000(3)	0.27 0.27 0.81	7/2/2022 7/2/2022 10/22/2024
Eric R. Olson, Ph.D.	167,103(4)	255,054(4) 140,719(5) 17,000(6)	0.27 0.27 0.37	5/20/2023 5/20/2023 7/1/2024
Jorge Conde	—	454,938(7) 113,734(8)	0.37 0.37	5/27/2024 5/27/2024

(1) This option was granted on May 22, 2013 and vested as to 25% of the shares on July 2, 2013 with the remaining shares vesting in equal monthly installments thereafter through July 2, 2016.

- (2) This option was granted on May 22, 2013 and vests upon the achievement of performance-based criteria, and in any event will vest in full on July 2, 2018.
- (3) This option was granted on October 22, 2014 and vested as to 25% of the shares on September 29, 2015 with the remaining shares vesting in equal monthly installments thereafter through September 29, 2018.
- (4) This option was granted on May 22, 2013 and vested as to 25% of the shares on May 20, 2013 with the remaining shares vesting in equal monthly installments thereafter through May 20, 2017.

- (5) This option was granted on May 22, 2013 and vests upon the achievement of performance-based criteria, and in any event will vest in full on May 20, 2019.
- (6) This option was granted on September 4, 2014 and vested as to 25% of the shares on July 1, 2015 with the remaining shares vesting in equal monthly installments thereafter through July 1, 2018.
- (7) This option was granted on June 3, 2014 and vested as to 25% of the shares on May 27, 2015 with the remaining shares vesting in equal monthly installments thereafter through May 27, 2018.
- (8) This option was granted on June 3, 2014 and vests upon the achievement of performance-based criteria, and in any event will vest in full on May 27, 2020.

Employment and Change in Control Arrangements

We have entered into written offer letters with each of our named executive officers. These agreements set forth the terms of the named executive officer's compensation, including his or her initial base salary, severance and annual cash bonus opportunity. In addition, the agreements provide that the named executive officers are eligible to participate in company-sponsored benefit programs that are available generally to all of our employees. In connection with the commencement of their employment with us, our named executive officers executed our standard invention and non-disclosure agreement and non-competition and non-solicitation agreement.

The offer letter with Dr. Simonian provides that she is eligible to receive an annual incentive bonus equal to 50% of her then-current salary, subject to the terms of the applicable bonus plans approved by our board of directors. Dr. Simonian's offer letter also provides that if her employment is terminated by us without cause, or by her with good reason, as such terms are defined in her offer letter, she will receive monthly severance payments equal to her then-current monthly salary rate for 12 months and payment of an incentive bonus pro-rated for the portion of the then-current calendar year during which she was employed by us, subject to certain conditions. In addition, in the event of a change in control of our company, as defined in the offer letter, all unvested stock options then held by Dr. Simonian will vest in full 12 months after the change in control, or earlier if her employment is terminated by us without cause or by her for good reason in contemplation of, pursuant to or following a change in control, referred to as the CIC Equity Vesting.

The offer letter with Dr. Olson, as amended, provides that if his employment is terminated by us without cause, or by him with good reason, as such terms are defined in his offer letter, he will receive monthly severance payments equal to his then-current monthly rate of salary for nine months, subject to certain conditions. The offer letter with Mr. Conde provides that if his employment is terminated by us without cause, or by him with good reason, as such terms are defined in his offer letter, he will receive monthly severance payments equal to his then-current monthly rate of salary for six months, subject to certain conditions. Dr. Olson and Mr. Conde are also eligible for the CIC Equity Vesting.

Equity Compensation Plans

The three equity incentive plans described in this section are our 2012 Equity Incentive Plan, as amended to date, or the 2012 plan, our 2016 Stock Incentive Plan, or the 2016 plan, and our 2016 Employee Stock Purchase Plan, or the 2016 ESPP. Prior to this offering, we granted awards to eligible participants under the 2012 plan. Following the effectiveness of this registration statement, we expect to grant awards to eligible participants only under the 2016 plan.

2012 Equity Incentive Plan

The 2012 plan was adopted by our board of directors and approved by our stockholders in August 2012. The 2012 plan provides for the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, awards of restricted stock, restricted stock units, other stock-based awards and



cash-based awards. Our employees, officers, directors, consultants and advisors are eligible to receive awards under our 2012 plan; however, incentive stock options may only be granted to our employees. A maximum of 8,711,306 shares of our common stock are authorized for issuance under the 2012 plan.

The type of award granted under our 2012 plan and the terms of such award are set forth in the applicable award agreement.

Pursuant to the terms of the 2012 plan, our board of directors (or a committee delegated by our board of directors) administers the plan and, subject to any limitations set forth in the plan, selects the recipients of awards and determines:

- the number of shares of our common stock covered by options and the dates upon which the options become exercisable;
- the type of options to be granted;
- the duration of options, which may not be in excess of ten years;
- the exercise price of options, which price must be at least equal to the fair market value of our common stock on the date of grant;
- the methods of payment of the exercise price of options; and
- the number of shares of our common stock subject to any stock appreciation rights, awards of restricted stock, restricted stock units or other stock-based awards and the terms and conditions of such awards and of any cash-based awards, including conditions for repurchase, measurement price, issue price and repurchase price and performance conditions (though the measurement price of stock appreciation rights must be at least equal to the fair market value of our common stock on the date of grant and the duration of such awards may not be in excess of ten years), if any.

If our board of directors delegates authority to an executive officer to grant awards under the 2012 plan, the executive officer will have the power to make awards to all of our employees, except executive officers. Our board of directors will fix the terms of the awards to be granted by such executive officer, including the exercise price of such awards (or a formula for establishing such price), and the maximum number of shares subject to awards that such executive officer may make.

In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of our common stock other than an ordinary cash dividend, we are required by the 2012 plan to make equitable adjustments (or make substitute awards, if applicable), in a manner determined by our board, to:

- the number and class of securities available under the 2012 plan;
- the number and class of securities and exercise price per share of each outstanding option;
- the share and per-share provisions and measurement price of each outstanding stock appreciation right;
- the number of shares and repurchase price per share subject to, each outstanding restricted stock award or restricted stock unit award; and
- the share and per-share related provisions and purchase price, if any, of each outstanding other stock-based award.

Upon a merger or other reorganization event (as defined in the 2012 plan), our board of directors may, on such terms as our board determines (except to the extent specifically provided otherwise in an applicable award agreement or other agreement between the participant and us), take any one or more



of the following actions pursuant to the 2012 plan as to all or any (or any portion of) outstanding awards other than awards of restricted stock:

- provide that all outstanding awards will be assumed, or substantially equivalent awards will be substituted, by the acquiring or successor corporation (or an affiliate thereof);
- upon written notice to a participant, provide that all of the participant's vested but unexercised awards will terminate immediately prior to the consummation of such reorganization event unless exercised by the participant;
- provide that outstanding awards will become exercisable, realizable or deliverable, or restrictions applicable to an award will lapse, in whole or in part, prior to or upon such reorganization event;
- in the event of a reorganization event pursuant to which holders of shares of our common stock will receive a cash payment for each share surrendered in the reorganization event, make or provide for a cash payment to the participants with respect to each award held by a participant equal to (1) the number of shares of our common stock subject to the vested portion of the award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such reorganization event) multiplied by (2) the excess, if any, of the cash payment for each share surrendered in the reorganization event over the exercise, measurement or purchase price of such award and any applicable tax withholdings, in exchange for the termination of such award;
- provide that, in connection with our liquidation or dissolution, awards will convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings); or
- any combination of the foregoing.

Our board of directors is not obligated by the 2012 plan to treat all awards, all awards held by a participant, or all awards of the same type, identically.

In the case of certain restricted stock units that are subject to Section 409A of the Internal Revenue Code of 1986, as amended, or the Code, no assumption or substitution is permitted, and the restricted stock units will instead be settled in accordance with the terms of the applicable restricted stock unit agreement.

Upon the occurrence of a reorganization event other than our liquidation or dissolution, the repurchase and other rights with respect to outstanding awards of restricted stock will continue for the benefit of the successor company and will, unless our board of directors may otherwise determine, apply to the cash, securities or other property which our common stock is converted into or exchanged for pursuant to the reorganization event. However, our board of directors may provide for the termination or deemed satisfaction of such repurchase or other rights under the restricted stock award agreement or any other agreement between the participant and us, either initially or by amendment. Upon the occurrence of a reorganization event involving our liquidation or dissolution, all restrictions and conditions on each outstanding restricted stock award will automatically be deemed terminated or satisfied, unless otherwise provided in the agreement evidencing the restricted stock award or in any other agreement between the participant and us.

Our board of directors may, at any time, provide that any award under the 2012 plan will become immediately exercisable in whole or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part, as the case may be.

As of September 30, 2015, there were options to purchase 7,088,929 shares of our common stock outstanding under the 2012 plan, at a weighted-average exercise price of \$0.74 per share.

No award may be granted under the 2012 plan on or after the effectiveness of the registration statement for this offering. Our board of directors may amend, suspend or terminate the 2012 plan at any time, except that stockholder approval may be required to comply with applicable law or stock market requirements.

2016 Stock Incentive Plan

We expect our board of directors to adopt, and our stockholders to approve, the 2016 plan, which will become effective immediately prior to the effectiveness of the registration statement for this offering. The 2016 plan will provide for the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, awards of restricted stock, restricted stock units and other stock-based awards. Upon effectiveness of the 2016 plan, the number of shares of our common stock that will be reserved for issuance under the 2016 plan will be the sum of (1)shares plus; (2) the number of shares reserved for issuance (up to shares) equal to the sum of the number of shares of our common stock then available for issuance under the 2012 plan and the number of shares of our common stock subject to outstanding awards under the 2012 plan that expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by us at their original issuance price pursuant to a contractual repurchase right; plus (3) an annual increase, to be added the first day of each fiscal year, beginning with the fiscal year ending December 31, 2017 and continuing until, and including, the fiscal year ending December 31, 2026, equal to the lowest of shares of our common stock. % of the number of shares of our common stock outstanding on the first day of the fiscal year and an amount determined by our board of directors. Our employees, officers, directors, consultants and advisors will be eligible to receive awards under the 2016 plan; however, incentive stock options may only be granted to our employees.

Pursuant to the terms of the 2016 plan, our board of directors (or a committee delegated by our board of directors) administers the plan and, subject to any limitations set forth in the plan, will select the recipients of awards and determine:

- the number of shares of our common stock covered by options and the dates upon which those options become exercisable;
- the type of options to be granted;
- the duration of options, which may not be in excess of ten years;
- the exercise price of options, which price must be at least equal to the fair market value of our common stock on the date of grant;
- the methods of payment of the exercise price of options; and
- the number of shares of our common stock subject to and the terms and conditions of any stock appreciation rights, awards of restricted stock, restricted stock units or other stock-based awards, including conditions for repurchase, measurement price, issue price and repurchase price and performance conditions (though the measurement price of stock appreciation rights must be at least equal to the fair market value of our common stock on the date of grant and the duration of such awards may not be in excess of ten years), if any.

If our board of directors delegates authority to an executive officer to grant awards under the 2016 plan, the executive officer will have the power to make awards to all of our employees, except executive officers. Our board of directors will fix the terms of the awards to be granted by such executive officer, including the exercise price of such awards (or a formula for establishing such price), and the maximum number of shares subject to awards that such executive officer may make.

In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any

dividend or distribution to holders of our common stock other than an ordinary cash dividend, we are required by the 2016 plan to make equitable adjustments (or make substitute awards, if applicable), in a manner determined by our board, to:

- the number and class of securities available under the 2016 plan;
- the share counting rules under the 2016 plan;
- the number and class of securities and exercise price per share of each outstanding option;
- the share and per-share provisions and measurement price of each outstanding stock appreciation right;
- the number of shares and repurchase price per share subject to each outstanding restricted stock award or restricted stock unit award; and
- the share and per-share related provisions and purchase price, if any, of each outstanding other stock-based award.

Upon a merger or other reorganization event (as defined in our 2016 plan), our board of directors, may, on such terms as our board determines (except to the extent specifically provided otherwise in an applicable award agreement or other agreement between the participant and us), take any one or more of the following actions pursuant to the 2016 plan, as to all or any (or any portion of) outstanding awards, other than awards of restricted stock:

- provide that all outstanding awards will be assumed or substantially equivalent awards will be substituted by the acquiring successor corporation (or an affiliate thereof);
- upon written notice to a participant, provide that all of the participant's unvested and/or unexercised awards will terminate immediately prior to the consummation of such reorganization event unless exercised by the participant;
- provide that outstanding awards will become exercisable, realizable or deliverable, or restrictions applicable to an award will lapse, in whole or in part, prior to or upon such reorganization event;
- in the event of a reorganization event pursuant to which holders of shares of our common stock will receive a cash payment for each share surrendered in the reorganization event, make or provide for a cash payment to the participants with respect to each award held by a participant equal to (1) the number of shares of our common stock subject to the vested portion of the award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such reorganization event) multiplied by (2) the excess, if any, of the cash payment for each share surrendered in the reorganization event over the exercise, measurement or purchase price of such award and any applicable tax withholdings, in exchange for the termination of such award;
- provide that, in connection with our liquidation or dissolution, awards will convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings); or
- any combination of the foregoing.

Our board of directors is not obligated by the 2016 plan to treat all awards, all awards held by a participant, or all awards of the same type, identically.

In the case of certain restricted stock units, no assumption or substitution is permitted, and the restricted stock units will instead be settled in accordance with the terms of the applicable restricted stock unit agreement.



Upon the occurrence of a reorganization event other than our liquidation or dissolution, the repurchase and other rights with respect to outstanding awards of restricted stock will continue for the benefit of the successor company and will, unless our board of directors may otherwise determine, apply to the cash, securities or other property which our common stock is converted into or exchanged for pursuant to the reorganization event. However, our board of directors may provide for the termination or deemed satisfaction of such repurchase or other rights under the restricted stock award agreement or any other agreement between the participant and us, either initially or by amendment. Upon the occurrence of a reorganization event involving our liquidation or dissolution, all restrictions and conditions on each outstanding restricted stock award will automatically be deemed terminated or satisfied, unless otherwise provided in the agreement evidencing the restricted stock award or in any other agreement between the participant and us.

Our board of directors may at any time provide that any award under the 2016 plan will become immediately exercisable in whole or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part, as the case may be.

Except with respect to certain actions requiring stockholder approval under the Code or NASDAQ rules, our board of directors may amend, modify or terminate any outstanding award under the 2016 plan, including but not limited to, substituting therefor another award of the same or a different type, changing the date of exercise or realization, and converting an incentive stock option into a nonstatutory stock option, subject to certain participant consent requirements. Unless our stockholders approve such action, the 2016 plan provides that we may not (except as otherwise permitted in connection with a change in capitalization or reorganization event):

- amend any outstanding stock option or stock appreciation right granted under the 2016 plan to provide an exercise or measurement price per share that is lower than the then-current exercise or measurement price per share of such outstanding award;
- cancel any outstanding option or stock appreciation right (whether or not granted under the 2016 plan) and grant in
 substitution therefor new awards under the 2016 plan (other than substitute awards permitted in connection with a merger or
 consolidation of an entity with us or our acquisition of property or stock of another entity) covering the same or a different
 number of shares of our common stock and having an exercise or measurement price per share lower than the then-current
 exercise or measurement price per share of the cancelled award;
- cancel in exchange for a cash payment any outstanding option or stock appreciation right with an exercise or measurement price per share above the then-current fair market value of our common stock; or
- take any other action that constitutes a "repricing" within the meaning of NASDAQ rules.

No award may be granted under the 2016 plan after ten years from the effectiveness of the 2016 plan. Our board of directors may amend, suspend or terminate the 2016 plan at any time, except that stockholder approval will be required to comply with applicable law or stock market requirements.

2016 Employee Stock Purchase Plan

We expect our board of directors to adopt, and our stockholders to approve, the 2016 ESPP, to become effective upon the closing of this offering. The 2016 ESPP will be administered by our board of directors or by a committee appointed by our board of directors. The 2016 ESPP initially will provide participating employees with the opportunity to purchase up to an aggregate of shares of our common stock. The number of shares of our common stock reserved for issuance under the 2016 ESPP will automatically increase on the first day of each fiscal year, commencing on January 1, 2016 and ending on December 31, 2026, in an amount equal to the least of (i) shares of our common

stock, (ii) % of the total number of shares of our common stock outstanding on the first day of the applicable year, and (iii) an amount determined by our board of directors.

All of our employees or employees of any designated subsidiary, as defined in the 2016 ESPP, are eligible to participate in the 2016 ESPP, provided that:

- such person is customarily employed by us or a designated subsidiary for more than 20 hours a week and for more than five months in a calendar year;
- such person has been employed by us or by a designated subsidiary for at least six months prior to enrolling in the 2016 ESPP; and
- such person was our employee or an employee of a designated subsidiary on the first day of the applicable offering period under the 2016 ESPP.

No employee may purchase shares of our common stock under the 2016 ESPP and any of our other employee stock purchase plans in excess of \$25,000 of the fair market value of our common stock (as of the date of the option grant) in any calendar year. In addition, no employee may purchase shares of our common stock under the 2016 ESPP that would result in the employee owning 5% or more of the total combined voting power or value of our stock or the stock of any of our subsidiaries.

We expect to make one or more offerings to our eligible employees to purchase stock under the 2016 ESPP beginning at such time as our board of directors may determine. Each offering will consist of a six-month offering period during which payroll deductions will be made and held for the purchase of our common stock at the end of the offering period. Our board of directors may, at its discretion, choose a different period of not more than 12 months for offerings.

On the commencement date of each offering period, each eligible employee may authorize up to a maximum of 15% of his or her compensation to be deducted by us during the offering period. Each employee who continues to be a participant in the 2016 ESPP on the last business day of the offering period will be deemed to have exercised an option to purchase from us the number of whole shares of our common stock that his or her accumulated payroll deductions on such date will pay for, not in excess of the maximum numbers set forth above. Under the terms of the 2016 ESPP, the purchase price shall be determined by our board of directors for each offering period and will be at least 85% of the applicable closing price of our common stock. If our board of directors does not make a determination of the purchase price, the purchase price will be 85% of the lesser of the closing price of our common stock on the first business day of the offering period.

An employee who is not a participant on the last day of the offering period is not entitled to purchase shares under the 2016 ESPP, and the employee's accumulated payroll deductions will be refunded. An employee's rights under the 2016 ESPP terminate upon voluntary withdrawal from an offering under the 2016 ESPP at any time, or when the employee ceases employment for any reason.

We will be required to make equitable adjustments to the number and class of securities available under the 2016 ESPP, the share limitations under the 2016 ESPP, and the purchase price for an offering period under the 2016 ESPP to reflect stock splits, reverse stock splits, stock dividends, recapitalizations, combinations of shares, reclassifications of shares, spin-offs and other similar changes in capitalization or events or any dividends or distributions to holders of our common stock other than ordinary cash dividends.

In connection with a merger or other reorganization event, as defined in the 2016 ESPP, our board of directors or a committee of our board of directors may take any one or more of the following



actions as to outstanding options to purchase shares of our common stock under the 2016 ESPP on such terms as our board or committee determines:

- provide that options shall be assumed, or substantially equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof);
- upon written notice to employees, provide that all outstanding options will be terminated immediately prior to the consummation of such reorganization event and that all such outstanding options will become exercisable to the extent of accumulated payroll deductions as of a date specified by our board or committee in such notice, which date shall not be less than ten days preceding the effective date of the reorganization event;
- upon written notice to employees, provide that all outstanding options will be cancelled as of a date prior to the effective date of the reorganization event and that all accumulated payroll deductions will be returned to participating employees on such date;
- in the event of a reorganization event under the terms of which holders of our common stock will receive upon consummation thereof a cash payment for each share surrendered in the reorganization event, change the last day of the offering period to be the date of the consummation of the reorganization event and make or provide for a cash payment to each employee equal to (1) the cash payment for each share surrendered in the reorganization event times the number of shares of our common stock that the employee's accumulated payroll deductions as of immediately prior to the reorganization event could purchase at the applicable purchase price, where the acquisition price is treated as the fair market value of our common stock on the last day of the applicable offering period for purposes of determining the purchase price and where the number of shares that could be purchased is subject to the applicable limitations under the 2016 ESPP minus (2) the result of multiplying such number of shares by the purchase price; and/or
- provide that, in connection with our liquidation or dissolution, options shall convert into the right to receive liquidation proceeds (net of the purchase price thereof).

Our board of directors may at any time, and from time to time, amend or suspend the 2016 ESPP or any portion thereof. We will obtain stockholder approval for any amendment if such approval is required by Section 423 of the Code. Further, our board of directors may not make any amendment that would cause the 2016 ESPP to fail to comply with Section 423 of the Code. The 2016 ESPP may be terminated at any time by our board of directors. Upon termination, we will refund all amounts in the accounts of participating employees.

401(k) Retirement Plan

We maintain a 401(k) retirement plan that is intended to be a tax-qualified defined contribution plan under Section 401(k) of the Code. In general, all of our employees are eligible to participate, beginning on the first day of the quarter following commencement of their employment. The 401(k) plan includes a salary deferral arrangement pursuant to which participants may elect to reduce their current compensation by up to the statutorily prescribed limit, equal to \$18,000 in 2015, and have the amount of the reduction contributed to the 401(k) plan.

Limitations on Liability and Indemnification

Our restated certificate of incorporation that will become effective upon the closing of this offering limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the General Corporation Law of the State of Delaware and provides that no director will have personal liability to us or to our stockholders for monetary damages for breach of fiduciary duty or

other duty as a director. However, these provisions do not eliminate or limit the liability of any of our directors:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- for voting for or assenting to unlawful payments of dividends, stock repurchases or other distributions; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment to or repeal of these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to such amendment or repeal. If the General Corporation Law of the State of Delaware is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the General Corporation Law of the State of Delaware.

In addition, our restated certificate of incorporation that will become effective upon the closing of this offering provides that we must indemnify our directors and officers and we must advance expenses, including attorneys' fees, to our directors and officers in connection with legal proceedings, subject to very limited exceptions.

We maintain a general liability insurance policy that covers specified liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers. In addition, we have entered into indemnification agreements with each of our directors, and we intend to enter into indemnification agreements with all of our directors and executive officers prior to the closing of this offering. These indemnification agreements may require us, among other things, to indemnify each such director or officer for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by him or her in any action or proceeding arising out of his or her service as one of our directors or officers.

Some of our non-employee directors may, through their relationships with their employers, be insured or indemnified against specified liabilities incurred in their capacities as members of our board of directors.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, executive officers or persons controlling us, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Rule 10b5-1 Trading Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without subsequent direction from the director or officer. The director or officer may amend or terminate the plan in some circumstances. Our directors and executive officers may also buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

Director Compensation

In September 2015, we adopted a director compensation program, pursuant to which non-founder, non-investor, non-employee members of our board of directors will receive annual cash compensation



of \$17,500 for service on our board of directors. This fee is payable in arrears in four equal quarterly installments on the last day of each quarter, provided that the amount of such payment will be prorated for any portion of such quarter that the director is not serving on our board of directors. Prior to the adoption of this program, during 2014, we paid Dr. Sato an annual retainer of \$25,000 in return for her service on our board of directors, and in 2015 we paid Dr. Sato an annual retainer of \$15,000. In September 2015, we granted options to purchase 27,500 shares of our common stock to each of Dr. Sato, Dr. Sharp and Mr. Bancel in return for their service on our board of directors. The options were granted at an exercise price per share of \$1.85, which equalled the fair market value of our common stock on the date of grant, vest as to 25% of the shares underlying the option on September 17, 2015, with the remainder of the shares underlying the option vesting in equal monthly installments for an additional three years, and have a term of 10 years. No other directors have received compensation from us for their service on our board of directors. We also reimburse our non-employee directors for reasonable travel and out-of-pocket expenses incurred in connection with attending board of director and committee meetings.

In September 2015, our board of directors also approved a director compensation program to be effective at the closing of this offering. Under this director compensation program, on or around the closing of this offering for current directors, or upon their election to the board for new directors, we will grant to our non-employee directors an initial grant of an option to purchase 22,000 shares of our common stock, with an exercise price equivalent to fair market value of a share of common stock at the time of grant, which option will vest as to 25% of the shares on the first anniversary of the date of grant and as to the remainder of the shares monthly thereafter, subject to continued service, and will have a term of 10 years. Immediately following each annual meeting of our stockholders, we will grant to each director who has served on our board of directors for at least six months as of the time of such grant an option to purchase 11,000 shares of our common stock, with an exercise price equivalent to fair market value of a share of common stock at the time of grant, which option will vest as to 25% of the shares on the first anniversary of the date of grant and as to the remainder of the shares 11,000 shares of our common stock, with an exercise price equivalent to fair market value of a share of common stock at the time of grant, which option will vest as to 25% of the shares on the first anniversary of the date of grant and as to the remainder of the shares monthly thereafter, subject to continued service, and will have a term of 10 years.

We also will continue to reimburse our non-employee directors for reasonable travel and out-of-pocket expenses incurred in connection with attending our board of director and committee meetings.

We do not pay any compensation to our president and chief executive officer in connection with her service on our board of directors. The compensation that we pay to our president and chief executive officer is discussed earlier in this "Executive Compensation" section.

TRANSACTIONS WITH RELATED PERSONS

Since January 1, 2012, we have engaged in the following transactions in which the amount involved exceeded \$120,000 and any of our directors or executive officers or beneficial holders of more than 5% of any class of our voting securities, or any immediate family member of the foregoing persons, or any person who was in any of those categories at the time of such transaction, had a material interest. We believe that all of these transactions were on terms comparable to terms that could have been obtained from unrelated third parties.

Series A Preferred Stock Financing

In August 2012, we issued and sold an aggregate of 2,500,000 shares of our Series A-1 preferred stock at a price per share of \$0.50, for an aggregate purchase price of \$1.25 million. The following table sets forth the number of shares of our Series A-1 preferred stock purchased by our directors, executive officers and 5% stockholders and their affiliates and the aggregate purchase price paid for such shares.

Name	Shares of Series A-1 Preferred Stock Purchased	P	Aggregate urchase Price
Entities affiliated with Flagship Ventures	1,000,000	\$	500,000
ARCH Venture Fund VII, L.P.	1,000,000	\$	500,000
Total	2,000,000	\$	1,000,000

In April and November 2013, we issued and sold an aggregate of 12,100,000 shares of our Series A-2 preferred stock at a price per share of \$1.00, for an aggregate purchase price of \$12.1 million. The following table sets forth the number of shares of our Series A-2 preferred stock purchased by our directors, executive officers and 5% stockholders and their affiliates and the aggregate purchase price paid for such shares.

Name	Shares of Series A-2 Preferred Stock Purchased		Aggregate Purchase Price	
Entities affiliated with Flagship Ventures	5,000,000	\$	5,000,000	
ARCH Venture Fund VII, L.P.	5,000,000	\$	5,000,000	
Phillip A. Sharp, Ph.D.	1,000,000	\$	1,000,000	
Nancy Simonian, M.D.	250,000	\$	250,000	
Stéphane Bancel	100,000	\$	100,000	
Total	11,350,000	\$	11,350,000	

In March and August 2014, we issued and sold an aggregate of 15,750,000 shares of our Series A-3 preferred stock at a price per share of \$1.00, for an aggregate purchase price of \$15.75 million. The following table sets forth the number of shares of our Series A-2 preferred stock purchased by our directors, executive officers and 5% stockholders and their affiliates and the aggregate purchase price paid for such shares.

	Shares of Series A-2 Preferred Stock	Aggregate
Name	Purchased	Purchase Price
Entities affiliated with Flagship Ventures	7,500,000	\$ 7,500,000
ARCH Venture Fund VII, L.P.	7,500,000	\$ 7,500,000
Total	15,000,000	\$ 15,000,000

Series B Preferred Stock Financing

In October 2014, we issued and sold an aggregate of 16,893,931 shares of our Series B preferred stock at a price per share of \$3.1461, for an aggregate purchase price of \$53.1 million. The following table sets forth the number of shares of our Series B preferred stock purchased by our directors, executive officers and 5% stockholders and their affiliates and the aggregate purchase price paid for such shares.

Name	Shares of Series B Preferred Stock Purchased	Aggregate Purchase Price
Entities affiliated with Fidelity	6,357,077	\$ 19,999,999
Polaris Partners VII, L.P.	3,178,539	\$ 10,000,001
Entities affiliated with Flagship Ventures	2,224,976	\$ 6,999,997
ARCH Venture Fund VII, L.P.	1,589,269	\$ 4,999,993
Total	13,349,861	\$ 41,999,990

Robert Nelsen, a member of our board of directors, is a general partner at ARCH Venture Fund VII, L.P. Douglas Cole, M.D., who was a member of our board of directors at the time of the Series A and Series B preferred stock financings, is a general partner at Flagship Ventures and is the spouse of Dr. Simonian.

Investors' Rights Agreement

We are a party to an amended and restated investors' rights agreement, dated as of October 9, 2014, as amended, which we refer to as our investors' rights agreement, with holders of our preferred stock, including entities affiliated with Flagship, ARCH Venture Fund VII, L.P., entities affiliated with Fidelity, Polaris Partners VII, L.P., Nancy Simonian, M.D., Phillip A. Sharp, Ph.D., and Stéphane Bancel. The investors' rights agreement provides these holders the right, following the closing of this offering, to demand that we file a registration statement or request that their shares be covered by a registration statement that we are otherwise filing. See "Description of Capital Stock —Registration Rights" for additional information regarding these registration rights.

Employment Agreements

See the "Executive Compensation—Employment and Change in Control Agreements" section of this prospectus for a further discussion of these arrangements.

Equity Grants to Directors and Executive Officers

We have granted stock options and stock awards to certain of our directors and named executive officers. For more information regarding the stock options and stock awards granted to our directors and named executive officers see "Executive Compensation."

Indemnification Agreements

Our restated certificate of incorporation that will become effective upon the closing of this offering provides that we will indemnify our directors and officers to the fullest extent permitted by Delaware law. In addition, we have entered into indemnification agreements with each of our directors, and we intend to enter into indemnification agreements with all of our directors and executive officers prior to the closing of this offering. See "Executive Compensation—Limitations of Liability and Indemnification" for additional information regarding these agreements.

Policies and Procedures for Related Person Transactions

Our board of directors will adopt written policies and procedures, which will become effective at the closing of this offering, for the review of any transaction, arrangement or relationship in which our company is a participant, the amount involved exceeds \$120,000 and one of our executive officers, directors, director nominees or 5% stockholders, or their immediate family members, each of whom we refer to as a "related person," has a direct or indirect material interest.

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a "related person transaction," the related person must report the proposed related person transaction to our chief financial officer. The policy calls for the proposed related person transaction to be reviewed and approved by our audit committee. Whenever practicable, the reporting, review and approval will occur prior to entry into the transaction. If advance review and approval is not practicable, the committee will review, and, in its discretion, may ratify the related person transactions that arise between committee meetings, subject to ratification by the committee at its next meeting. Any related person transactions that are ongoing in nature will be reviewed annually.

A related person transaction reviewed under the policy will be considered approved or ratified if it is authorized by the audit committee after full disclosure of the related person's interest in the transaction. As appropriate for the circumstances, the committee will review and consider:

- the related person's interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person's interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

The audit committee may approve or ratify the transaction only if the committee determines that, under all of the circumstances, the transaction is in our best interests. The committee may impose any conditions on the related person transaction that it deems appropriate.

The policy provides that transactions involving compensation of executive officers shall be reviewed and approved by the compensation committee in the manner specified in its charter.

PRINCIPAL STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our common stock as of September 30, 2015 by:

- each of our directors;
- each of our named executive officers;
- all of our directors and executive officers as a group; and
- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock.

The column entitled "Percentage of Shares Beneficially Owned—Before Offering" is based on a total of 56,871,713 shares of our common stock outstanding as of September 30, 2015, assuming the automatic conversion of all outstanding shares of our preferred stock into an aggregate of 47,243,931 shares of our common stock upon the closing of this offering. The column entitled "Percentage of Shares Beneficially Owned—After Offering" is based on shares of our common stock to be outstanding after this offering, including the shares of our common stock that we are selling in this offering, but not including any additional shares issuable upon exercise of outstanding options or any exercise by the underwriters of their overallotment option.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of our common stock subject to options that are currently exercisable or exercisable within 60 days after September 30, 2015 are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investing power with respect to all of the shares of our common stock beneficially owned by them, subject to community property laws, where applicable. Except as otherwise

set forth below, the address of the beneficial owner is c/o Syros Pharmaceuticals, Inc., 620 Memorial Drive, Suite 300, Cambridge Massachusetts 02139.

		Percenta Shar Beneficially	es
Name of Beneficial Owner	Shares Beneficially Owned	Before Offering	After Offering
5% Stockholders	Beneficially Owned	Offering	Offering
Entities affiliated with Flagship Ventures	16,524,976(1)	29.1%	
ARCH Venture Fund VII, L.P.	15,889,269(2)	27.9%	
Entities affiliated with Fidelity	6,357,077(3)	11.2%	
Polaris Partners VII, L.P.	3,178,539(4)	5.6%	
Named Executive Officers and Directors	1.505.051(5)	2.00/	
Nancy Simonian, M.D.	1,585,251(5)	2.8%	
Eric R. Olson, Ph.D. Jorge Conde	269,514(6) 170,601(7)	*	
Stéphane Bancel	179,931(8)	*	
Marsha H. Fanucci		_	
Robert Nelsen	15,889,269(9)	27.9%	
Vicki L. Sato, Ph.D.	37,467(10)	*	
Phillip A. Sharp, Ph.D.	1,113,236(11)	2.0%	
Richard A. Young, Ph.D.	2,000,000	3.5%	
All Executive Officers and Directors as a Group (11 persons)	21,245,269(12)	36.9%	

* Represents beneficial ownership of less than 1% of our outstanding stock.

- (1) Consists of 800,000 shares of common stock held by Flagship VentureLabs IV, LLC ("Flagship VentureLabs"), 12,579,981 shares of common stock issuable upon the conversion of preferred stock held by Flagship Ventures Fund IV, L.P. ("Flagship Fund IV") and 3,144,995 shares of common stock issuable upon the conversion of preferred stock held by Flagship Ventures Fund IV-Rx, L.P. ("Flagship Fund IV-Rx" and together with Flagship VentureLabs and Flagship IV, the "Flagship Funds"). Flagship Fund IV is a member of Flagship VentureLabs and also serves as its manager. The general partner of each of Flagship Fund IV and Flagship Fund IV-Rx is Flagship Ventures Fund IV General Partner LLC ("Flagship Fund IV GP"). Stéphane Bancel is a director of Syros and a limited partner of Flagship Fund IV and a member of Flagship Fund IV GP. Mr. Bancel disclaims beneficial ownership of such shares. Noubar B. Afeyan, Ph.D. and Edwin M. Kania Jr. are the managers of Flagship Fund IV GP. Flagship Fund IV GP and each of these individuals may be deemed to share voting and investment power with respect to all shares held by the Flagship Funds. Each of the foregoing persons disclaims beneficial ownership of the shares except to the extent of any pecuniary interest therein. The address of such stockholder is One Memorial Drive, 7th Floor, Cambridge, Massachusetts 02142.
- (2) Consists of 800,000 shares of common stock and 15,089,269 shares of common stock issuable upon the conversion of preferred stock held of record by ARCH Venture Fund VII, L.P., or ARCH VII. ARCH Venture Partners VII, L.P., or the GPLP, as the sole general partner of ARCH VII, may be deemed to beneficially own the shares held of record by ARCH VII. The GPLP disclaims beneficial ownership of all shares held of record by ARCH VII in which the GPLP does not have an actual pecuniary interest. ARCH Venture Partners VII, LLC, or the GPLLC, as the sole general partner of the GPLP, may be deemed to beneficially own certain of the shares held of record by ARCH VII. The GPLLC disclaims beneficial ownership of all shares held of record by ARCH VII. The GPLLC disclaims beneficial ownership of all shares held of record by ARCH VII. The GPLLC disclaims beneficial ownership of all shares held of record by ARCH VII in which it does not have an actual pecuniary interest. Keith Crandell, Clinton Bybee

and Robert Nelsen are the managing directors of the GPLLC, and may be deemed to share voting and dispositive power over the shares held of record by ARCH VII. The managing directors disclaim beneficial ownership of all shares held of record by ARCH VII in which they do not have an actual pecuniary interest. ARCH Venture Fund VII, L.P. has an address at 8725 West Higgins Road, Suite 290, Chicago, Illinois 60631.

- (3) Consists of shares of common stock issuable upon the conversion of preferred stock, 3,779,290 of which are held of record by Ball & Co fbo Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund, 163,994 of which are held of record by Bangle & Co fbo Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund, 643,039 of which are held of record by Mag & Co fbo Fidelity Growth Company Comingled Pool, 860,442 of which are held of record by Mag & Co fbi Fidelity Select Portfolios: Biotechnology Portfolio and 910,312 of which are held of record by WAVELENGTH + Co fbo Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund. These accounts are managed by direct or indirect subsidiaries of FMR LLC. Edward C. Johnson 3d is a Director and the Chairman of FMR LLC and Abigail P. Johnson is a Director, Vice Chairman and the President of FMR LLC. Members of the family of Edward C. Johnson 3d, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Edward C. Johnson 3d nor Abigail P. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act ("Fidelity Funds") advised by Fidelity Management & Research Company ("FMR Co"), a wholly owned subsidiary of FMR LLC, which power resides with the Fidelity Funds' Board of Trustees. Fidelity Management & Research Company carries out the voting of the shares under written guidelines established by the Fidelity Funds' Board of Trustees. The address for Fidelity Select Portfolios: Biotechnology Portfolio is Brown Brothers Harriman & Co., 525 Washington Blvd., Jersey City NJ 07310. The address for Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund is State Street Bank & Trust, PO Box 5756, Boston, Massachusetts 02206. The address for Fidelity Growth Company Commingled Pool is Brown Brothers Harriman & Co., 525 Washington Blvd., Jersey City NJ 07310. The address for Fidelity Mt. Vernon Trust: Fidelity Series Growth Company Fund is State Street Bank & Trust, PO Box 5756, Boston, Massachusetts 02206. The address for Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund is BNY Mellon, 525 William Penn Place Rm 0400, Pittsburgh, PA 15259.
- (4) Consists of shares of common stock issuable upon the conversion of preferred stock. The general partner of Polaris Partners VII, L.P. is Polaris Management Co. VII, L.L.C. ("Polaris Management"), and Polaris Management may be deemed to have sole voting and investment power over such shares. Polaris Management disclaims beneficial ownership of these shares, except to the extent of its pecuniary interest therein. The address of such stockholder is One Marina Park Drive, 10th Floor, Boston, Massachusetts 02210.
- (5) Consists of (i) 250,000 shares of common stock issuable upon the conversion of preferred stock, (ii) 1,166,794 shares of common stock and (iii) 168,457 shares of common stock issuable upon the exercise of options that vest on or prior to November 29, 2015.
- (6) Consists of shares of common stock issuable upon the exercise of options that vest on or prior to November 29, 2015.

- (7) Consists of shares of common stock issuable upon the exercise of options that vest on or prior to November 29, 2015.
- (8) Includes 100,000 shares of common stock issuable upon the conversion of preferred stock.
- (9) See footnote 2.
- (10) Consists of shares of common stock issuable upon the exercise of options that vest on or prior to November 29, 2015.
- (11) Consists of (i) 550,000 shares of common stock issuable upon the conversion of preferred stock held of record by Dr. Sharp, (ii) 150,000 shares of common stock issuable upon the conversion of preferred stock held of record by Ann H. Sharp and Christine S. Carey, as Trustees of the Phillip A. Sharp 2008 Irrevocable Trust f/b/o Christine S. Carey, (iii) 150,000 shares of common stock issuable upon the conversion of preferred stock held of record by Ann H. Sharp and Helena S. Gordon, as Trustees of the Phillip A. Sharp 2008 Irrevocable Trust f/b/o Helena H. Sharp, (iv) 150,000 shares of common stock issuable upon the conversion of preferred stock held of record by Ann H. Sharp and Sarah S. Brokaw, as Trustees of the Phillip A. Sharp 2008 Irrevocable Trust f/b/o Sara S. Brokaw and (v) 113,236 shares of common stock issuable upon the exercise of options that vest on or prior to November 29, 2015.
- (12) Includes 16,439,269 shares of common stock issuable upon conversion of preferred stock and 759,275 shares of common stock issuable upon the exercise of options that vest on or prior to November 29, 2015.

DESCRIPTION OF CAPITAL STOCK

General

Following the closing of this offering, our authorized capital stock will consist of shares of common stock, par value \$0.001 per share, and shares of preferred stock, par value \$0.001 per share, all of which preferred stock will be undesignated. The following description of our capital stock and provisions of our restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the restated certificate of incorporation and the amended and restated bylaws that will be in effect upon the closing of this offering. We have filed copies of these documents as exhibits to our registration statement of which this prospectus forms a part. The descriptions of the common stock and preferred stock reflect changes to our capital structure that will occur upon the closing of this offering.

Common Stock

As of September 30, 2015, we had outstanding 9,627,782 shares of common stock. These shares of common stock were held by 15 stockholders of record. As of September 30, 2015, there would have been outstanding 56,871,713 shares of common stock, assuming the automatic conversion of all outstanding shares of our preferred stock into common stock upon the closing of this offering. These shares of common stock would have been held by 34 stockholders of record.

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Other matters shall be decided by the affirmative vote of our stockholders having a majority in voting power of the votes cast by the stockholders present or represented and voting on such matter, except as otherwise disclosed below. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of outstanding preferred stock.

In the event of our liquidation or dissolution, the holders of common stock are entitled to receive proportionately all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

As of September 30, 2015, there were outstanding 47,243,931 shares of preferred stock, consisting of 2,500,000 shares of Series A-1 preferred stock, 12,100,000 shares of Series A-2 preferred stock, 15,750,000 shares of Series A-3 preferred stock and 16,893,931 shares of Series B preferred stock. All currently outstanding shares of preferred stock will be converted into an aggregate of 47,243,931 shares of common stock upon the closing of this offering.

Under the terms of our restated certificate of incorporation that will become effective upon the closing of this offering, our board of directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third

party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock. Upon the closing of this offering, there will be no shares of preferred stock outstanding, and we have no present plans to issue any shares of preferred stock.

Stock Options

As of September 30, 2015, options to purchase 7,088,929 shares of our common stock at a weighted-average exercise price of \$0.74 per share were outstanding, of which options to purchase 1,640,688 shares of our common stock were exercisable, at a weighted-average exercise price of \$0.35 per share, and options to purchase 384,752 shares of common stock were available for future issuance under our 2012 Equity Incentive Plan.

Registration Rights

Our investor's rights agreement provides specified holders of our currently outstanding preferred stock, including some of our directors and 5% stockholders and their respective affiliates and entities affiliated with our officers and directors, the right, following the closing of this offering, to require us to register the shares of common stock that will be issued upon conversion of the preferred stock under the Securities Act under specified circumstances as described below. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act.

Demand Registration Rights

Beginning 180 days after the effective date of the registration statement for this offering, subject to specified limitations set forth in the investor's rights agreement, at any time the holders of 25% of then outstanding registrable securities, as defined in the investor's rights agreement, acting together, may demand in writing that we register their registrable securities under the Securities Act so long as the total amount of registrable shares requested to be registered has an anticipated aggregate offering price to the public, net of selling expenses, as defined in the investor's rights agreement, that would exceed \$5.0 million. We are not obligated to effect a registration statement pursuant to this demand provision on more than two occasions, subject to specified exceptions.

In addition, at any time after we become eligible to file a registration statement on Form S-3 under the Securities Act, subject to specified limitations, the holders of at least 25% of the registrable securities then outstanding may demand in writing that we register on Form S-3 registrable shares held by them so long as the total amount of registrable shares requested to be registered has an anticipated aggregate offering price to the public, net of selling expenses, as defined in the investors' rights agreement, of at least \$2.0 million. We are not obligated to effect a registration statement pursuant to this demand provision on more than two occasions in any twelve-month period, subject to specified exceptions.

Incidental Registration Rights

If, at any time after the closing of this offering, we propose to file a registration statement to register any of our securities under the Securities Act, either for our own account or for the account of any of our stockholders that are not holders of registrable shares, solely for cash and on a form that would also permit the registration of registrable shares, the holders of our registrable shares are entitled to notice of registration and, subject to specified exceptions, we will be required to register the registrable shares then held by them that they request that we register.

Expenses

Pursuant to the investor's rights agreement, we are required to pay all registration expenses, including registration fees, printing expenses, fees and disbursements of our counsel and accountants and reasonable fees and disbursements of one counsel representing the selling stockholders, other than

any underwriting discounts and commissions, related to any demand or incidental registration. The investor's rights agreement contains customary cross-indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions in the registration statement attributable to them.

Anti-Takeover Effects of Delaware Law and Our Charter and Bylaws

Delaware law contains, and upon the closing of this offering our restated certificate of incorporation and our amended and restated bylaws will contain, provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors.

Staggered Board; Removal of Directors

Upon the closing of this offering, our restated certificate of incorporation and our amended and restated bylaws will divide our board of directors into three classes with staggered three-year terms. In addition, a director will only be able to be removed for cause and only by the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in an annual election of directors. Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, will only be able to be filled by vote of a majority of our directors then in office. The classification of our board of directors and the limitations on the removal of directors and filling of vacancies could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of our company.

Stockholder Action by Written Consent; Special Meetings

Upon the closing of this offering, our restated certificate of incorporation will provide that any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of such holders and may not be effected by any consent in writing by such holders. Upon the closing of this offering, our restated certificate of incorporation and our amended and restated bylaws will also provide that, except as otherwise required by law, special meetings of our stockholders can only be called by our chairman of the board, our chief executive officer or our board of directors.

Advance Notice Requirements for Stockholder Proposals

Upon the closing of this offering, our amended and restated bylaws will establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of persons for election to our board of directors. Stockholders at an annual meeting will only be able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder of record on the record date for the meeting who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying until the next stockholder meeting stockholder actions that are favored by the holders of a majority of our outstanding voting securities.

Delaware Business Combination Statute

Upon the closing of this offering, we will be subject to Section 203 of the General Corporation Law of the State of Delaware. Subject to certain exceptions, Section 203 prevents a publicly held Delaware corporation from engaging in a "business combination" with any "interested stockholder" for



three years following the date that the person became an interested stockholder, unless the interested stockholder attained such status with the approval of our board of directors or unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger or consolidation involving us and the "interested stockholder" and a sale involving us and the "interested stockholder" of 10% or more of our assets. In general, an "interested stockholder" is any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person.

Amendment of Certificate of Incorporation and Bylaws

The General Corporation Law of the State of Delaware provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or bylaws, unless a corporation's certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Effective upon the closing of this offering, our bylaws may be amended or repealed by a majority vote of our board of directors or by the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors. In addition, the affirmative vote of the holders of at least 75% of the votes that all of our stockholders would be entitled to cast in any annual election of directors is required to amend or repeal or to adopt any provisions inconsistent with any of the provisions of our certificate of incorporation described above under "—Staggered Board; Removal of Directors" and "—Stockholder Action by Written Consent; Special Meetings."

Exclusive Forum Selection

Effective upon closing of this offering, our restated certificate of incorporation will provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware) shall be the sole and exclusive forum for (1) any derivative action or proceeding brought on behalf of our company, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or employees to our company or our stockholders, (3) any action asserting a claim against our company arising pursuant to any provision of the General Corporation Law of the State of Delaware or our restated certificate of incorporation or amended and restated bylaws, or (4) any action asserting a claim against our company governed by the internal affairs doctrine. Although our restated certificate of incorporation contains the choice of forum provision described above, it is possible that a court could rule that such a provision is inapplicable for a particular claim or action or that such provision is unenforceable.

Listing on The NASDAQ Global Market

We plan to apply to have our common stock listed on The NASDAQ Global Market under the symbol "SYRS."

Authorized but Unissued Shares

The authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval, subject to any limitations imposed by the listing requirements of The NASDAQ Global Market. These additional shares may be used for a variety of corporate finance transactions, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock could make it more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock, and a liquid trading market for our common stock may not develop or be sustained after this offering. Future sales of substantial amounts of our common stock in the public market, including shares issued upon exercise of outstanding options, or the anticipation of these sales, could adversely affect market prices prevailing from time to time and could impair our ability to raise capital through sales of equity securities.

Based upon the 9,627,782 shares of our common stock that were outstanding on September 30, 2015, upon the closing of this offering, we will have outstanding shares of our common stock, after giving effect to the issuance of shares of our common stock in this offering and the conversion of all outstanding shares of our preferred stock into 47,243,931 shares of common stock upon the closing of this offering, and assuming no exercise by the underwriters of their overallotment option and no exercise of options outstanding as of September 30, 2015.

Of the shares to be outstanding immediately after the closing of this offering, we expect that the shares to be sold in this offering will be freely tradable without restriction under the Securities Act unless purchased by our "affiliates," as that term is defined in Rule 144 under the Securities Act. The remaining 56,871,713 shares of our common stock outstanding after this offering will be "restricted securities" under Rule 144, and we expect that substantially all of these restricted securities will be subject to the 180-day lock-up period under the lock-up agreements as described below. These restricted securities may be sold in the public market only if registered or pursuant to an exemption from registration, such as Rule 144 or Rule 701 under the Securities Act.

Rule 144

In general, under Rule 144, beginning 90 days after the date of this prospectus, any person who is not our affiliate and has held their shares for at least six months, including the holding period of any prior owner other than one of our affiliates, may sell shares without restriction, subject to the availability of current public information about us. In addition, under Rule 144, any person who is not our affiliate and has not been our affiliate at any time during the preceding three months and has held their shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares immediately upon the closing of this offering without regard to whether current public information about us is available.

Beginning 90 days after the date of this prospectus, a person who is our affiliate or who was our affiliate at any time during the preceding three months may sell any unrestricted securities, as well as restricted securities that the person has beneficially owned for at least six months, including the holding period of any prior owner other than one of our affiliates, under Rule 144. Affiliates selling restricted securities may sell a number of shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering; and
- the average weekly trading volume of our common stock on The NASDAQ Global Market during the four calendar weeks preceding the filing of a Notice of Proposed Sale of Securities Pursuant to Rule 144 with respect to the sale.

Sales under Rule 144 by our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us.

Upon expiration of the 180-day lock-up period described below, approximately 56,871,713 shares of our common stock will be eligible for sale under Rule 144, including shares eligible for resale

immediately upon the closing of this offering as described above. We cannot estimate the number of shares of our common stock that our existing stockholders will elect to sell under Rule 144.

Rule 701

In general, under Rule 701 of the Securities Act, any of our employees, consultants or advisors, other than our affiliates, who purchased shares from us in connection with a qualified compensatory stock plan or other written agreement is eligible to resell these shares 90 days after the date of this prospectus in reliance on Rule 144, but without compliance with the holding period requirements of Rule 144 and without regard to the volume of such sales or the availability of public information about us. Subject to the 180-day lock-up period described below, approximately 1,384,000 shares of our common stock will be eligible for sale in accordance with Rule 701, subject to satisfying applicable vesting schedules.

Lock-Up Agreements

We, and each of our executive officers and directors and the holders of substantially all of our outstanding stock have agreed that, without the prior written consent of Cowen and Company, LLC and Piper Jaffray & Co., on behalf of the underwriters, we and they will not, subject to limited exceptions, during the period ending 180 days after the date of this prospectus: directly or indirectly, (i) offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, or announce the intention to otherwise dispose of, any shares of common stock or securities convertible into or exercisable or exchangeable for common stock; (ii) enter into any swap, hedge or similar agreement or arrangement that transfers in whole or in part, the economic risk of ownership of the common stock or securities convertible into or exercisable or exchangeable for common stock. whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition; or (iii) engage in any short selling of the common stock or securities convertible into or exchangeable for common stock. These restrictions are subject to customary exceptions, including transfers made by an individual as gifts, to members of the individual's immediate family or a trust for the benefit of the individual or his or her immediate family, or by will, intestacy or operation of law; and transfers by an entity to its stockholders or other owners, to an affiliate, or in connection with a sale of the entity. See "Underwriting" for additional information.

Registration Rights

Subject to the lock-up agreements described above, upon the closing of this offering, the holders of an aggregate of 47,243,931 shares of our common stock will be entitled to various rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See "Description of Capital Stock—Registration Rights" for additional information. Shares covered by a registration statement will be eligible for sale in the public market upon the expiration or release from the terms of lock-up agreements applicable to such shares.

Stock Options

As of September 30, 2015, we had outstanding options to purchase 7,088,929 shares of our common stock, of which options to purchase 1,640,688 shares were vested. Following this offering, we intend to file one or more registration statements on Form S-8 under the Securities Act to register all of the shares of our common stock subject to outstanding options and options and other awards issuable pursuant to the 2016 stock incentive plan, the 2016 ESPP and our 2012 equity incentive plan. Shares covered by these registration statements will then be eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described above and Rule 144 limitations applicable to affiliates.

MATERIAL U.S. FEDERAL INCOME AND ESTATE TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following is a general discussion of material U.S. federal income and estate tax considerations relating to ownership and disposition of our common stock by a non-U.S. holder. For purposes of this discussion, the term "non-U.S. holder" means a beneficial owner (other than a partnership or other pass-through entity) of our common stock that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or other entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or of any political subdivision of the United States;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if (1) a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

This discussion does not address the tax treatment of partnerships or other entities that are pass-through entities for U.S. federal income tax purposes or persons who hold their common stock through partnerships or such other pass-through entities. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of our common stock through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended, or the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus and all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any change could alter the tax consequences to non-U.S. holders described in this prospectus. There can be no assurance that the Internal Revenue Service, or the IRS, will not challenge one or more of the tax consequences described in this prospectus.

We assume in this discussion that each non-U.S. holder holds shares of our common stock as a capital asset (generally, property held for investment) for U.S. federal income tax purposes. This discussion does not address all aspects of U.S. federal income and estate taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address any aspects of U.S. state, local or non-U.S. taxes, the alternative minimum tax, or the Medicare tax on net investment income. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- financial institutions;
- brokers or dealers in securities;
- tax-exempt organizations;
- pension plans;
- owners that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment or who have elected to mark securities to market;



- insurance companies;
- controlled foreign corporations;
- passive foreign investment companies;
- non-U.S. governments; and
- certain U.S. expatriates.

THIS DISCUSSION IS FOR GENERAL INFORMATION ONLY AND IS NOT, AND IS NOT INTENDED TO BE, LEGAL OR TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE U.S. FEDERAL, STATE, LOCAL, ESTATE AND NON-U.S. INCOME AND OTHER TAX CONSIDERATIONS OF ACQUIRING, HOLDING AND DISPOSING OF OUR COMMON STOCK.

Distributions

As discussed under "Dividend Policy" above, we do not expect to make cash dividends to holders of our common stock in the foreseeable future. If we make distributions in respect of our common stock, those distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, and will be subject to the tax treatment described in this section. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to the holder's tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below under the heading "Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock." Any such distributions will also be subject to the discussion below under the headings "Information Reporting and Backup Withholding" and "FATCA."

Dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States, and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements (generally including provision of a valid IRS Form W-8ECI (or applicable successor form) certifying that the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States). However, such U.S. effectively connected income, net of specified deductions and credits, will be taxed in the hands of the non-U.S. holder at the same graduated U.S. federal income tax rates as would apply if such holder were a U.S. person (as defined in the Code). A non-U.S. holder that is classified as a corporation for U.S. federal income tax purposes may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence) on its "effectively connected earnings and profits," subject to certain adjustments.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty and the specific methods available to them to satisfy these requirements.

A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock

Subject to the discussion below under the headings "Information Reporting and Backup Withholding" and "FATCA," a non-U.S. holder generally will not be subject to U.S. federal income tax or withholding tax on any gain realized upon such non-U.S. holder's sale, exchange or other disposition of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States, and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States; in these cases, the non-U.S. holder generally will be taxed on a net income basis at the graduated U.S. federal income tax rates applicable to U.S. persons, and, if the non-U.S. holder is a foreign corporation, an additional branch profits tax at a rate of 30% (or a lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence) may also apply;
- the non-U.S. holder is a non-resident alien present in the United States for 183 days or more in the taxable year of the disposition and certain other requirements are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence) on the net gain derived from the disposition, which may be offset by certain U.S.-source capital losses of the non-U.S. holder recognized in the taxable year of the disposition, if any; or
- we are or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation" unless our common stock is regularly traded on an established securities market and the non-U.S. holder held no more than 5% of our outstanding common stock, directly or indirectly, at any time during the shorter of the five-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. Generally, a corporation is a "U.S. real property holding corporation" if the fair market value of its "U.S. real property interests" (as defined in the Code and applicable regulations) equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we believe that we are not currently, and we do not anticipate becoming, a "U.S. real property holding corporation" for U.S. federal income tax purposes. If we are a U.S. real property holding corporation and either our common stock, directly or indirectly, during the applicable testing period, such non-U.S. holder's proceeds received on the disposition of shares of our common stock generally will be subject to withholding at a rate of 10% and such non-U.S. holder will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply.

Information Reporting and Backup Withholding

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. holders generally will have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup

withholding at the applicable rate with respect to dividends on our common stock. Generally, a holder will comply with such procedures if it provides a properly executed IRS Form W-8BEN or W-8BEN-E (or other applicable Form W-8), or otherwise meets documentary evidence requirements for establishing that it is not a U.S. person, or otherwise establishes an exemption. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above under "Distributions," will generally be exempt from U.S. backup withholding.

Information reporting and backup withholding, currently at a rate of 28%, generally will apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, whether U.S. or non-U.S., unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption from backup withholding. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

FATCA

The Foreign Account Tax Compliance Act, or FATCA, generally imposes a 30% withholding tax on dividends on, and gross proceeds from the sale or disposition of, our common stock if paid to a foreign entity unless (i) if the foreign entity is a "foreign financial institution," the foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a "foreign financial institution," the foreign entity identifies certain U.S. holders of debt or equity interests in such foreign entity or (iii) the foreign entity is otherwise exempt from FATCA.

Withholding under FATCA generally (1) applies to payments of dividends on our common stock and (2) will apply to payments of gross proceeds from a sale or other disposition of our common stock made after December 31, 2018. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of the tax. Non-U.S. holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

Federal Estate Tax

Shares of our common stock that are owned or treated as owned by an individual who is not a citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) at the time of death are considered U.S. situs assets and will be included in the individual's gross estate for U.S. federal estate tax purposes. Such shares, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax or other treaty provides otherwise.

The preceding discussion of material U.S. federal tax considerations is for general information only. It is not legal or tax advice. Prospective investors should consult their own tax advisors regarding the particular U.S. federal, state, local and non-U.S. tax consequences of purchasing, holding and disposing of our common stock, including the consequences of any proposed changes in applicable laws.



UNDERWRITING

We and the underwriters for the offering named below have entered into an underwriting agreement with respect to the shares of common stock being offered. Subject to the terms and conditions of the underwriting agreement, each underwriter has severally agreed to purchase from us the number of shares of common stock set forth opposite its name below. Cowen and Company, LLC and Piper Jaffray & Co. are the representatives of the underwriters.

	Number of
Underwriter	Shares
Cowen and Company, LLC	
Piper Jaffray & Co.	
JMP Securities LLC	
Wedbush Securities Inc.	
Total	

The underwriting agreement provides that the obligations of the underwriters are subject to certain conditions precedent and that the underwriters have agreed, severally and not jointly, to purchase all of the shares of common stock sold under the underwriting agreement if any of these shares are purchased, other than those shares covered by the overallotment option described below. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the non-defaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the underwriters may be required to make in respect thereof.

The underwriters are offering the shares of common stock, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel and other conditions specified in the underwriting agreement. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Overallotment Option to Purchase Additional Shares

We have granted to the underwriters an option to purchase up to additional shares of common stock at the public offering price, less the underwriting discount, in this offering of common stock. This option is exercisable for a period of 30 days. The underwriters may exercise this option solely for the purpose of covering overallotments, if any, made in connection with the sale of common stock offered hereby. To the extent that the underwriters exercise this option, the underwriters will purchase additional shares from us in approximately the same proportion as shown in the table above.

Discounts and Commissions

The following table shows the public offering price, underwriting discount and proceeds, before expenses, to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' overallotment option.

We estimate that the total expenses of this offering of common stock, excluding underwriting discounts and commissions, will be approximately \$ and are payable by us. We have also agreed to reimburse the underwriters for certain of their expenses as set forth in the underwriting agreement, including legal fees incurred in the qualification of this offering and the concurrent offering of notes

with the Financial Regulatory Authority, or FINRA, in an amount of up to \$35,000, which amount is deemed to be underwriting compensation by FINRA.

	Total		
	Without With		
	Per Share	Overallotment	Overallotment
Initial public offering price	\$	\$	\$
Underwriting discounts and commissions			
Proceeds, before expenses, to Syros	\$	\$	\$

The underwriters propose to offer the shares of common stock to the public at the public offering price set forth on the cover of this prospectus. The underwriters may offer the shares of common stock to securities dealers at the public offering price less a concession not in excess of \$ per share. If all of the shares are not sold at the public offering price, the underwriters may change the offering price and other selling terms. Sales of shares of common stock made outside of the United States may be made by affiliates of certain of the underwriters may sell shares to the public through one or more of their affiliates as selling agents.

Discretionary Accounts

The underwriters do not intend to confirm sales of the shares of common stock to any accounts over which they have discretionary authority.

Market Information

Prior to this offering, there has been no public market for shares of our common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In addition to prevailing market conditions, the factors to be considered in these negotiations include:

- the history of, and prospects for, our company and the industry in which we compete;
- our past and present financial information;
- an assessment of our management; its past and present operations, and the prospects for, and timing of, our future revenues;
- the present state of our development; and
- the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for our common stock may not develop, of if such a market develops, may not be sustained. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

We plan to apply to list our common stock on The NASDAQ Global Market under the symbol "SYRS."

Price Stabilization, Short Positions and Penalty Bids

In connection with this offering of common stock, the underwriters may engage in stabilizing transactions, overallotment transactions, syndicate covering transactions, penalty bids and purchases to cover positions created by short sales.

- Stabilizing transactions permit bids to purchase shares of common stock so long as the stabilizing bids do not exceed a specified maximum, and are engaged in for the purpose of preventing or retarding a decline in the market price of the common stock while the offering is in progress.
- Overallotment transactions involve sales by the underwriters of shares of common stock in excess of the number of shares the underwriters are obligated to purchase. This creates a syndicate short position which may be either a covered short position or a naked short position. In a covered short position, the number of shares over-allotted by the underwriters is not greater than the number of shares that they may purchase in the overallotment option. In a naked short position, the number of shares involved is greater than the number of shares in the overallotment option. The underwriters may close out any short position by exercising their overallotment option and/or purchasing shares in the open market.
- Syndicate covering transactions involve purchases of common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared with the price at which they may purchase shares through exercise of the overallotment option. If the underwriters sell more shares than could be covered by exercise of the overallotment option and, therefore, have a naked short position, the position can be closed out only by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that after pricing there could be downward pressure on the price of the shares in the open market that could adversely affect investors who purchase in the offering.
- Penalty bids permit the representatives to reclaim a selling concession from a syndicate member when the common stock originally sold by that syndicate member is purchased in stabilizing or syndicate covering transactions to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock in the open market may be higher than it would otherwise be in the absence of these transactions. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of shares of our common stock. These transactions may be effected on The NASDAQ Global Market, in the over-the-counter market or otherwise and, if commenced, may be discontinued at any time.

Lock-Up Agreements

Pursuant to certain "lock-up" agreements, we and our executive officers, directors and stockholders, have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic consequence of ownership of, directly or indirectly, or make any demand or request or exercise any right with respect to the registration of, or file with the SEC a registration statement under the Securities Act relating to, any common stock or securities convertible into or exchangeable or exercisable for any common stock without the prior written consent of Cowen and Company, LLC and Piper Jaffray & Co., for a period of 180 days after the date of the underwriting agreement.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition. The lock-up agreements include customary exceptions.

Cowen and Company, LLC and Piper Jaffray & Co., in their sole discretion, may release our common stock and other securities subject to the lock-up agreements described above in whole or in part at any time. When determining whether or not to release our common stock and other securities from lock-up agreements, Cowen and Company, LLC and Piper Jaffray & Co. will consider, among other factors, the holder's reasons for requesting the release, the number of shares for which the release is being requested and market conditions at the time of the request. In the event of such a release or waiver for one of our directors or officers, Cowen and Company, LLC and Piper Jaffray & Co. shall provide us with notice of the impending release or waiver at least three business days before the effective date of such release or waiver and we will announce the impending release or waiver by issuing a press release at least two business days before the effective date of the release or waiver.

Electronic Offer, Sale and Distribution of Shares

A prospectus in electronic format may be made available on the websites maintained by one or more of the underwriters or selling group members, if any, participating in this offering and one or more of the underwriters participating in this offering may distribute prospectuses electronically. The representatives may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters and selling group members that will make internet distributions on the same basis as other allocations. Other than the prospectus in electronic format, the information on these websites is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriter in its capacity as underwriter, and should not be relied upon by investors.

Other Relationships

Certain of the underwriters and their affiliates have provided, and may in the future provide, various investment banking, commercial banking and other financial services for us and our affiliates for which they have received, and may in the future receive, customary fees.

Selling Restrictions

No action has been taken in any jurisdiction except the United States that would permit a public offering of our common stock, or the possession, circulation or distribution of this prospectus or any other material relating to us or our common stock in any jurisdiction where action for that purpose is required. Accordingly, the shares may not be offered or sold, directly or indirectly, and neither this prospectus nor any other offering material or advertisements in connection with the shares may be distributed or published, in or from any country or jurisdiction except in compliance with any applicable rules and regulations of any such country or jurisdiction.

Canada

The securities may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the securities must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser

within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 *Underwriting Conflicts* (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

United Kingdom

Each of the underwriters has, separately and not jointly, represented and agreed that:

- it has not made or will not make an offer of the securities to the public in the United Kingdom within the meaning of section 102B of the Financial Services and Markets Act 2000 (as amended), or the FSMA, except to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities or otherwise in circumstances which do not require the publication by us of a prospectus pursuant to the Prospectus Rules of the Financial Services Authority, or FSA;
- it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of section 21 of FSMA) to persons who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 or in circumstances in which section 21 of FSMA does not apply to us; and
- it has complied with and will comply with all applicable provisions of FSMA with respect to anything done by it in relation to the securities in, from or otherwise involving the United Kingdom.

Switzerland

The securities will not be offered, directly or indirectly, to the public in Switzerland and this prospectus does not constitute a public offering prospectus as that term is understood pursuant to article 652a or 1156 of the Swiss Federal Code of Obligations.

Israel

In the State of Israel this prospectus shall not be regarded as an offer to the public to purchase shares of common stock under the Israeli Securities Law, 5728—1968, which requires a prospectus to be published and authorized by the Israel Securities Authority, if it complies with certain provisions of Section 15 of the Israeli Securities Law, 5728—1968, including, *inter alia*, if: (i) the offer is made, distributed or directed to not more than 35 investors, subject to certain conditions (the "Addressed Investors"); or (ii) the offer is made, distributed or directed to certain qualified investors defined in the First Addendum of the Israeli Securities Law, 5728—1968, subject to certain conditions (the "Qualified Investors"). The Qualified Investors shall not be taken into account in the count of the Addressed Investors and may be offered to purchase securities in addition to the 35 Addressed Investors. The company has not and will not take any action that would require it to publish a prospectus in accordance with and subject to the Israeli Securities Law, 5728—1968. We have not and will not distribute this prospectus or make, distribute or direct an offer to subscribe for our common stock to any person within the State of Israel, other than to Qualified Investors and up to 35 Addressed Investors.

Qualified Investors may have to submit written evidence that they meet the definitions set out in of the First Addendum to the Israeli Securities Law, 5728—1968. In particular, we may request, as a



condition to be offered common stock, that Qualified Investors will each represent, warrant and certify to us and/or to anyone acting on our behalf: (i) that it is an investor falling within one of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968; (ii) which of the categories listed in the First Addendum to the Israeli Securities Law, 5728—1968 regarding Qualified Investors is applicable to it; (iii) that it will abide by all provisions set forth in the Israeli Securities Law, 5728—1968 and the regulations promulgated thereunder in connection with the offer to be issued common stock; (iv) that the shares of common stock that it will be issued are, subject to exemptions available under the Israeli Securities Law, 5728—1968: (a) for its own account; (b) for investment purposes only; and (c) not issued with a view to resale within the State of Israel, other than in accordance with the provisions of the Israeli Securities Law, 5728—1968; and (v) that it is willing to provide further evidence of its Qualified Investor status. Addressed Investors may have to submit written evidence in respect of their identity and may have to sign and submit a declaration containing, *inter alia*, the Addressed Investor's name, address and passport number or Israeli identification number.

European Economic Area

In relation to each Member State of the European Economic Area, or the EEA, which has implemented the European Prospectus Directive (each, a "Relevant Member State"), an offer of our shares may not be made to the public in a Relevant Member State other than:

- to any legal entity which is a qualified investor, as defined in the European Prospectus Directive;
- to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150 natural or legal persons (other than qualified investors as defined in the European Prospectus Directive), subject to obtaining the prior consent of the relevant dealer or dealers nominated by us for any such offer; or
- in any other circumstances falling within Article 3(2) of the European Prospectus Directive;

provided that no such offer of our shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the European Prospectus Directive or supplement prospectus pursuant to Article 16 of the European Prospectus Directive.

For the purposes of this description, the expression an "offer to the public" in relation to the securities in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the expression may be varied in that Relevant Member State by any measure implementing the European Prospectus Directive in that member state, and the expression "European Prospectus Directive" means Directive 2003/71/EC (and amendments hereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State) and includes any relevant implementing measure in each Relevant Member State. The expression 2010 PD Amending Directive means Directive 2010/73/EU.

We have not authorized and do not authorize the making of any offer of securities through any financial intermediary on our behalf, other than offers made by the underwriters and their respective affiliates, with a view to the final placement of the securities as contemplated in this document. Accordingly, no purchaser of the shares, other than the underwriters, is authorized to make any further offer of shares on our behalf or on behalf of the underwriters.

Hong Kong

The contents of this document have not been reviewed or approved by any regulatory authority in Hong Kong. This document does not constitute an offer or invitation to the public in Hong Kong to acquire shares. Accordingly, unless permitted by the securities laws of Hong Kong, no person may issue or have in its possession for the purposes of issue, this document or any advertisement, invitation or



document relating to the shares, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong other than in relation to shares which are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" (as such term is defined in the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) ("SFO") and the subsidiary legislation made thereunder); or in circumstances which do not result in this document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32, Laws of Hong Kong) ("CO"); or which do not constitute an offer or an invitation to the public for the purposes of the SFO or the CO. The offer of the shares is personal to the person to whom this document has been delivered, and a subscription for shares will only be accepted from such person. No person to whom a copy of this document is issued may issue, circulate or distribute this document in Hong Kong, or make or give a copy of this document to any other person. You are advised to exercise caution in relation to the offer. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor pursuant to Section 274 of the Securities and Futures Act, Chapter 289 of Singapore ("SFA"), (ii) to a relevant person (as defined in Section 275(2) of the SFA), or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased pursuant to an offer made in reliance on Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor;

shares, debentures and units of shares, and debentures of that corporation, or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferable for six months after that corporation or that trust has acquired the shares under Section 275 except:

- (1) to an institutional investor or to a relevant person (as defined in Section 275(2) of the SFA), or any person pursuant to Section 275(1A) of the SFA (in the case of that corporation) or Section 276(4)(i)(B) of the SFA (in the case of that trust);
- (2) where no consideration is or will be given for the transfer; or
- (3) where the transfer is by operation of law.



LEGAL MATTERS

The validity of the shares of our common stock offered hereby is being passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP. The underwriters have been represented in this offering by Cooley LLP.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements at December 31, 2013 and 2014, and for each of the years then ended, as set forth in their report. We have included our consolidated financial statements in the prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of our common stock we are offering to sell. This prospectus, which constitutes a part of the registration statement, does not include all of the information contained in the registration statement and the exhibits, schedules and amendments to the registration statement. For further information with respect to us and our common stock, we refer you to the registration statement and to the exhibits and schedules to the registration statement. Statements contained in this prospectus about the contents of any contract, agreement or other document are not necessarily complete, and, in each instance, we refer you to the copy of the contract, agreement or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference to such contract, agreement or document.

You may read and copy the registration statement of which this prospectus is a part at the SEC's public reference room, which is located at 100 F Street, N.E., Room 1580, Washington, DC 20549. You can request copies of the registration statement by writing to the Public Reference Section of the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the SEC's public reference room. In addition, the SEC maintains an Internet website, which is located at *www.sec.gov*, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. You may access the registration statement of which this prospectus is a part at the SEC's Internet website.

Upon the closing of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements and other information with the SEC. We plan to fulfill our obligations with respect to such requirements by filing periodic reports and other information with the SEC. We intend to furnish our stockholders with annual reports containing consolidated financial statements certified by an independent registered public accounting firm. We also maintain a website at www.syros.com. Our website is not a part of this prospectus.

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Syros Pharmaceuticals, Inc.

We have audited the accompanying consolidated balance sheets of Syros Pharmaceuticals, Inc. (the "Company") as of December 31, 2013 and 2014, and the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' (deficit) equity, and cash flows for each of the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Syros Pharmaceuticals, Inc. at December 31, 2013 and 2014, and the consolidated results of its operations and its cash flows for each of the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

Boston, Massachusetts November 20, 2015

Consolidated Balance Sheets

(amounts in thousands, except share and per share data)

		Decem	ber	31.		September 30, 2015			
		2013		2014	-	Actual	Pr	o Forma	
						(unau	dited)	?	
Assets									
Current assets:									
Cash and cash equivalents	\$	3,801	\$	60,393	\$	44,985	\$	44,985	
Prepaid expenses and other current assets		112		150		303		303	
Total current assets		3,913		60,543		45,288		45,288	
Property and equipment, net		938		881		4,061		4,061	
Other long term assets						210		210	
Restricted cash		70	_	70		483		483	
Total assets	\$	4,921	\$	61,494	\$	50,042	\$	50,042	
Liabilities, convertible preferred stock and stockholders' (deficit) equity Current liabilities:									
Accounts payable	\$	594	\$	928	\$	1,649	\$	1,649	
Accrued expenses		280		287		2,492		2,492	
Deferred rent, current portion		36		37		215		215	
Capital lease obligations, current portion			_			111		111	
Total current liabilities		910		1,252		4,467		4,467	
Deferred rent, net of current portion		36		_		1,496		1,496	
Restricted stock liability, net of current portion		2		1				_	
Capital lease obligations, net of current portion		—		—		246		246	
Commitments and contingencies (Note 8)									
December 31, 2014 and September 30, 2015 (unaudited), 14,600,000 shares issued and outstanding at December 31, 2013, 30,350,000 shares issued and outstanding at December 31, 2014 and September 30, 2015 (unaudited) and no shares issued and outstanding at September 30, 2015 (pro forma) (unaudited); (aggregated liquidation preference of \$31,238 and \$32,544 at December 31, 2014 and September 30, 2015 (unaudited), respectively)		13,266		29,015		29,015		_	
Series B convertible preferred stock, \$0.001 par value; no shares authorized, issued and outstanding at December 31, 2013, 16,893,931 shares authorized, issued and outstanding at December 31, 2014 and September 30, 2015 (unaudited) and no shares issued and outstanding at September 30, 2015 (pro forma) (unaudited); (aggregated liquidation preference of \$53,846 and \$56,230 at December 31, 2014 and September 30, 2015 (unaudited), respectively)				52,998		52,998		_	
Stockholders' (deficit) equity:									
Preferred stock, \$0.001 par value: no shares authorized or outstanding actual; shares authorized, no shares issued and outstanding pro forma and pro forma as adjusted		_		_					
Common stock, \$0.001 par value; 47,000,000 shares authorized at December 31, 2013 and 64,571,908 shares authorized at December 31, 2014 and September 30, 2015 (unaudited), 5,173,782, 6,150,065 and 8,384,486 shares issued and outstanding at December 31, 2013 and 2014 and September 30, 2015 (unaudited), respectively, and 55,928,417 shares issued and outstanding		5		4		8		56	
at September 30, 2015 (pro forma) (unaudited) Additional paid-in capital		966		6 1,917		4,636		87,434	
Accumulated deficit		(10,264)		(23,695)		(42,824)		(43,657)	
Total stockholders' (deficit) equity	_	(10,204) (9,293)	-	(23,693)	-	(38,180)	-	43,833	
	¢		e		¢		¢		
Total liabilities, convertible preferred stock and stockholders' (deficit) equity	\$	4,921	\$	61,494	\$	50,042	\$	50,042	

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Operations and Comprehensive Loss

(amounts in thousands, except share and per share data)

	Year Ended December 31,				Ended 30,			
		2013	_	2014		2014		2015
_	*		*		*	(unaud		,
Revenue	\$	—	\$	—	\$	— 5	\$	317
Operating expenses:								
Research and development		6,266		10,923		7,901		16,030
General and administrative		2,367		2,512		1,843		3,418
Total operating expenses		8,633		13,435		9,744		19,448
Loss from operations		(8,633)	_	(13,435)	_	(9,744)		(19,131)
Other income (expense), net		(32)		4		2		2
Net loss and comprehensive loss	\$	(8,665)	\$	(13,431)	\$	(9,742) \$	\$	(19,129)
Accrued dividends on preferred stock		(594)		(2,211)		(1,074)		(3,690)
Net loss applicable to common stockholders	\$	(9,259)	\$	(15,642)	\$	(10,816)	\$	(22,819)
Net loss per share applicable to common								
stockholders—basic and diluted	\$	(2.25)	\$	(2.74)	\$	(1.93) \$	\$	(3.26)
Weighted-average number of common shares used in net loss per share applicable to				10 0 1 1				6 005 500
common stockholders-basic and diluted	4	,110,716		5,718,844	_	5,599,543		6,997,532
Pro forma net loss per share—basic and diluted (unaudited)			\$	(0.37)		(\$	(0.37)
Weighted-average number of common shares used in pro forma net loss per share—basic and diluted (unaudited)				35,901,743		-		54,255,749

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Convertible Preferred Stock and Stockholders' (Deficit) Equity

(amounts in thousands except share data)

	Series A Co Preferred		Series B Co Preferred		Commor	1 Stock			
	# of Shares	Amount	# of Shares	Amount	# of Shares	Amount	Additional Paid-In Capital	Accumulated Deficit	Stockholders' (Deficit) Equity
Balance at December 31, 2012	2,500,000	\$ 1,208		\$ _	2,400,000	\$ 2	\$ 123	\$ (1,599)	\$ (1,474)
Issuance of Series A convertible preferred stock, net of issuance costs of \$42	12,100,000	12,058	_	ф 		φ <u> </u>	φ 123 	φ (1,577). 	
Issuance of common stock	_	_	_	_	643,782	1	22	_	23
Exercise of stock options and vesting of restricted stock awards	_	_		_	2,130,000	2		_	2
Stock-based compensation expense					, ,		821		821
Net loss Balance at								(8,665)	(8,665)
December 31, 2013 Issuance of Series A convertible	14,600,000	13,266		—	5,173,782	5	966	(10,264)	(9,293)
preferred stock, net of issuance costs of \$1	15,750,000	15,749						_	_
Issuance of Series B convertible preferred stock, net of issuance costs of									
\$152	_	_	16,893,931	52,998	_	_	_	_	_
Exercise of stock options and vesting of restricted stock awards	_			_	976,283	1	14	_	15
Stock-based compensation expense	_	_	_	_		_	937	_	937
Net loss Balance at								(13,431)	(13,431)
December 31, 2014 Exercise of stock	30,350,000	29,015	16,893,931	52,998	6,150,065	6	1,917	(23,695)	(21,772)
optons and vesting of restricted stock awards (unaudited) Stock-based	_	_		_	2,234,421	2	334	_	336
compensation expense (unaudited) Net loss (unaudited)	_	_	_	_	_	_	2,385	(19,129)	2,385 (19,129)
Balance at September 30, 2015 (unaudited)	30,350,000	29,015	16,893,931	52,998	8,384,486	8	4,636	(42,824)	(38,180)
Conversion of Series A convertible preferred stock into common stock									
(unaudited) Conversion of Series B convertible preferred stock into common stock	(30,350,000)	(29,015)			30,350,000	31	28,984	_	29,015
(unaudited) Stock-based compensation expense for stock- based awards that vest upon initial		_	(16,893,931)	(52,998)	16,893,931	17	52,981	_	52,998
public offering Pro forma balance at					300,000		833	(833)	
September 30, 2015 (unaudited)		\$		<u>\$ </u>	55,928,417	\$ 56	\$ 87,434	<u>\$ (43,657)</u>	\$ 43,833

The accompanying notes are an integral part of these financial statements.

Consolidated Statements of Cash Flows

(amounts in thousands)

	Year Ended December 31,					Nine Months Ended September 30,			
		2013	_	2014	_	2014		2015	
					_	(unau	dit	ed)	
Operating Activities									
Net loss	\$	(8,665)	\$	(13,431)	\$	(9,742)	\$	(19,129)	
Adjustments to reconcile net loss to net cash used in									
operating activities:									
Depreciation		170		258		187		373	
Non-cash interest expense		33							
Stock-based compensation expense		821		937		587		2,385	
Changes in operating assets and liabilities:									
Prepaid expenses and other current assets		(89)		(38)		(12)		(153)	
Other long term assets				—				(210)	
Restricted cash		(20)		-		—		(413)	
Accounts payable		361		334		88		721	
Accrued expenses		136		7		451		1,536	
Deferred rent and lease incentive	_	59		(36)	_	(25)		61	
Net cash used in operating activities	_	(7,194)	_	(11,969)	_	(8,466)		(14,829)	
Investing Activities									
Purchases of property and equipment		(878)		(201)	_	(187)		(883)	
Net cash used in investing activities		(878)		(201)	_	(187)		(883)	
Financing Activities									
Payments of capital lease obligations				_				(32)	
Proceeds from issuance of convertible preferred stock, net of									
issuance costs		10,021		68,747		15,749		_	
Proceeds from issuance of common stock		24		15		15		336	
Net cash provided by financing activities		10,045		68,762		15,764		304	
Increase (decrease) in cash and cash equivalents	_	1,973		56,592	_	7,111		(15,408)	
Cash and cash equivalents		,		,		,			
Beginning of period		1,828		3,801		3,801		60,393	
End of period	\$	3,801	\$	60,393	\$	10,912	\$	44,985	
Supplemental disclosure of cash flow information:	<u> </u>		-		-		-	, ,	
Cash paid for interest	\$		\$		\$		\$	12	
Non-cash investing and financing activities	Ψ		Ψ		Ψ		Ψ	12	
Issuance of Series A convertible preferred stock through									
conversion of convertible notes	\$	2,036	\$		\$		\$		
Property and equipment received but unpaid as of period	Ψ	2,000	Ψ		Ψ		φ		
end	\$		\$		\$		\$	669	
Assets acquired under capital lease	\$		\$		\$		\$	389	
Assets acquired through lease incentive	\$		\$		\$		\$	1,612	
rissets acquired through lease meentive	ψ		Ψ		Ψ		Ψ	1,012	

The accompanying notes are an integral part of these financial statements.

Notes to Consolidated Financial Statements

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

1. Nature of Business

Syros Pharmaceuticals, Inc. (the "Company"), formerly known as LS22, Inc., a Delaware corporation formed in November 2011, is a biopharmaceutical company seeking to discover and develop medicines that control the expression of genes with the aim of treating cancer and other serious diseases. The Company has built a proprietary platform to identify crucial genes that become dysregulated in diseased cells in order to create medicines that return cells to a non-diseased state.

The Company is subject to a number of risks similar to those of other early stage companies, including dependence on key individuals; risks inherent in the development and commercialization of medicines to treat human disease; competition from other companies, many of which are larger and better capitalized; risks relating to obtaining and maintaining necessary intellectual property protection; and the need to obtain adequate additional financing to fund the development of its product candidates. If the Company is unable to raise capital when needed or on attractive terms, it would be forced to delay, reduce, eliminate or out-license certain of its research and development programs or future commercialization efforts.

The Company has an accumulated deficit as of September 30, 2015 of approximately \$42.8 million and will require substantial additional capital for research and product development. The future success of the Company is dependent upon its ability to develop its product candidates, and ultimately upon its ability to attain profitable operations. At September 30, 2015, the Company believes that its cash and cash equivalents, totaling \$45.0 million, will be sufficient to allow the Company to fund its current operating plan for a period of at least the next 12 months. Thereafter, the Company will be required to obtain additional funding and intends to pursue a public offering of its common stock to fund future operations. However, if the Company is unable to complete a sufficient public offering in a timely manner it would need to pursue other financing alternatives, such as private financing of debt or equity or collaboration agreements. There can be no assurances, however, that the current operating plan will be achieved or that additional funding will be available on terms acceptable to the Company, or at all.

2. Summary of Significant Accounting Policies

The following is a summary of significant accounting policies followed in the preparation of these financial statements.

Basis of Presentation

The Company's financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") and include all adjustments necessary for the fair presentation of the Company's financial position and results of its operations for the periods presented. Any reference in these notes to applicable guidance is meant to refer to the authoritative United States generally accepted accounting principles as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB").

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Syros Pharmaceuticals, Inc. and its wholly owned subsidiary, Syros Securities Corporation, which is a

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

2. Summary of Significant Accounting Policies (Continued)

Massachusetts subsidiary formed by the Company in December 2014 to exclusively engage in buying, selling and holding securities on its own behalf. All intercompany transactions and balances have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts in the financial statements and accompanying notes. Management considers many factors in selecting appropriate financial accounting policies and in developing the estimates and assumptions that are used in the preparation of the financial statements. Management must apply significant judgment in this process. In addition, other factors may affect estimates, which include, but are not limited to, expected business and operational changes, sensitivity and volatility associated with the assumptions used in developing estimates and whether historical trends are expected to be representative of future trends. Management's estimation process often may yield a range of potentially reasonable estimates and management must select an amount that falls within that range of reasonable estimates. On an ongoing basis, the Company's management evaluates its estimating the fair value of the Company's common stock (the "Common Stock"), accrued expenses and income taxes. Actual results may differ from those estimates or assumptions.

Unaudited Interim Financial Information

The unaudited interim financial statements as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 and the related interim information contained within the notes to the financial statements are unaudited. The interim unaudited financial statements have been prepared on the same basis as the annual audited financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of the Company's consolidated financial position as of September 30, 2015, and the consolidated statements of operations and comprehensive loss and its cash flows for the nine months ended September 30, 2014 and 2015. The financial data and other information disclosed in these notes as of and for the nine months ended September 30, 2014 and 2015 are unaudited. The results for the nine months ended September 30, 2015 are not necessarily indicative of results to be expected for the year ending December 31, 2015, or any other future annual or interim periods.

Unaudited Pro Forma Financial Information

Upon the closing of a qualified initial public offering, all of the Company's outstanding convertible preferred stock will automatically convert into Common Stock and certain of the Company's restricted stock and performance-based stock option awards will vest. The accompanying unaudited pro forma consolidated balance sheet and statement of convertible preferred stock and stockholders' (deficit) equity as of September 30, 2015 assumes the conversion of all outstanding convertible preferred stock into shares of Common Stock and the vesting of certain restricted stock and performance-based stock option awards as if this proposed initial public offering was completed on September 30, 2015. In the accompanying consolidated statements of operations and comprehensive loss, unaudited pro forma



Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

2. Summary of Significant Accounting Policies (Continued)

basic and diluted net loss per share attributable to common stockholders has been prepared to give effect to the automatic conversion of all outstanding shares of convertible preferred stock and vesting of certain restricted stock and performance-based stock option awards as if this proposed initial public offering had occurred on the later of the beginning of the reporting period or the issuance date of the convertible preferred stock or performance-based award. Accordingly, the unaudited pro forma net loss attributable to common stockholders used in the calculation of unaudited basic and diluted pro forma net loss per share attributable to common stockholders excludes the effects of dividends on preferred stock and includes additional compensation expense related to the vesting of certain of the Company's restricted stock and performance-based stock option awards.

Segment Information

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision making group, in making decisions on how to allocate resources and assess performance. The Company's chief operating decision maker is the Chief Executive Officer. The Company and the chief operating decision maker view the Company's operations and manage its business in one operating segment. The Company operates only in the United States.

Comprehensive Loss

Comprehensive loss is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. For the years ended December 31, 2013 and 2014 and for the nine months ended September 30, 2014 and 2015, comprehensive loss was equal to net loss.

Cash and Cash Equivalents

The Company considers all highly liquid instruments that have original maturities of three months or less when acquired to be cash equivalents. Cash equivalents, which consist of money market funds that invest in U.S. Treasury obligations, are stated at fair value. The Company maintains its bank accounts at one major financial institution. Cash and cash equivalents consist of the following (in thousands):

	Dec	ember 31,	
	2013	2014	September 30, 2015
Cash and cash equivalents:			
Cash	\$ 155	5 \$ 54,981	\$ 6
Money market funds	3,646	5,412	44,979
Total	\$ 3,801	\$ 60,393	\$ 44,985

Off-Balance Sheet Risk and Concentrations of Credit Risk

The Company has no financial instruments with off-balance sheet risk, such as foreign exchange contracts, option contracts, or other foreign hedging arrangements. Financial instruments that



Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

2. Summary of Significant Accounting Policies (Continued)

potentially subject the Company to concentrations of credit risk primarily consist of cash and cash equivalents. The Company's cash is held in accounts at a financial institution that may exceed federally insured limits. The Company has not experienced any credit losses in such accounts and does not believe it is exposed to any significant credit risk on these funds.

Fair Value of Financial Instruments

ASC Topic 820, *Fair Value Measurement* ("ASC 820"), establishes a fair value hierarchy for instruments measured at fair value that distinguished between assumptions based on market data (observable inputs) and the Company's own assumptions (unobservable inputs). Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumption about the inputs that market participants would use in pricing the asset or liability, and are developed based on the best information available in the circumstances.

ASC 820 identified fair value as the exchange price, or exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As a basis for considering market participant assumptions in fair value measurements, ASC 820 established a three-tier fair value hierarchy that distinguishes between the following:

Level 1-Quoted market prices (unadjusted) in active markets for identical assets or liabilities.

Level 2—Inputs other than quoted prices included within Level 1 that are either directly or indirectly observable, such as quoted market prices, interest rates and yield curves.

Level 3—Unobservable inputs developed using estimates or assumptions developed by the Company, which reflect those that a market participant would use.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized as Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

The carrying amounts reflected in the balance sheets for cash and cash equivalents, prepaid expenses, other current assets, accounts payable and accrued expenses approximate their fair values, due to their short-term nature.

Property and Equipment

Property and equipment consists of laboratory equipment, computer equipment, furniture and fixtures and leasehold improvements, all of which are stated at cost, less accumulated depreciation. Expenditures for maintenance and repairs that do not improve or extend the lives of the respective assets are recorded to expense as incurred. Major betterments are capitalized as additions to property and equipment. Depreciation is recognized over the estimated useful lives of the assets using the straight-line method.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

2. Summary of Significant Accounting Policies (Continued)

Construction-in-progress is stated at cost, which relates to the cost of research equipment not yet placed into service. No depreciation expense is recorded on construction-in-progress until such time as the relevant assets are completed and put into use.

Impairment of Long-Lived Assets

The Company continually evaluates long-lived assets for potential impairment when events or changes in circumstances indicate the carrying value of the assets may not be recoverable. Recoverability is measured by comparing the book values of the assets to the expected future net undiscounted cash flows that the assets are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the book values of the assets exceed their fair value. The Company has not recognized any impairment losses from inception through September 30, 2015.

Other Long Term Assets

Other long term assets consists of deferred issuance costs, which includes direct incremental legal and accounting fees relating to the Company's proposed initial public offering of common stock. Deferred issuance costs are capitalized as incurred. The deferred issuance costs will be offset against proceeds upon the consummation of the offering. In the event the offering is terminated, deferred issuance costs will be expensed. Approximately \$210,000 of deferred issuance costs were incurred and capitalized as of September 30, 2015. No amounts were capitalized as of December 31, 2014 and 2013. Such costs are included within non-current assets on the balance sheet.

Revenue Recognition

To date, the Company's only source of revenue has been the research agreement with a multinational pharmaceutical company (Note 13).

The Company recognizes revenue in accordance with ASC Topic 605, *Revenue Recognition* ("ASC 605"). Accordingly, revenue is recognized when all of the following criteria are met:

- Persuasive evidence of an arrangement exists;
- Delivery has occurred or services have been rendered;
- The seller's price to the buyer is fixed or determinable; and
- Collectability is reasonably assured.

Amounts received prior to satisfying the revenue recognition criteria are recognized as deferred revenue in the Company's consolidated balance sheets. Amounts expected to be recognized as revenue within the 12 months following the balance sheet date are classified in current liabilities. Amounts not expected to be recognized as revenue within the 12 months following the balance sheet date are classified as deferred revenue, net of current portion.

The Company analyzes arrangements with multiple deliverables based on the guidance in ASC Topic 605-25, *Revenue Recognition—Multiple Element Arrangements* ("ASC 605-25"). Pursuant to the guidance in ASC 605-25, the Company evaluates multiple element arrangements to determine (1) the



Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

2. Summary of Significant Accounting Policies (Continued)

deliverables included in the arrangement and (2) whether the individual deliverables represent separate units of accounting or whether they must be accounted for as a combined unit of accounting. This evaluation involves subjective determinations and requires management to make judgements about the individual deliverables and whether such deliverables are separate from other aspects of the contractual relationship. Deliverables are considered separate units of accounting provided that: (i) the delivered item(s) has value to the customer on a standalone basis and (ii) if the arrangement includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially within control of the Company. The Company's research agreement contains a single unit of accounting.

The Company recognizes arrangement consideration allocated to each unit of accounting when all of the revenue recognition criteria in ASC 605 are satisfied for that particular unit of accounting. In the event that a deliverable does not represent a separate unit of accounting, the Company would recognize revenue from the combined unit of accounting over the contractual or estimated performance period for the undelivered items, which is typically the term of its research and development obligations. If there is no discernible pattern of performance or objectively measurable performance measures do not exist, then the Company would recognize revenue under the arrangement on a straight-line basis over the period it expects to complete its performance obligations or upon completion when the final act is of such significance to the overall arrangement that performance has not substantively occurred until the completion of that act. Conversely, if the pattern of performance over which the service is provided to the customer can be determined and objectively measurable performance measures exist, then the Company would recognize revenue under the arrangement using the proportional performance method.

The Company recognizes service revenue under its research agreement based upon the completed performance method of revenue recognition as it is unable to reasonably estimate the period of performance of the services and the delivery of the final study report is significant to the arrangement.

Research and Development

Expenditures relating to research and development are expensed in the period incurred. Research and development expenses consist of both internal and external costs associated with the development of the Company's gene control platform and gene control medicines, with initial focus on cancer. Research and development costs include salaries and benefits, materials and supplies, external research and preclinical expenses, stock-based compensation expense and facilities costs. Facilities costs primarily include the allocation of rent, utilities and depreciation.

In certain circumstances, the Company is required to make nonrefundable advance payments to vendors for goods or services that will be received in the future for use in research and development activities. In such circumstances, the nonrefundable advance payments are deferred and capitalized, even when there is no alternative future use for the research and development, until related goods or services are provided.

The Company records accruals for estimated ongoing research costs. When evaluating the adequacy of the accrued liabilities, the Company analyzes progress of the work being performed, including the phase or completion of the event, invoices received and costs. Significant judgements and

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

2. Summary of Significant Accounting Policies (Continued)

estimates may be made in determining the accrued balances at the end of any reporting period. Actual results could differ from the Company's estimates.

The Company may in-license the rights to develop and commercialize product candidates. For each in-license transaction the Company evaluates whether it has acquired processes or activities along with inputs that would be sufficient to constitute a "business" as defined under U.S. GAAP. A "business" as defined under U.S. GAAP consists of inputs and processes applied to those inputs that have the ability to create outputs. Although businesses usually have outputs, outputs are not required for an integrated set of activities to qualify as a business. When the Company determines that it has not acquired sufficient processes or activities to constitute a business, any up-front payments, as well as milestone payments, are immediately expensed as research and development in the period in which they are achieved.

Stock-Based Compensation Expense

The Company accounts for its stock-based compensation awards in accordance with ASC Topic 718, *Compensation—Stock Compensation* ("ASC 718"). ASC 718 requires all stock-based payments to employees and directors, including grants of restricted stock and stock options, to be recognized as expense in the consolidated statements of operations based on their grant date fair values. Grants of restricted stock and stock options to other service providers, referred to as non-employees, are required to be recognized as expense in the consolidated statements of operations based on their vesting date fair values. The Company estimates the fair value of options granted using the Black-Scholes option-pricing model. The Company uses the value of its common stock to determine the fair value of restricted stock awards.

The use of the Black-Scholes option-pricing model requires management to apply significant judgement and make estimates, including:

Expected volatility—Since the Company is privately held as of the date of these financial statements, it does not have relevant historical data to support its expected volatility. As such, the Company has used an average of expected volatility based on the volatilities of a representative group of publicly traded biopharmaceutical companies with similar characteristics to the Company, including stage of product development, length of trading history and life science industry focus. The expected volatility was determined using an average of the historical volatilities of the representative group of companies for a period equal to the expected term of the option grant. The Company intends to consistently apply this process using the same representative companies until a sufficient amount of historical information regarding the volatility of the Company's own share price becomes available or until circumstances change, such that the identified entities are no longer representative companies. In the latter case, more suitable, similar entities whose share prices are publicly available would be utilized in the calculation.

Risk-free interest rate—The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant commensurate with the expected life assumption.

Expected term—The Company uses the "simplified method" as prescribed by the Securities and Exchange Commission ("SEC") Staff Accounting Bulletin No. 107, *Share-Based Payment* to estimate the

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

2. Summary of Significant Accounting Policies (Continued)

expected term of stock option grants. Under this approach, the weighted-average expected life is presumed to be the average of the contractual term (ten years) and the vesting term (generally four years) of the Company's stock options, taking into consideration multiple vesting tranches. The Company utilizes this method as the Company has insufficient historical information regarding stock options to provide a basis for an estimate.

Fair value of the underlying common shares—The fair value of the underlying common shares was determined using the optionpricing method, or OPM or a hybrid of the probability-weighted expected return method, or PWERM, and the OPM, and was approved by its board of directors.

Dividends—The Company has never paid, and does not anticipate paying, any cash dividends in the foreseeable future, and therefore uses an expected dividend yield of zero.

The amount of stock-based compensation expense recognized during a period is based on the fair value of the portion of the awards that are ultimately expected to vest. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The term "forfeitures" is distinct from "cancellations" or "expirations" and represents only the unvested portion of the surrendered option. The Company evaluates its forfeiture rate at each reporting period. Ultimately, the actual expense recognized over the vesting period will be for only those options that vest.

The Company expenses the fair value of its stock-based awards to employees on a straight-line basis over the associated service period, which is generally the vesting period. For stock-based awards granted to consultants and non-employees, compensation expense is recognized over the period during which services are rendered by such consultants and non-employees until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then-current fair value of such awards.

For stock-based awards that contain performance-based milestones, the Company records stock-based compensation expense in accordance with the accelerated attribution model. Management evaluates when the achievement of a performance-based milestone is probable based on the expected satisfaction of the performance conditions as of the reporting date. For certain of the Company's performance-based awards, notwithstanding any vesting in accordance with the achievement of performance-based milestones, such awards vest in full on the sixth anniversary of the vesting commencement date.

Income Taxes

The Company accounts for income taxes in accordance with ASC Topic 740, *Income Taxes* ("ASC 740"). The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on differences between the financial statement carrying amounts and the tax bases of the assets and liabilities using the enacted tax rates in effect in the years in which the differences are expected to reverse. A valuation allowance against deferred tax assets is recorded if, based on the weight of the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

2. Summary of Significant Accounting Policies (Continued)

The Company accounts for uncertain tax positions using a more-likely-than-not threshold for recognizing and resolving uncertain tax positions. The evaluation of uncertain tax positions is based on factors including, but not limited to, changes in the law, the measurement of tax positions taken or expected to be taken in tax returns, the effective settlement of matters subject to audit, new audit activity, and changes in facts or circumstances related to a tax position.

Net Loss per Share and Unaudited Pro Forma Net Loss per Share

Basic net loss per share applicable to common stockholders is calculated by dividing net loss applicable to common stockholders by the weighted average shares outstanding during the period, without consideration for common stock equivalents. Diluted net loss per share applicable to common stockholders is calculated by adjusting the weighted average shares outstanding for the dilutive effect of common stock equivalents outstanding for the period, determined using the treasury-stock method and the if-converted method. For purposes of the dilutive net loss per share applicable to common stockholders calculation, convertible preferred stock, stock options, and unvested restricted stock are considered to be common stock equivalents but are excluded from the calculation of diluted net loss per share applicable to common stockholders, as their effect would be anti-dilutive; therefore, basic and diluted net loss per share applicable to common stockholders were the same for all periods presented.

The following common stock equivalents were excluded from the calculation of diluted net loss per share applicable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect.

	As of Dece	mber 31,	As of Septe	ember 30,
	2013	2014	2015	
Convertible preferred stock	14,600,000	47,243,931	30,350,000	47,243,931
Outstanding stock options	3,985,851	4,987,881	4,646,191	7,088,929
Unvested restricted common stock	3,154,931	2,233,283	2,479,931	1,243,296
	21,740,782	54,465,095	37,476,122	55,576,156

Unaudited pro forma net loss per share applicable to common stockholders is computed using the weighted-average number of common shares outstanding after giving effect to the conversion of all convertible preferred stock into shares of common stock and the vesting of certain restricted stock awards, which occurs upon the closing of the initial public offering, as if such conversion or vesting had occurred at the beginning of the period presented, or the date of original issuance, if later. Accordingly, the pro forma basic and diluted net loss per share applicable to common stockholders does not include the effects of the cumulative preferred stock dividends and includes compensation expense for certain restricted stock. Shares to be sold in the initial public offering are excluded from the unaudited pro forma basic and diluted loss per share applicable to common stockholders calculations.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

2. Summary of Significant Accounting Policies (Continued)

Unaudited pro forma net loss per share applicable to common stockholders is computed as follows (in thousands except for share and per share information):

		Ended r 31, 2014	Nine Months Ended September 30, 2015
Numerator:			
Net loss applicable to common stockholders	\$	(15,642) \$	\$ (22,819)
Plus: Accrued dividends on preferred stock		2,211	3,690
Net loss		(13,431)	(19,129)
Stock-based compensation expense for stock-based awards with vesting contingent upon initial public offering			(833)
Pro forma net loss	\$	(13,431) 5	\$ (19,962)
Denominator:			
Weighted-average number of common shares used in net loss per share applicable to common stockholders—basic and diluted	5	5,718,844	6,997,532
Pro forma adjustment to reflect assumed conversion of convertible preferred stock	30),182,899	47,243,931
Pro forma adjustment to reflect shares outstanding as a result of restricted stock awards that vest upon initial public			14.000
offering			14,286
Weighted-average number of common shares used in pro forma net loss per share—basic and diluted	35	5,901,743	54,255,749
Pro forma basic and diluted net loss per share	\$	(0.37) \$	\$ (0.37)

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue From Contracts With Customers* ("ASU 2014-09"). ASU 2014-09 amends ASC 605, *Revenue Recognition*, by outlining a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. ASU 2014-09 will be effective for the Company for interim and annual periods beginning after December 15, 2017. The Company is evaluating the impact that this ASU may have on its financial statements, if any.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

2. Summary of Significant Accounting Policies (Continued)

In June 2014, the FASB issued ASU 2014-10, *Development Stage Entities* (Topic 915) ("ASU 2014-10"), which removes the definition of a development stage entity from the ASC, thereby removing the financial reporting distinction between development stage entities and other reporting entities. Accordingly, ASU 2014-10 eliminates the requirements for development stage entities to (1) present inception-to-date information in the statements of operations, cash flows and shareholders' equity, (2) label financial statements as those of a development stage entity is engaged and (4) disclose in the first year in which the entity is no longer a development stage entity that in prior years it had been in the development stage. ASU 2014-10 is effective for public business entities for annual periods beginning after December 15, 2014, with early adoption permitted. The Company early adopted the provisions of ASU 2014-10 in these financial statements.

In August 2014, the FASB issued ASU No. 2014-15, *Presentation of Financial Statements—Going Concern* ("ASU 2014-15") which provides new guidance on management's responsibility in evaluating whether or not there is substantial doubt about a company's ability to continue as a going concern within one year from the date the financial statements are issued each reporting period. ASU 2014-15 is effective for annual periods ending after December 15, 2016. Early adoption is permitted. The Company is in the process of evaluating the new guidance and determining the expected effect on its financial statements.

3. Fair Value Measurements

Assets and liabilities measured at fair value on a recurring basis are as follows (in thousands):

		Active	Observable	Unobservable
		Markets	Inputs	Inputs
Description	December 31, 2013	(Level 1)	(Level 2)	(Level 3)
Money market funds, included in cash equivalents	\$ 3,646	\$ 3,646	<u>\$ </u>	<u>\$ </u>

		Active Markets	Observable Inputs	Unobservable Inputs
Description	December 31, 2014	(Level 1)	(Level 2)	(Level 3)
Money market funds, included in cash equivalents	\$ 5,412	\$ 5,412	<u> </u>	<u>\$ </u>

			Active Markets	Observable Inputs	Unobservable Inputs
Description	September	30, 2015	(Level 1)	(Level 2)	(Level 3)
Money market funds, included in cash					
equivalents	\$	44,979	\$ 44,979	<u>\$ </u>	<u>\$ </u>

4. Restricted Cash

At December 31, 2013 and 2014, the Company had \$70,000 in restricted cash. This amount is comprised of a \$20,000 certificate of deposit to collateralize a credit card account with the Company's primary financial institution and a \$50,000 letter of credit, which served as the security deposit on the

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

4. Restricted Cash (Continued)

lease of the Company's prior facility in Watertown, Massachusetts. At September 30, 2015 the Company had \$483,000 in restricted cash which serves as the security deposit on the lease of the Company's current facility in Cambridge, Massachusetts (Note 8).

5. Property and Equipment

Property and equipment consists of the following at December 31, 2013 and 2014 and September 30, 2015 (in thousands):

	Estimated		Decem	ber			
	useful life (in years)		2013		2014	Se	ptember 30, 2015
Laboratory equipment	5	\$	900	\$	1,080	\$	1,893
Computer equipment	3		132		173		193
Furniture and fixtures	4		56		56		400
Leasehold improvements	Shorter of 7 years or life of lease						2,376
Construction-in-progress			20		—		
			1,108		1,309		4,862
Less: Accumulated depreciation			(170)		(428)		(801)
Total property and equipment, net		\$	938	\$	881	\$	4,061

Depreciation expense, including depreciation expense for assets recorded under capital leases, amounted to \$170,000 and \$258,000 for the years ended December 31, 2013 and 2014, respectively, and \$187,000 and \$373,000 for the nine months ended September 30, 2014 and 2015, respectively. Lab equipment included assets recorded under capital leases of \$389,000 at September 30, 2015 (Note 7). Accumulated depreciation from assets recorded under capital leases was \$65,000 at September 30, 2015.

6. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	Decem	ber 31,	September 30,
	2013	2014	2015
Employee compensation and benefits	\$ 121	\$ 132	\$ 354
External research and preclinical development		106	784
Facilities			735
Professional fees	158	48	618
Restricted stock liability	1	1	1
	\$ 280	\$ 287	\$ 2,492

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

7. Indebtedness

Convertible Notes

On December 19, 2012, the Company issued convertible notes (the "Notes") to certain of its preferred stock investors in the aggregate principal amount of \$2,000,000. Under the terms of the Notes, the principal and unpaid accrued interest of the Notes would automatically convert upon the occurrence of the Company's next qualified financing. The Notes bore an interest rate of 6% per annum. On April 10, 2013, the Company completed the Series A-2 convertible preferred stock financing, which constituted a qualified financing, and the principal and unpaid accrued interest of the Notes of \$2,036,492 automatically converted to shares of Series A-2 convertible preferred stock at a conversion price equal to the price paid per share in the financing. Upon the date of the qualified financing, the Notes were converted into 2,036,492 shares of Series A-2 convertible preferred stock at a purchase price of \$1.00 per share.

Equipment Financing

In March 2015, the Company entered into a lease agreement with a vendor for certain laboratory equipment. The Company financed \$389,000 of the amount owed under the lease agreement and is required to make consecutive monthly payments of principal, plus accrued interest at 6.44%, over 36 months through March 2018. As of September 30, 2015, the Company had made payments of \$44,000, of which \$12,000 related to interest. At September 30, 2015, \$357,000 of principal was outstanding with respect to the equipment financing arrangement.

Scheduled monthly future minimum lease payments with respect to the equipment financing arrangement are as follows (in thousands):

At September 30, 2015:	
2015	\$ 23
2016	152
2017	172
2018	43
	\$ 390

8. Commitments

Operating Leases

In October 2012, the Company entered into an operating lease for office and laboratory space in Watertown, Massachusetts (the "2012 Lease"). The lease agreement was with Alexandria Real Estate, a related party (see Note 14). The lease agreement expired in August 2015. The Company's lease agreement had escalating rent payments and the Company recorded rent expense on a straight-line basis. The Company recorded rent expense of \$265,000 for each of the years ended December 31, 2013 and 2014, and \$199,000 and \$177,000 for the nine months ended September 30, 2014 and 2015, respectively. The lease agreement required the Company to issue an original letter of credit in the



Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

8. Commitments (Continued)

amount of \$50,000, which is included in other current assets in the accompanying balance sheets. The Company's remaining lease commitment under the 2012 Lease as of December 31, 2014 was \$206,000.

In March 2015, the Company entered into an operating lease for approximately 21,488 rentable square feet of office and laboratory space in Cambridge, Massachusetts (the "2015 Lease"), with a lease term commencing in August 2015 and ending in October 2020, assuming occupancy in August 2015. The Company has an option to extend the lease for five additional years. The Company's lease agreement has escalating rent payments and the Company records rent expense on a straight-line basis over the term of the lease, including any rent-free periods. The Company recorded rent expense of \$99,000 for the nine months ended September 30, 2015 related to the 2015 Lease. The lease agreement required the Company to issue an original letter of credit in the amount of \$483,000, which is included in restricted cash in the accompanying balance sheet at September 30, 2015.

The 2015 Lease includes certain lease incentives in the form of tenant allowances. The Company has capitalized the improvements made with the tenant allowance into fixed assets and established a liability for the deferred lease incentive upon occupancy. The Company recorded these incentives as a component of deferred rent and will amortize these incentives as a reduction of rent expense over the lease term. The related fixed assets will be amortized over the lease term. The 2012 Lease and 2015 Lease require the Company to share in prorated operating expenses and property taxes based upon actual amounts incurred; those amounts are not fixed for future periods and, therefore, are not included in the future commitments listed below.

The minimum aggregated future lease commitment at September 30, 2015 is as follows (in thousands):

At September 30, 2015:	
2015	\$ 240
2016	1,217
2017	1,252
2018	1,288
2019	1,325
2020	1,130
	\$ 6,452

License Agreements

Dana-Farber Cancer Institute, Inc.

In February 2013, the Company entered into a license agreement with Dana-Farber Cancer Institute, Inc. ("Dana-Farber") pursuant to which the Company was granted an exclusive worldwide, sublicensable license under specified patents relating to CDK7 inhibitors and JNK inhibitors owned or controlled by Dana-Farber. The Company paid a \$50,000 license initiation fee to Dana-Farber, which was recorded as research and development expense. A funding milestone payment of \$125,000 was paid in April 2014 upon the close of the Series A-3 convertible preferred stock financing. Payments totaling



Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

8. Commitments (Continued)

\$3.4 million are due when the Company achieves certain clinical and regulatory milestones for any product to Dana-Farber, none of which have been achieved as of September 30, 2015. The future potential milestone payments have not been accrued as of December 31, 2013 and 2014 and September 30, 2015, respectively, as no milestones have been achieved and the agreement can be cancelled at the Company's option. Therefore, the Company had no obligation to pay any of these amounts. After the Company begins commercial sale of products in any country subject to the license, the Company will owe a tiered royalty on net sales. Royalty payments continue for the duration of the licensed patents.

In the event the Company grants a sublicense to a third party, the Company will pay a royalty equal to a percentage of the revenue it receives from the sublicense. The specific percentage payable is dependent on the stage of development of the product subject to the sublicense at the time the sublicense is granted.

Whitehead Institute for Biomedical Research and Dana-Farber

Effective April 1, 2013, the Company entered into a license agreement with the Whitehead Institute for Biomedical Research ("Whitehead") and Dana-Farber, pursuant to which the Company was granted a worldwide, sublicensable license under specified patents relating to modulators of Myc/Max Screen, relating to Chem-Seq owned or controlled by Whitehead and Dana-Farber. In April 2013, related to such license, the Company paid a \$50,000 license initiation fee to Whitehead, which was recorded as a research and development expense. A funding milestone payment of \$50,000 was paid in April 2014. Payments totaling \$3.4 million are due when the Company achieves certain clinical and regulatory milestones, none of which have been achieved as of September 30, 2015. The future potential milestone payments have not been accrued as of December 31, 2013 and 2014 and September 30, 2015, respectively, as no milestones have been achieved and the agreement can be cancelled at the Company's option, and therefore the Company had no obligation to pay any of these amounts. After the Company begins commercial sale of products in any country subject to the license, the Company will owe a tiered royalty on net sales. Royalty payments continue for the duration of the licensed patents.

In the event the Company grants a sublicense to a third party, the Company will pay a royalty equal to a percentage of the revenue it receives from the sublicense. The specific percentage payable is dependent on the stage of development of the product subject to the sublicense at the time the sublicense is granted.

Whitehead Institute for Biomedical Research

Effective April 4, 2013, the Company entered into an additional license agreement with Whitehead, pursuant to which the Company was granted a worldwide license under specified patents relating to super-enhancers owned or controlled by Whitehead. In April 2013, related to such license, the Company paid a \$30,000 license initiation fee to Whitehead, which was recorded as a research and development expense. A milestone payment of \$100,000 is due upon the issuance of a patent under patent rights in the United States for a product or licensed service in commercial development and another \$100,000 is due upon the receipt by the Company of \$1.0 million from a commercial partner or

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

8. Commitments (Continued)

licensee. These amounts have not been accrued as of December 31, 2013 and 2014 and September 30, 2015, respectively, because the milestones had not been achieved, and therefore, the Company had no obligation to pay any of these amounts. After the Company begins commercial sale of products in any country subject to the license, the Company will owe a tiered royalty on net sales. Royalty payments continue for the duration of the licensed patents.

In the event the Company grants a sublicense to a third party, the Company will pay a royalty equal to a percentage of the revenue it receives from the sublicense. The specific percentage payable is dependent on the stage of development of the product subject to the sublicense at the time the sublicense is granted.

As part of the above licensing agreements, the Company issued 643,782 shares of common stock to Whitehead in April 2013. The Company recorded \$166,740 of expenses within research and development as a result of this issuance.

TMRC Co. Ltd.

In September 2015, the Company entered into an exclusive license agreement with the Japanese oncology company TMRC Co. Ltd., ("TMRC") to develop and commercialize tamibarotene in North America and Europe for cancer. Tamibarotene is an agonist of retinoic acid receptor alpha ("RARa") and is currently marketed in Japan for acute promyelocytic leukemia, a form of acute myeloid leukemia ("AML"). The Company identified the genomic biomarker that identifies AML and myelodysplastic syndrome patient subgroup to be sensitive to or likely to respond to RARa agonist therapy through the Company's proprietary gene control target discovery platform. The Company has identified this product candidate as SY-1425.

In exchange for this license, the Company made a one-time, non-refundable upfront payment of \$500,000 in September 2015 and may make additional payments upon the successful achievement of clinical and regulatory milestones of approximately \$13.0 million per indication. In addition, the Company will pay TMRC single-digit percentage royalties, on a country-by-country, product-by-product basis, on net product sales in North America and Europe.

TMRC is expected to supply the active pharmaceutical ingredient for SY-1425 to the Company pursuant to a supply agreement that is currently being negotiated.

At any time after the first anniversary of the TMRC Agreement, the Company has the ability to terminate the agreement at its sole discretion for any reason.

The Company is responsible for all preclinical, clinical, regulatory and other activities necessary to develop and commercialize tamibarotene in North America and Europe. None of the assets acquired had alternative future uses. As no processes or activities that would constitute a "business" were acquired as part of the license agreement, the transaction was accounted for as an asset acquisition and the upfront payment of \$500,000 was recorded as research and development expense. The additional payments will also be recorded as research and development and expensed as achieved.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

8. Commitments (Continued)

Litigation

The Company is not party to any litigation and does not have contingency reserves established for any litigation liabilities as of December 31, 2013, December 31, 2014 or September 30, 2015.

9. Convertible Preferred Stock

Series A Convertible Preferred Stock Financing

On August 8, 2012, the Company issued 2,500,000 shares of Series A-1 Convertible Preferred Stock ("Series A-1") at a purchase price of \$0.50 per share. The issuance resulted in cash proceeds of \$1,208,000, net of issuance costs of \$42,000. The Series A-1 has a liquidation preference amount of \$1,486,000 at September 30, 2015.

On various dates in 2013, the Company issued 12,100,000 shares of Series A-2 Convertible Preferred Stock ("Series A-2") at a purchase price of \$1.00 per share. The shares were issued for cash proceeds of \$10,021,000, net of issuance costs of \$42,000, and the exchange of outstanding Convertible Notes, including accrued interest, of approximately \$2,036,000, as disclosed in Note 7. The Series A-2 has a liquidation preference amount of \$13,888,000 at September 30, 2015.

On various dates in 2014, the Company issued 15,750,000 shares of Series A-3 Convertible Preferred Stock ("Series A-3") at a purchase price of \$1.00 per share. The issuances resulted in cash proceeds of \$15,749,000, net of issuance costs of \$1,000. The Series A-3 has a liquidation preference amount of \$17,170,000 at September 30, 2015.

The Series A-1, Series A-2 and Series A-3 preferred stock is collectively referred to as "Series A" or "Series A Preferred Stock."

Series B Convertible Preferred Stock Financing

In October 2014, the Company issued 16,893,931 shares of Series B Convertible Preferred Stock ("Series B") at a purchase price of \$3.1461 per share. The issuance resulted in cash proceeds of \$52,998,000, net of issuance costs of \$152,000. The Series B has a liquidation preference amount of \$56,230,000 at September 30, 2015.

The rights, preferences, and privileges of the Series A-1, Series A-2, Series A-3 and Series B (collectively the "Preferred Stock") are listed below:

Conversion

Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of common stock as is determined by dividing the original issuance price by the conversion price in effect at the time of conversion. The conversion price currently in effect is the original issuance price, or \$0.50 per share for Series A-1, \$1.00 per share for Series A-2 and Series A-3 and \$3.1461 per share for Series B, in each case subject to adjustment in the



Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

9. Convertible Preferred Stock (Continued)

event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Preferred Stock.

Conversion is at the option of the preferred stockholders, although conversion is automatic upon either of the consummation of an initial public offering resulting in gross proceeds of \$30.0 million and at a price of \$5.00 per share of the Common Stock or the vote or written consent of the majority of outstanding shares of the Preferred Stock.

Voting

On any matter presented to the stockholders of the Company for their action or consideration at any meeting of stockholders of the Company (or by written consent of stockholders in lieu of a meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of common stock as a single class.

The holders of Series B Preferred Stock have certain protective voting rights as defined. These protective rights require the written consent or affirmative vote of the holders of at least sixty-six and two thirds percent of the then outstanding shares of Series B before action can be taken to (i) modify, amend, or waive any provision of the Certificate of Incorporation in any way that adversely affects the holders of the Series B Preferred Stock, (ii) purchase or redeem or pay or declare any dividend or make any distribution on any shares of capital stock prior to the Series B Preferred Stock, other than repurchases in connection with the cessation of employment or service, or (iii) increase or decrease the authorized number of shares of Series B Preferred Stock.

In addition to the Series B protective rights, all holders of Preferred Stock have certain protective voting rights as defined. These protective rights require the written consent or affirmative vote of the holders of at least sixty-six and two thirds percent of the then outstanding shares of Preferred Stock before action can be taken to (i) liquidate, dissolve or wind-up the business and affairs of the Company, effect any merger or consolidation or any other deemed liquidation event, (ii) amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the Company, (iii) create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless such series ranks junior to the Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Company, the payment of dividends and rights of redemption, or increase the authorized number of shares of Preferred Stock unless the same ranks junior to the Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Company, the payment of dividends and rights of redemption, (iv) purchase or redeem or pay or declare any dividend or make any distribution on any shares of capital stock prior to the Preferred Stock, other than repurchases in connection with the cessation of employment or service.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

9. Convertible Preferred Stock (Continued)

Dividends

Holders of the Preferred Stock are entitled to receive, before any cash is paid out or set aside for any Common Stock, dividends at the annual rate of \$0.03 per share on shares of Series A-1, \$0.06 per share on shares of Series A-2 and Series A-3 and \$0.1887 per share on shares of Series B, in each case subject to adjustment for any stock dividend, stock split, combination or other similar recapitalization. The dividends are cumulative and are payable only when, as, and if, declared by the board of directors, or liquidation, dissolution, sale or winding up of the Company. No dividends have been declared since the Company's inception. Aggregate cumulative preferred dividends at December 31, 2013, December 31, 2014 and September 30, 2015 were \$0.6 million, \$2.8 million and \$6.5 million, respectively.

Redemption

The preferred stock is redeemable upon a deemed liquidation event, provided that the Company does not effect a dissolution of the Company within ninety days after such deemed liquidation event.

The following events are considered deemed liquidation events unless the holders of at least sixty-six and two thirds percent of the outstanding shares of Preferred Stock and at least sixty-six and two thirds percent of the outstanding shares of Series B elect otherwise: (a) a merger or consolidation in which (i) the Company is a constituent party or (ii) a subsidiary of the Company is a constituent party and the Company issues shares of its capital stock pursuant to such merger or consolidation, except any such merger or consolidation in which the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of the surviving or resulting corporation, or the parent corporation of the surviving or resulting corporation is a wholly owned subsidiary of another corporation, or (b) the sale, lease, transfer, exclusive license or other disposition of all or substantially all the assets of the Company.

Liquidation

Holders of Series B have preference in the event of a liquidation, dissolution, sale or winding up of the Company equal to the greater of \$3.1461 per share, plus any accrued but unpaid dividends whether or not declared, plus any dividends declared but unpaid thereon or such amount per share as would have been payable had all shares of Series B been converted into Common Stock immediately prior to such liquidation, dissolution, sale or winding up of the Company. If upon any such liquidation, dissolution, sale or winding up of the Company or a deemed liquidation event, the assets of the Company available for distribution are insufficient to pay the holders of Series B the full amount to which they would be entitled, the holders of shares of Series B shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable if all amounts payable with respect to such shares were paid in full.

After the payment of all liquidation preferences to holders of Series B, holders of Series A have preference in the event of a liquidation, dissolution, sale or winding up of the Company equal to the



Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

9. Convertible Preferred Stock (Continued)

greater of the original issue price per share, or \$0.50 per share for Series A-1 and \$1.00 per share for Series A-2 and Series A-3, plus any dividends declared but unpaid thereon, or such amount per share as would have been payable had all shares of Series A been converted into Common Stock immediately prior to such liquidation, dissolution, sale or winding up of the Company. If upon any such liquidation, dissolution, sale or winding up of the Company or a deemed liquidation event, the assets of the Company available for distribution are insufficient to pay the holders of Series A the full amount to which they would be entitled, the holders of Series A shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable if all amounts payable with respect to such shares were paid in full.

Thereafter, if assets remain in the Company, the holders of the Common Stock shall receive all of the remaining assets of the Company pro rata based on the number of shares of Common Stock held by each.

As the Preferred Stock may become redeemable upon an event that is outside of the control of the Company, the Preferred Stock has been classified outside of stockholders' (deficit) equity. Since the Preferred Stock is not initially redeemable and it is not probable that it will become redeemable, the initial carrying value of the Preferred Stock has not been adjusted to redemption value.

The Company assessed the Series A and Series B Preferred Stock for any beneficial conversion features or embedded derivatives, including the conversion option, that would require bifurcation from the Series A and Series B Preferred Stock and receive separate accounting treatment. Based on the Company's determination that the Preferred Stock is an "equity host," all features of the Preferred Stock are either clearly and closely related to the equity host or did not meet the definition of a derivative, and do not require bifurcation as a derivative liability. On the date of issuance, the fair value of Common Stock into which the Series A and Series B Preferred Stock was convertible was less than the effective conversion price of the Series A and Series B Preferred Stock, and as such, there was no beneficial conversion feature at the commitment date.

10. Common Stock

Holders of the Company's common stock are entitled to one vote for each share of common stock held. Common stockholders are not entitled to receive dividends unless declared by the board of directors.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

10. Common Stock (Continued)

The Company has reserved the following shares of Common Stock for the potential conversion of Preferred Stock and the issuance of Common Stock in connection with stock options:

	As of Dece	mber 31,	As of
	2013	2014	September 30, 2015
Series A Preferred Stock	14,600,000	30,350,000	30,350,000
Series B Preferred Stock		16,893,931	16,893,931
Stock options outstanding	3,985,851	4,987,881	7,088,929
Shares available for future issuance under the			
2012 Plan	1,329,218	3,822,859	384,752
Shares reserved for vesting of restricted stock			
awards	3,154,931	2,233,283	1,243,296
	23,070,000	58,287,954	55,960,908

11. Stock-Based Payments

2012 Stock Option Plan

The Company grants restricted stock awards, incentive stock options ("ISO") and nonstatutory stock options ("NSO") under the Syros Pharmaceuticals, Inc. 2012 Equity Incentive Plan (the "2012 Plan"). As of September 30, 2015, the Company had reserved 8,711,306 shares of Common Stock under the 2012 Plan, of which 384,752 shares remained available for future issuance under the 2012 Plan. Under the 2012 Plan, stock options may not be granted at less than fair value on the date of grant.

Terms of restricted stock and stock option agreements, including vesting requirements, are determined by the board of directors, subject to the provisions of the 2012 Plan. Restricted stock awards granted by the Company generally vest based on each grantee's continued service with the Company during a specified period following grant. Stock option awards granted by the Company generally vest over four years, with 25% vesting on the one year anniversary of the vesting commencement date and 75% vesting ratably, on a monthly basis, over the remaining three years. Such awards are exercisable from the date of grant for a period of ten years. The Company also grants performance-based stock option awards and restricted stock for which vesting accelerates upon the achievement of performance-based milestones. For certain of such awards, notwithstanding any vesting in accordance with the achievement of performance-based milestones, such awards vest in full on the sixth anniversary of the vesting commencement date.

Stock Options

Performance-Based Stock Options

The Company has granted stock options to management for which the vesting of such stock options accelerates upon the achievement of performance-based criteria. Milestone events are specific to the Company's corporate goals, including but not limited to certain preclinical and clinical development milestones and the Company's ability to execute on its corporate development and



Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

11. Stock-Based Payments (Continued)

financing strategies. Stock-based compensation expense associated with these performance-based stock options is recognized based on the accelerated attribution model. Management evaluates when the achievement of a performance-based milestone is probable based on the expected satisfaction of the performance conditions as of the reporting date. Notwithstanding any vesting in accordance with the achievement of performance-based milestones, such awards vest in full on the sixth anniversary of the vesting commencement date. During the year ended December 31, 2013, management determined that a performance-based milestone was achieved and recorded stock-based compensation expense of \$11,000. No additional milestones were deemed to be probable of achievement as of December 31, 2014. As of September 30, 2015, management determined that certain other performance-based milestones were probable of achievement and recorded a cumulative catch-up to stock-based compensation expense of \$65,000 as of September 30, 2015. As of September 30, 2015, there is \$930,000 of unrecognized stock-based compensation expense related to the performance-based stock options.

A summary of the status of stock options as of December 31, 2014 and September 30, 2015 and changes during the year ended December 31, 2014 and the nine months ended September 30, 2015 is presented below:

	Shares	A E	eighted- verage xercise Price	Remaining Contractual Life (in years)	ſi	Aggregate Intrinsic Value n thousands)
Outstanding at December 31, 2013	3,985,851	\$	0.25	9.4	\$	61
Granted	1,093,485		0.51			
Exercised	(54,635)		0.27			
Cancelled	(36,820)		0.27			
Outstanding at December 31, 2014	4,987,881	\$	0.31	8.6	\$	2,494
Granted	3,498,913		1.17			
Exercised	(1,244,434)		0.27			
Cancelled	(153,431)		0.19			
Outstanding at September 30, 2015	7,088,929	\$	0.74	8.8	\$	7,848
Exercisable at December 31, 2014	2,033,484	\$	0.30		\$	1,046
Vested and expected to vest at						
December 31, 2014	4,987,881	\$	0.31	8.6	\$	2,494
Exercisable at September 30, 2015	1,640,688	\$	0.35	8.0	\$	2,454
Vested and expected to vest at						
September 30, 2015	7,088,929	\$	0.74	8.8	\$	7,848

The intrinsic value of options exercised during the year ended December 31, 2014 was \$6,000 and during the nine months ended September 30, 2015 was \$1.6 million.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

11. Stock-Based Payments (Continued)

Restricted Common Stock

At various dates in 2012 and 2013, upon approval by its board of directors, the Company issued an aggregate of 6,079,931 shares of restricted Common Stock to certain advisors at a purchase price of \$0.001 per share. Of the restricted Common Stock issued by the Company, 6,000,000 shares begin vesting upon the achievement of certain performance objectives as well as continued service to the Company, as set forth in each grantee's individual restricted stock purchase agreement. The remaining 79,931 shares of restricted Common Stock are subject to the Company, as set forth in the director's individual restricted stock purchase agreement. The shares of restricted Common Stock are subject to repurchase rights. Accordingly, the Company has recorded the proceeds from the issuance of restricted Common Stock as a liability in the accompanying balance sheets. The restricted stock liability is reclassified into stockholders' (deficit) equity as the restricted Common Stock vests.

A summary of the status of unvested restricted Common Stock as of December 31, 2014 and September 30, 2015 and changes during the year ended December 31, 2014 and the nine months ended September 30, 2015 is presented below:

	Shares	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2013	3,154,931 \$	0.10
Issued		
Vested	(921,648)	0.10
Repurchased	_	_
Unvested at December 31, 2014	2,233,283 \$	0.10
Issued		_
Vested	(989,987)	0.05
Repurchased	_	_
Unvested at September 30, 2015	1,243,296 \$	0.10

The non-employee restricted Common Stock is revalued as it vests. The expense related to the restricted Common Stock issued to non-employees for the years ended December 31, 2013 and 2014 was \$0.4 million and \$0.6 million, respectively, and for the nine months ended September 30, 2014 and 2015 was \$0.4 million and \$1.6 million, respectively.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

11. Stock-Based Payments (Continued)

Stock-based Compensation Expense

The fair value of each stock option granted was estimated on the date of grant using the Black-Scholes option-pricing model based on the following weighted-average assumptions:

	Decembe	er 31,	September 30,
	2013 2014		2015
Weighted-average risk-free interest rate	1.21%	2.00%	1.76%
Expected dividend yield	0%	0%	0%
Expected option term	6.11	7.03	6.09
Volatility	89.23%	85.51%	82.59%

The weighted-average grant date fair value per share of options granted during the year ended December 31, 2013 was \$0.19, during the year ended December 31, 2014 was \$0.39 and during the nine months ended September 30, 2015 was \$1.18.

The following table summarizes the stock-based compensation expense for stock options and restricted common stock granted to employees and non-employees recorded in the Company's statements of operations:

		Year ended December 31,			Nine months ended September 30,			
	_			2014	2014			2015
Research and development	\$	673	\$	830	\$	514	\$	2,073
General and administrative		148		107		73		312
Total stock-based compensation expense	\$	821	\$	937	\$	587	\$	2,385

As of September 30, 2015, there was \$6.4 million of total unrecognized compensation cost related to non-vested stock options and unvested restricted Common Stock, which is expected to be recognized over a weighted-average period of 2.7 years.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

12. Income Taxes

A reconciliation of the expected income tax (benefit) computed using the federal statutory income tax rate to the Company's effective income tax rate is as follows:

	Year end December	
	2013	2014
Federal income tax computed at federal statutory tax rate	34.00%	34.00%
State income tax, net of federal benefit	4.80%	4.86%
Permanent items	(3.81)%	(1.94)%
Federal and state research and development credits	5.61%	4.73%
Other	0.17%	%
Change in valuation allowance	(40.77)%	(41.65)%
Effective income tax rate	0.00%	0.00%

The principal components of the Company's deferred tax assets and liabilities consist of the following at December 31, 2013 and 2014, respectively (in thousands):

		ended 1ber 31,
	2013	2014
Deferred tax assets:		
Federal and state net operating loss carryforwards	\$ 2,945	\$ 7,969
Tax credit carryforwards	486	1,121
Intangible assets	548	430
Stock-based compensation	20	87
Other	103	83
Total deferred tax assets	4,102	9,690
Less valuation allowance	(4,102)	(9,690)
Net deferred tax assets		
Deferred tax liabilities:	—	
Net deferred taxes	\$ —	\$ —

As of December 31, 2014 the Company had federal net operating loss ("NOL") carryforwards of approximately \$20.3 million and state net operating loss carryforwards of \$20.2 million, which are available to reduce future taxable income. The Company also had federal tax credits of approximately \$0.8 million and state tax credits of \$0.5 million, which may be used to offset future tax liabilities. The NOL and tax credit carryforwards will expire at various dates through 2034. The NOL and tax credit carryforwards are subject to review and possible adjustment by the Internal Revenue Service ("IRS") and state tax authorities. Net operating loss and tax credit carryforwards may become subject to an annual limitation in the event of certain cumulative changes in the ownership interest of significant shareholders over a three-year period in excess of 50%, as defined under Sections 382 and 383 of the Internal Revenue Code, respectively, as well as similar state provisions. This could limit the amount of

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

12. Income Taxes (Continued)

tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the value of the Company immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation in future years. The Company has not determined whether an ownership change has occurred and as such, the Company's NOLs may be limited.

ASC 740 requires a valuation allowance to reduce the deferred tax assets reported if, based on the weight of the evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. After consideration of all the evidence, both positive and negative, the Company has recorded a valuation allowance against its deferred tax assets at December 31, 2013 and 2014, respectively, because the Company's management has determined that it is more likely than not that these assets will not be fully realized. The increase in the valuation allowance in 2014 primarily relates to the net loss incurred by the Company.

As of December 31, 2014, the Company had no federal and state net operating losses related to excess tax deductions that have been excluded from the above table. The benefit of these net operating losses will be recognized as an increase in additional paid in capital when it results in a reduction in taxes payable.

The Company has not as yet conducted a study of its research and development credit carryforwards. This study may result in an adjustment to the Company's research and development credit carryforwards. A full valuation allowance has been provided against the Company's research and development credits, and if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Thus, there would be no impact to the balance sheets or statements of operations if an adjustment were required.

The Company's reserves related to taxes are based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more likely than not to be realized following resolution of any potential contingencies present related to the tax benefit. At December 31, 2013 and 2014, the Company had no unrecognized tax benefits. The Company's policy is to recognize both interest and penalties related to unrecognized tax benefits in income tax expense.

The statute of limitations for assessment by the IRS, and state tax authorities remains open for all tax years. The Company files income tax returns in the U.S. federal and Massachusetts jurisdictions. There are currently no federal or state audits in process.

13. Research Agreement

In November 2014, the Company entered into a research agreement with a multinational pharmaceutical company (the "Counterparty") for purposes of mapping immune cell super-enhancers ("SE") and transcriptional targets in autoimmune disease. Under the research agreement, the Company will be responsible for the conduct of all activities under separate projects, as defined in the research agreement, associated with generating SE and transcriptional maps of the cell/tissue supplied by the pharmaceutical company. Upon the completion of each project, the Counterparty will determine whether to commence the next project under the research agreement upon written notification.

Notes to Consolidated Financial Statements (Continued)

(Information as of September 30, 2015 and for the nine months ended September 30, 2014 and 2015 is unaudited)

13. Research Agreement (Continued)

The research agreement expires on the earlier of November 30, 2016 or completion of the research program, unless otherwise terminated earlier. The research agreement terminates automatically if the Counterparty does not notify the Company that it would like to commence the next research project.

In exchange for these research services, the Company may receive funding of up to \$3.0 million over the term of the agreement. The Company will recognize revenue on a completed performance basis for each project performed under the agreement, as the Company does not have the ability to reasonably estimate the period of performance and the final study report for each project is significant to the overall arrangement. The Company recognized revenue of \$0.3 million during the nine months ended September 30, 2015 related to the pilot project of the research agreement.

14. Related Party Transactions

During the year ended December 31, 2014, the Company paid to WuXi PharmaTech ("WuXi") \$1.1 million in cash for external research and preclinical development services. During the nine months ended September 30, 2015, the Company paid WuXi \$2.1 million in cash for external research and preclinical development services. In August 2012, as part of the Series A-1 Preferred Stock financing, WuXi purchased 500,000 shares of Series A-1 Preferred Stock at a purchase price of \$0.50 per share, for a total purchase value of \$250,000. In April 2013, as part of the Series A-2 Preferred Stock financing, WuXi purchased 500,000 shares of Series A-2 Preferred Stock financing, WuXi purchased 500,000 shares of Series A-2 Preferred Stock at a purchase price of \$1.00 per share, for a total purchase value of \$500,000. In March 2014, as part of the Series A-3 Preferred Stock at a purchase price of \$1.00 per share, for a total purchase value of \$500,000. In October 2014, as part of the Series B Preferred Stock financing, WuXi purchased 953,561 shares of Series B Preferred Stock at a purchase price per share of \$3.1461, for a total purchase value of \$3,000,000.

In October 2012, the Company entered into an operating lease for office and laboratory space in Watertown, Massachusetts with Alexandria Real Estate Equities ("ARE"). As part of the lease agreement, the Company granted ARE the right to participate in the Company's Series A-2 Preferred Stock financing. In April 2013, as part of the Series A-2 Preferred Stock financing, ARE purchased 250,000 shares of Series A-2 Preferred Stock at a purchase price of \$1.00 per share, for a total purchase value of \$250,000. During the year ended December 31, 2014, the Company paid to ARE \$0.5 million in cash for rent and miscellaneous facilities costs. During the nine months ended September 30, 2015, the Company paid to ARE \$0.3 million for rent and miscellaneous facilities costs.

15. Defined Contribution Plan

The Company established a defined contribution savings plan under Section 401(k) of the Internal Revenue Code. This plan covers substantially all employees who meet minimum age and service requirements and allows participants to defer a portion of their annual compensation on a pretax basis. Company contributions to the plan may be made at the discretion of the board of directors. Through September 30, 2015, no contributions had been made to the plan by the Company.

Shares



Common Stock

PROSPECTUS

Cowen and Company

Piper Jaffray

JMP Securities

Wedbush PacGrow

, 2016

Through and including , 2016 (the 25th day after the date of this prospectus), all dealers that buy, sell or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the expenses to be incurred in connection with the offering described in this Registration Statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimates except the Securities and Exchange Commission, or SEC, registration fee, the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee and the NASDAQ listing fee.

	Amount
SEC registration fee	*
FINRA filing fee	*
NASDAQ listing fee	*
Accounting fees and expenses	*
Legal fees and expenses	*
Blue Sky fees and expenses (including legal fees)	*
Transfer Agent and Registrar fees and expenses	*
Printing and engraving expenses	*
Miscellaneous fees and expenses	*
Total expenses	*

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of its directors or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Upon the closing of this offering, our restated certificate of incorporation will provide that none of our directors shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the

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circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Upon the closing of this offering, our restated certificate of incorporation will provide that we will indemnify each person who was or is a party or threatened to be made a party to or is involved in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, our director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful. Our restated certificate of incorporation that will be effective upon the closing of the offering also provides that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, our director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred by him or her or on his or her behalf in connection therewith. If we do not assume the defense, expenses must be advanced to an Indemnitee under certain circumstances.

We have entered into indemnification agreements with our directors and executive officers. In general, these agreements provide that we will indemnify the director or executive officer to the fullest extent permitted by law for claims arising in his or her capacity as a director or officer of our company or in connection with their service at our request for another corporation or entity. The indemnification agreements also provide for procedures that will apply in the event that a director or executive officer makes a claim for indemnification and establish certain presumptions that are favorable to the director or executive officer.

We maintain a general liability insurance policy that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

The underwriting agreement we will enter into in connection with the offering of common stock being registered hereby provides that the underwriters will indemnify, under certain conditions, our directors and officers (as well as certain other persons) against certain liabilities arising in connection with such offering.

Insofar as the forgoing provisions permit indemnification of directors, executive officers, or persons controlling us for liability arising under the Securities Act of 1933, as amended, or the Securities Act, we have been informed that, in the opinion of the Securities and Exchange Commission, such

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indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding shares of our common stock and shares of our preferred stock, and stock options granted, by us within the past three years that were not registered under the Securities Act. Included is the consideration, if any, we received for such shares and options and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

(a) Issuance of shares of capital stock

In August 2012, we issued and sold 3,999,900 shares of our common stock at a price per share of \$0.001 for an aggregate purchase price of \$3,999.90. In December 2012, we issued and sold 1,600,000 shares of our common stock at a price per share of \$0.001 for an aggregate purchase price of \$1,600. In January 2013, we issued and sold 2,000,000 shares of our common stock at a price per share of \$0.001 for an aggregate purchase price of \$2,000.

In August 2012, we issued and sold an aggregate of 2,500,000 shares of our Series A-1 preferred stock at a price per share of \$0.50, for an aggregate purchase price of \$1.25 million. In April and November 2013, we issued and sold an aggregate of 12,100,000 shares of our Series A-2 preferred stock at a price per share of \$1.00, for an aggregate purchase price of \$12.1 million.

In August 2013, we issued 643,782 shares of common stock to the Whitehead Institute for Biomedical Research pursuant to the terms of certain license agreements between us and the Whitehead Institute for Biomedical Research.

In November 2013, we issued and sold 79,931 shares of common stock pursuant to our 2012 equity incentive plan at a price per share of \$0.27 for an aggregate purchase price of \$21,581.37.

In March and August 2014, we issued and sold an aggregate of 15,750,000 shares of our Series A-3 preferred stock at a price per share of \$1.00, for an aggregate purchase price of \$15.75 million.

In October 2014, we issued and sold an aggregate of 16,893,931 shares of our Series B preferred stock at a price per share of \$3.1461, for an aggregate purchase price of \$53.1 million.

No underwriters were involved in the foregoing issuances of securities. The securities described in this section (a) of Item 15 were issued to investors in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 4(a)(2) under the Securities Act and Regulation D promulgated thereunder relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. The recipients of securities in the transactions described above represented that they were accredited investors and were acquiring the securities for their own account for investment purposes only and not with a view to, or for sale in connection with, any distribution thereof and that they could bear the risks of the investment and could hold the securities for an indefinite period of time and appropriate legends were affixed to the instruments representing such securities issued in such transactions.

(b) Stock option grants and option exercises

From January 1, 2012 through the date of the prospectus that is a part of this registration statement, we granted options to purchase an aggregate of shares of common stock, with exercise prices ranging from \$ to \$ per share, to employees, directors, consultants and advisors pursuant to our 2012 equity incentive plan. We also issued options to purchase shares of common stock, with an exercise price of \$, to two consultants outside of our 2012 equity incentive

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plan. From January 1, 2012 through the date of the prospectus that is a part of this registration statement, we issued an aggregate of shares of common stock upon the exercise of options for aggregate consideration of \$

No underwriters were involved in the foregoing issuances of securities. The issuances of stock options and the shares of our common stock issued upon the exercise of the options described in this paragraph (b) of Item 15 were issued pursuant to written compensatory plans or arrangements with our employees, directors and consultants, in reliance on the exemption provided by Rule 701 promulgated under the Securities Act, or pursuant to Section 4(a)(2) under the Securities Act, relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. All recipients either received adequate information about us or had access, through employment or other relationships, to such information.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

The exhibits to the registration statement are listed in the Exhibit Index attached hereto and incorporated by reference herein.

(b) Financial Statement Schedules.

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or notes.

Item 17. Undertakings.

- (a) The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.
- (b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.
- (c) The undersigned registrant hereby undertakes that:
 - (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
 - (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.



SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on this day of , 2016.

SYROS PHARMACEUTICALS, INC.

By:

Nancy Simonian, M.D. President, Chief Executive Officer and Director

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Syros Pharmaceuticals, Inc., hereby severally constitute and appoint , and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement (or any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities held on the dates indicated.

Signature	<u>Title</u>	Date	
Nancy Simonian, M.D.	President, Chief Executive Officer and Director (principal executive officer)	, 2016	
Jorge Conde	Chief Financial Officer (principal financial and principal accounting officer)	, 2016	
	Director	, 2016	
Stéphane Bancel			
	Director	, 2016	
Marsha H. Fanucci			
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	Signature	Title	Date
-	Robert Nelsen	Director	, 2016
-	Vicki L. Sato, Ph.D.	Director	, 2016
-	Phillip A. Sharp, Ph.D.	Director	, 2016
-		Director	, 2016
	Richard A. Young, Ph.D.	II-6	
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EXHIBIT INDEX

Exhibit Number	Description of Exhibit
	Form of Underwriting Agreement
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as amended
3.2	Bylaws of the Registrant
3.3*	Form of Restated Certificate of Incorporation of the Registrant (to be effective upon the closing of this offering)
3.4*	Form of Amended and Restated Bylaws of the Registrant (to be effective upon the closing of this offering)
4.1*	Specimen stock certificate evidencing the shares of common stock
4.2	Investors' Rights Agreement, dated as of October 9, 2014, as amended, among the Registrant and the other parties thereto
5.1*	Opinion of Wilmer Cutler Pickering Hale and Dorr LLP
10.1*	2012 Equity Incentive Plan, as amended
10.2†	Form of Incentive Stock Option Agreement under 2012 Equity Incentive Plan
10.3†	Form of Nonstatutory Stock Option Agreement under 2012 Equity Incentive Plan
10.4†	Form of Restricted Stock Agreement under 2012 Equity Incentive Plan
10.5†'	*2016 Stock Incentive Plan
10.6†'	Form of Incentive Stock Option Agreement under 2016 Stock Incentive Plan
10.7†'	Form of Nonstatutory Stock Option Agreement under 2016 Stock Incentive Plan
10.8†'	*2016 Employee Stock Purchase Plan
10.9†	Offer Letter, dated November 13, 2012 and effective as of July 2, 2012, by and between the Registrant and Nancy Simonian, M.D.
10.10†'	*Offer Letter, dated April 24, 2013, by and between the Registrant and Eric Olson, Ph.D., as amended
10.11†	Offer Letter, dated May 13, 2014, by and between the Registrant and Jorge Conde
10.12*	Form of Director and Officer Indemnification Agreement by and between the Registrant and each of Nancy Simonian, M.D., Jorge Conde, Jonathan Garen, Kyle D. Kuvalanka, Eric R. Olson, Stéphane Bancel, Marsha H. Fanucci, Robert Nelsen, Vicki L. Sato, Ph.D., Phillip A. Sharp, Ph.D. and Richard A. Young, Ph.D.
10.13+	Exclusive License Agreement, by and between the Registrant and the Dana-Farber Cancer Institute, Inc., dated as of February 22, 2013
10.14+	Exclusive Patent License Agreement, by and among the Registrant, the Whitehead Institute for Biomedical Research and the Dana-Farber Cancer Institute, dated as of April 1, 2013
10.15+	Exclusive Patent License Agreement, by and between the Registrant and the Whitehead Institute for Biomedical Research, dated as of April 4, 2013
10.16+	License Agreement, by and between the Registrant and TMRC Co., Ltd., dated as of September 11, 2015

Exhibit Number	Description of Exhibit		
10.17	Lease, by and between the Registrant and 620 Memorial Leasehold LLC, dated as of March 13, 2015		
21.1 Subsidiaries of the Registrant			
23.1*	Consent of Ernst & Young LLP, independent registered public accounting firm.		
23.2*	Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1)		
24.1*	Power of Attorney (included on signature page)		
* То	be filed by amendment.		
	onfidential treatment requested as to certain portions, which portions have been omitted and filed separately with the curities and Exchange Commission.		
† Inc	licates management contract or compensatory plan.		
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THIRD AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF SYROS PHARMACEUTICALS, INC.

SYROS PHARMACEUTICALS, INC.

(Pursuant to Sections 242 and 245 of the General Corporation Law of the State of Delaware)

Syros Pharmaceuticals, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the "General Corporation Law"),

DOES HEREBY CERTIFY:

1. That the name of this corporation is Syros Pharmaceuticals, Inc., and that this corporation was originally incorporated under the name LS22, Inc. pursuant to the General Corporation Law on November 9, 2011.

2. That the Board of Directors duly adopted resolutions proposing to amend and restate the Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Certificate of Incorporation of this corporation be amended and restated in its entirety to read as

follows:

FIRST: The name of this corporation is Syros Pharmaceuticals, Inc. (the "Corporation").

SECOND: The address of the registered office of the Corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 64,571,908 shares of Common Stock, \$0.001 par value per share ("**Common Stock**"), and (ii) 47,243,931 shares of Preferred Stock, \$0.001 par value per share ("**Preferred Stock**"), of which 2,500,000 shares have been designated as "**Series A-1 Preferred Stock**," 12,100,000 shares have been designated as "**Series A-2 Preferred Stock**," 15,750,000 shares have been designated as "**Series A-3 Preferred Stock**" (together, the "**Series A Preferred Stock**") and 16,893,931 shares have been designated as "**Series B Preferred Stock**."

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. <u>General</u>. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. <u>Voting</u>. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); <u>provided</u>, <u>however</u>, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to the Certificate of Incorporation that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation or pursuant to the General Corporation Law. There shall be no cumulative voting. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of the Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation Law.

B. PREFERRED STOCK

Preferred Stock may be issued from time to time in one or more series, each of such series to consist of such number of shares and to have such terms, rights, powers and preferences, and the qualifications and limitations with respect thereto, as stated or expressed herein.

SERIES B PREFERRED STOCK

The Preferred Stock shall have the following rights, preferences, powers, privileges and restrictions, qualifications and limitations. Unless otherwise indicated, references to "Sections" or "Subsections" in this Part C of this Article Fourth refer to sections and subsections of Part C of this Article Fourth.

1. <u>Dividends</u>.

1.1 <u>Series B Preferred Stock Dividends</u>. From and after the date of the issuance of any shares of Series B Preferred Stock, dividends at the rate per annum of 0.1887 per share shall accrue on such shares of Series B Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock), from and after the date of issuance of any shares of

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Series B Preferred Stock (the "Series B Accruing Dividends"). Series B Accruing Dividends shall accrue from day to day, whether or not declared, and shall be cumulative; provided, however, that except as set forth in the following sentence of this Subsection 1.1 or in Subsection 2.1, such Series B Accruing Dividends shall be payable only when, as, and if declared by a majority of the Board of Directors and the Corporation shall be under no obligation to pay such Series B Accruing Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series B Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series B Preferred Stock in an amount at least equal to the greater of (i) the amount of the aggregate Series B Accruing Dividends then accrued on such share of Series B Preferred Stock and not previously paid and (ii) (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series B Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Series B Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series B Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Series B Original Issue Price (as defined below); provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series B Preferred Stock pursuant to this Subsection 1.1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series B Preferred Stock dividend. The "Series B Original Issue Price" shall mean \$3.1461 per share subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series B Preferred Stock.

1.2 Series A-1 Preferred Stock, Series A-2 Preferred Stock and Series A-3 Preferred Stock Dividends. From and after the date of the issuance of any shares of Series A-1 Preferred Stock, dividends at the rate per annum of \$0.03 per share shall accrue on such shares of Series A-1 Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-1 Preferred Stock), from and after the date of issuance of any shares of Series A-2 Preferred Stock (subject to appropriate adjustment in the event of any stock dividends at the rate per annum of \$0.06 per share shall accrue on such shares of Series A-2 Preferred Stock, dividends at the rate per annum of \$0.06 per share shall accrue on such shares of Series A-3 Preferred Stock, dividends at the rate per annum of \$0.06 per share shall accrue of any shares of Series A-3 Preferred Stock, dividends at the rate per annum of \$0.06 per share shall accrue of any shares of Series A-3 Preferred Stock, dividends at the rate per annum of \$0.06 per share shall accrue on such shares of Series A-3 Preferred Stock, dividends at the rate per annum of \$0.06 per share shall accrue on such shares of Series A-3 Preferred Stock (subject to appropriate adjustment in the event of \$0.06 per share shall accrue on such shares of Series A-3 Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-3 Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A-3 Preferred Stock) (together, the "Series A Accruing Dividends"). Series A Accruing Dividends shall accrue from day to day,

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whether or not declared, and shall be cumulative; provided however, that except as set forth in the following sentence of this Section 1 or in Subsection 2.1, such Series A Accruing Dividends shall be payable only when, as, and if declared by the Board of Directors and the Corporation shall be under no obligation to pay such Series A Accruing Dividends. The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than the Series B Accruing Dividends payable pursuant to Subsection 1.1, or dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in the Certificate of Incorporation) the holders of the Series A Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series A Preferred Stock in an amount at least equal to the greater of (i) the amount of the aggregate Series A Accruing Dividends then accrued on such share of Series A Preferred Stock and not previously paid and (ii) (A) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series A Preferred Stock as would equal the product of (1) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (2) the number of shares of Common Stock issuable upon conversion of a share of Series A Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (B) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series A Preferred Stock determined by (1) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (2) multiplying such fraction by an amount equal to the Series A-1 Original Issue Price, Series A-2 Original Issue Price, or Series A-3 Original Issue Price, as applicable (each as defined below); provided that, if the Corporation declares, pays or sets aside, on the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, other than the Series B Preferred Stock, the dividend payable to the holders of Series A Preferred Stock pursuant to this <u>Section 1.2</u> shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest Series A Preferred Stock dividend. The "Series A-1 Original Issue Price" shall mean \$0.50 per share, the "Series A-2 Original Issue Price" shall mean \$1.00 per share, and the "Series A-3 Original Issue Price" shall mean \$1.00 per share, in each case subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock.

1.3 <u>Other Dividends</u>. After payment of dividends in the amounts set forth above, any additional dividends declared shall be distributed among all holders of Preferred Stock and Common Stock in proportion to the number of shares of Common Stock that would be held by each such holder if all shares of Preferred Stock were converted to Common Stock.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 <u>Preferential Payments to Holders of Series B Preferred Stock</u>. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event (as defined below), the holders of shares of Series B Preferred Stock then outstanding shall be entitled to be paid out of the assets of the Corporation

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available for distribution to its stockholders before any payment shall be made to the holders of Series A Preferred Stock, Common Stock, or any other securities of the Corporation by reason of their ownership thereof, an amount per share equal to the greater of (i) the Series B Original Issue Price, plus any Series B Accruing Dividends accrued but unpaid thereon, whether or not declared, together with any other dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series B Preferred Stock been converted into Common Stock pursuant to <u>Section 4</u> immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence is hereinafter referred to as the "Series B Liquidation Amount"). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series B Preferred Stock the full amount to which they shall be entitled under this <u>Subsection 2.1</u>, the holders of shares of Series B Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

Preferential Payments to Holders of Series A Preferred Stock. In the event of any voluntary or 2.2 involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Series B Preferred Stock pursuant to Subsection 2.1 hereof, the holders of shares of Series A-1 Preferred Stock, Series A-2 Preferred Stock and Series A-3 Preferred stock then outstanding shall be entitled to be paid out of the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of shares of Series A Preferred Stock then outstanding before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the Series A-1 Original Issue Price, Series A-2 Original Issue Price, or Series A-3 Original Issue Price, as applicable, plus any Series A Accruing Dividends declared but unpaid thereon, or (ii) such amount per share as would have been payable had all shares of Series A Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution or, winding up or Deemed Liquidation Event (the amounts payable pursuant to this sentence are hereinafter referred to as the "Series A Liquidation Amount"). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series A Preferred Stock the full amount to which they shall be entitled under this Subsection 2.2, the holders of shares of Series A Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.3 <u>Payments to Holders of Common Stock</u>. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of shares of Common Stock, pro rata based on the number of shares held by each such holder.

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2.4 <u>Deemed Liquidation Events</u>.

2.4.1. <u>Definition</u>. Each of the following events shall be considered a "**Deemed Liquidation Event**" unless the holders of at least sixty six and two thirds percent (66 2/3%) of the outstanding shares of Preferred Stock and at least sixty six and two thirds percent (66 2/3%) of the outstanding shares of Series B Preferred Stock elect otherwise by written notice sent to the Corporation at least twenty (20) days prior to the effective date of any such event:

- (a) a merger or consolidation in which
 - (i) the Corporation is a constituent party or

(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(b) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or the sale or disposition (whether by merger, consolidation or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

2.4.2. Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in <u>Subsection 2.4.1(a)(i)</u> unless the agreement or plan of merger or consolidation for such transaction (the "**Merger Agreement**") provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with <u>Subsections 2.1, 2.2</u>, and <u>2.3</u>.

(b) In the event of a Deemed Liquidation Event referred to in <u>Subsection 2.4.1(a)(ii)</u> or <u>2.4.1(b)</u>, if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within ninety (90) days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Preferred

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Stock no later than the 90th day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Preferred Stock, and (ii) if the holders of at least sixty six and two thirds percent (66 2/3%) of the then outstanding shares of Preferred Stock so request in a written instrument delivered to the Corporation not later than one hundred twenty (120) days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors of the Corporation), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the "Available Proceeds"), on the 150th day after such Deemed Liquidation Event, to redeem all outstanding shares of Preferred Stock at a price per share equal to the Series A Liquidation Amount, or Series B Liquidation Amount, as applicable. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Preferred Stock, the Corporation shall ratably redeem the shares of Preferred Stock in accordance with the preferences and priorities set forth in Subsections 2.1, 2.2 and 2.4.4 to the fullest extent of such Available Proceeds, and shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders in accordance with the preferences and priorities set forth in Subsections 2.1, 2.2 and 2.4.4. The provisions of Section 6 shall apply, with such necessary changes in the details thereof as are necessitated by the context, to the redemption of the Preferred Stock pursuant to this Subsection 2.4.2(b). Prior to the distribution or redemption provided for in this Subsection 2.4.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

2.4.3. <u>Amount Deemed Paid or Distributed</u>. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities paid or distributed to such holders by the Corporation or the acquiring person, firm or other entity. The value of such property, rights or securities shall be determined in good faith by the Board of Directors of the Corporation.

2.4.4. <u>Allocation of Escrow</u>. In the event of a Deemed Liquidation Event pursuant to <u>Subsection</u> <u>2.4.1(a)(i)</u>, if any portion of the consideration payable to the stockholders of the Corporation is placed into escrow and/or is payable to the stockholders of the Corporation subject to contingencies, the Merger Agreement shall provide that (a) the portion of such consideration that is not placed in escrow and not subject to any contingencies (the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with <u>Subsections 2.1, 2.2</u> and <u>2.3</u> as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event and (b) any additional consideration which becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with <u>Subsections 2.1, 2.2</u> and <u>2.3</u> after taking into account the previous payment of the Initial Consideration as part of the same transaction. 3.1 <u>General</u>. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of the Certificate of Incorporation, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class.

3.2 Election of Directors. The holders of record of the shares of Series A Preferred Stock, exclusively and as a separate class, shall be entitled to elect two directors of the Corporation (the "Series A Directors"). Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of shares of Series A Preferred Stock, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Series A Preferred Stock fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Subsection 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Series A Preferred Stock elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Series A Preferred Stock and Series B Preferred Stock), exclusively and voting together as a single class, shall be entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2.

3.3 <u>Series B Preferred Stock Protective Provisions</u>. At any time when shares of Series B Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least sixty six and two thirds percent (66 2/3%) of the then outstanding shares of Series B Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect.

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3.3.1. modify, amend, or waive any provision of the Certificate of Incorporation of the Corporation in a manner adverse to the rights, preferences or privileges of the Series B Preferred Stock;

3.3.2. purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation prior to the Series B Preferred Stock other than repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price or the then-current fair market value thereof; or

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3.3.3. increase or decrease the authorized number of shares of Series B Preferred Stock of the

3.4 <u>Preferred Stock Protective Provisions</u>. At any time when shares of Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or the Certificate of Incorporation) the written consent or affirmative vote of the holders of at least sixty six and two thirds percent (66 2/3%) of the then outstanding shares of Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect.

3.4.1. liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

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3.4.2. amend, alter or repeal any provision of the Certificate of Incorporation or Bylaws of the

3.4.3. create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to the Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or increase the authorized number of shares of Preferred Stock unless the same ranks junior to the Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption; or

3.4.4. purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation prior to the Preferred Stock other than repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price or the then-current fair market value thereof.

4. <u>Optional Conversion</u>.

The holders of the Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

4.1 <u>Right to Convert</u>.

4.1.1. <u>Conversion Ratio</u>. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series A-1 Original Issue Price by the Series A-1 Conversion Price (as defined below), in the case of the Series A-1 Preferred Stock, by dividing the Series A-2 Original Issue Price by the Series A-2 Conversion Price (as defined below), in the case of the Series A-2 Preferred Stock, by dividing the Series A-3 Original Issue Price by the Series A-3 Conversion Price (as defined below), in the case of the Series A-2 Preferred Stock, by dividing the Series A-3 Original Issue Price by the Series B Conversion Price (as defined below), in the case of the Series A-3 Preferred Stock and by dividing the Series B Original Issue Price by the Series B Conversion Price (as defined below), in the case of the Series A-3 Preferred Stock and by dividing the Series B Original Issue Price by the Series B Conversion Price (as defined below), in the case of the Series A-3 Preferred Stock in each case, in effect at the time of conversion. The **"Series A-1 Conversion Price"** shall initially be equal to \$1.00. The **"Series A-3 Conversion Price"** shall initially be equal to \$1.00. The **"Series A-3 Conversion Price"** shall initially be equal to \$1.00. The **"Series A-3 Conversion Price"** shall initially be equal to \$3.1461. The Series A-1 Conversion Price, Series A-2 Conversion Price, Series A-3 Conversion Price"). Such initial Conversion Price, and the rate at which shares of Series A Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2. <u>Termination of Conversion Rights</u>. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Series A-1 Preferred Stock, Series A-2 Preferred Stock, Series A-3 Preferred Stock and Series B Preferred Stock, as the case may be.

4.2 <u>Fractional Shares</u>. No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 <u>Mechanics of Conversion</u>.

4.3.1. <u>Notice of Conversion</u>. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation

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against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the applicable series of Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the "Conversion Time"), and the shares of Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time, (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Preferred Stock converted.

4.3.2. <u>Reservation of Shares</u>. The Corporation shall at all times when any Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to the Certificate of Incorporation. Before taking any action which would cause an adjustment reducing any of the Conversion Prices below the then par value of the shares of Common Stock issuable upon conversion of the applicable series of Preferred

Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and nonassessable shares of Common Stock at such adjusted applicable Conversion Price.

4.3.3. <u>Effect of Conversion</u>. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, and to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in <u>Subsection 4.2</u> and to receive payment of any

dividends declared but unpaid thereon. Any shares of Series A Preferred Stock or Series B Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of such series of Preferred Stock accordingly.

4.3.4. <u>No Further Adjustment</u>. Upon any such conversion, no adjustment to the applicable Conversion Price shall be made for any declared but unpaid dividends on the Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5. <u>Taxes</u>. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Preferred Stock pursuant to this <u>Section 4</u>. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Applicable Conversion Price for Diluting Issues.

apply:

4.4.1. <u>Special Definitions</u>. For purposes of this Article Fourth, the following definitions shall

	(a)	"Option" shall mean rights, options or warrants to subscribe for, purchase or
otherwise acquire Common Stock or Conv	ertible Sec	irities.
Series A-1 Preferred Stock was issued.	(b)	"Series A-1 Original Issue Date" shall mean the date on which the first share of
Series A-2 Preferred Stock was issued.	(c)	"Series A-2 Original Issue Date" shall mean the date on which the first share of
Series A-3 Preferred Stock was issued.	(d)	"Series A-3 Original Issue Date" shall mean the date on which the first share of
Series B Preferred Stock was issued.	(e)	"Series B Original Issue Date" shall mean the date on which the first share of
other securities directly or indirectly conve	(f) ortible into	"Convertible Securities " shall mean any evidences of indebtedness, shares or or exchangeable for Common Stock, but excluding Options.
issued (or, pursuant to <u>Subsection 4.4.3</u> be (1) the following	(g) low, deeme	"Additional Shares of Common Stock" shall mean all shares of Common Stock ad to be issued) by the Corporation after the Series B Original Issue Date, other than
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shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, "**Exempted Securities**"):

(i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Series A Preferred Stock and Series B Preferred Stock, provided (a) the number of shares of Common Stock issued as a dividend or distribution on a share of Series A Preferred Stock multiplied by the number of shares of Common Stock into which a share of Series A Preferred Stock is then convertible is equal (b) to the number of shares of Common Stock issued as a dividend or distribution on a share of Series B Preferred Stock multiplied by the number of shares of Common Stock into which a share of Series B Preferred Stock is then convertible;

- (ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by <u>Subsection 4.5</u>, <u>4.6</u>, <u>4.7</u> or <u>4.8</u>;
- (iii) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors of the Corporation, including at least one Series A Director;
- (iv) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;
- (v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property
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leasing transaction approved by the Board of Directors of the Corporation, including at least one Series A Director;

- (vi) shares of Common Stock, Options or Convertible Securities issued to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors of the Corporation, including at least one Series A Director;
- (vii) shares of Common Stock, Options or Convertible Securities issued to WuXi Pharmatech Healthcare Fund I, L.P. or any of its affiliates (collectively, "Wuxi") pursuant to any research and development services agreement entered into by and between the Corporation and Wuxi;
- (viii) shares of Common Stock, Options or Convertible Securities issued pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are approved by the Board of Directors of the Corporation, including at least one Series A Director; or
- (ix) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors of the Corporation, including at least one Series A Director.

4.4.2. <u>No Adjustment of Conversion Prices</u>. No adjustment in the Series A-1 Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least sixty six and two thirds percent (66 2/3%) of the then outstanding shares of Series A-1 Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series A-2 Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least

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sixty six and two thirds percent (66 2/3%) of the then outstanding shares of Series A-2 Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series A-3 Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least sixty six and two thirds percent (66 2/3%) of the then outstanding shares of Series A-3 Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock. No adjustment in the Series B Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the holders of at least sixty six and two thirds percent (66 2/3%) of the then outstanding shares of Series B Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of at least sixty six and two thirds percent (66 2/3%) of the then outstanding shares of Series B Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3. Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time on or after the Series B Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted

Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the applicable Conversion Price pursuant to the terms of <u>Subsection 4.4.4</u>, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the applicable Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such applicable Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this <u>clause (b)</u> shall have the effect of increasing the applicable Conversion Price to an amount which exceeds the lower of (i) the applicable Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the applicable Conversion Price that would have resulted from any issuances of Additional

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Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to a Conversion Price pursuant to the terms of <u>Subsection 4.4.4</u> (either because the consideration per share (determined pursuant to <u>Subsection 4.4.5</u>) of the Additional Shares of Common Stock subject thereto was equal to or greater than the applicable Conversion Price then in effect, or because such Option or Convertible Security was issued before the Series B Original Issue Date), are revised on or after the Series B Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in <u>Subsection 4.4.3(a)</u> shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the applicable Conversion Price pursuant to the terms of <u>Subsection 4.4.4</u>, the applicable Conversion Price shall be readjusted to such applicable Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(c) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the applicable Conversion Price provided for in this <u>Subsection 4.4.3</u> shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this <u>Subsection 4.4.3</u>.) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to the applicable Conversion Price that would result under the terms of this <u>Subsection 4.4.3</u> at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to the applicable Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

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4.4.4. Adjustment of Conversion Prices Upon Issuance of Additional Shares of Common Stock.

(a) In the event the Corporation shall at any time after the Series B Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to <u>Subsection</u> <u>4.4.3</u>), without consideration or for a consideration per share less than the Series A-1 Conversion Price in effect immediately prior to such issue, then the Series A-1 Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

For purposes of the foregoing formula, the following definitions shall apply:

- (i) "CP₂" shall mean the Series A-1 Conversion Price in effect immediately after such issue of Additional Shares of Common Stock
- (ii) "CP₁" shall mean the Series A-1 Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;
- (iii) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Series A Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);
- (iv) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁); and
- (v) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

(b) In the event the Corporation shall at any time after the Series B Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to <u>Subsection</u> <u>4.4.3</u>), without consideration or for a consideration per share less than the Series A-2 Conversion Price in effect immediately prior to such issue, then the Series A-2 Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

- (i) "CP₂" shall mean the Series A-2 Conversion Price in effect immediately after such issue of Additional Shares of Common Stock
- (ii) "CP₁" shall mean the Series A-2 Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;
- (iii) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Series A Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);
- (iv) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁); and
- (v) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

(c) In the event the Corporation shall at any time after the Series B Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to <u>Subsection</u> <u>4.4.3</u>), without consideration or for a consideration per share less than the Series A-3 Conversion Price in effect

immediately prior to such issue, then the Series A-3 Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

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For purposes of the foregoing formula, the following definitions shall apply:

- (i) "CP₂" shall mean the Series A-3 Conversion Price in effect immediately after such issue of Additional Shares of Common Stock
- (ii) "CP₁" shall mean the Series A-3 Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;
- (iii) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Series A Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);
- (iv) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁); and
- (v) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

(d) In the event the Corporation shall at any time after the Series B Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to <u>Subsection</u> <u>4.4.3</u>), without consideration or for a consideration per share less than the Series B Conversion Price in effect immediately prior to such issue, then the Series B Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

 $CP_2 = CP_1 * (A + B) \div (A + C).$

For purposes of the foregoing formula, the following definitions shall apply:

- "CP2" shall mean the Series B Conversion Price in effect immediately after such issue of Additional Shares of Common Stock;
- "CP₁" shall mean the Series B Conversion Price in effect immediately prior to such issue of Additional Shares of Common Stock;
- (iii) "A" shall mean the number of shares of Common Stock outstanding immediately prior to such issue of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issue or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);
- (iv) "B" shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued at a price per share equal to the Series B Conversion Price in effect immediately prior to such issuance (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by the Series B Conversion Price in effect immediately prior to such issuance); and
- (v) "C" shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5. <u>Determination of Consideration</u>. For purposes of this <u>Subsection 4.4</u>, the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

- (a) <u>Cash and Property</u>: Such consideration shall:
 - (i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the

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Corporation, excluding amounts paid or payable for accrued interest;

- (ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors of the Corporation; and
- (iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in <u>clauses (i)</u> and <u>(ii)</u> above, as determined in good faith by the Board of Directors of the Corporation.
- Options and Convertible Securities. The consideration per share received by the

Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to <u>Subsection 4.4.3</u>, relating to Options and Convertible Securities, shall be determined by dividing

(b)

- (i) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by
- (ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such
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Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6. <u>Multiple Closing Dates</u>. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the applicable Conversion Price pursuant to the terms of <u>Subsection 4.4.4</u> then, upon the final such issuance, the applicable Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 <u>Adjustment for Stock Splits and Combinations</u>. If the Corporation shall at any time or from time to time on or after the Series B Original Issue Date effect a subdivision of the outstanding Common Stock, the applicable Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding shares of Common Stock, the applicable Conversion Price in effect immediately before the combination shall at any time or from time to time on or after the Series B Original Issue Date combine the outstanding shares of Common Stock, the applicable Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 <u>Adjustment for Certain Dividends and Distributions</u>. In the event the Corporation at any time or from time to time on or after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the applicable Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the applicable Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the applicable Conversion Price shall be recomputed accordingly as of the close of business on such record date

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and thereafter the applicable Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) that no such adjustment shall be made if the holders of the applicable series of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 <u>Adjustments for Other Dividends and Distributions</u>. In the event the Corporation at any time or from time to time on or after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of <u>Section 1</u> do not apply to such dividend or distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there 4.8 shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of each series of Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one each share of such series of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors of the Corporation) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the applicable Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock. For the avoidance of doubt, nothing in this Subsection 4.8 shall be construed as preventing the holders of Preferred Stock from seeking any appraisal rights to which they are otherwise entitled under the DGCL in connection with a merger triggering an adjustment hereunder, nor shall this Subsection 4.8 be deemed conclusive evidence of the fair value of the shares of Preferred Stock in any such appraisal proceeding.

4.9 <u>Certificate as to Adjustments</u>. Upon the occurrence of each adjustment or readjustment of the applicable Conversion Price pursuant to this <u>Section 4</u>, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than ten (10) days thereafter, compute such adjustment or readjustment in accordance with the

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terms hereof and furnish to each holder of the applicable series of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the applicable series of Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock (but in any event not later than ten (10) days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the applicable Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of each series of Preferred Stock owned and held by such holder.

4.10 <u>Notice of Record Date</u>. In the event:

(c)

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Corporation, or any Deemed Liquidation Event; or

Corporation,

of the voluntary or involuntary dissolution, liquidation or winding-up of the

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or

right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to each series of Preferred Stock and the Common Stock. Such notice shall be sent at least ten (10) days prior to the record date or effective date for the event specified in such notice.

5. <u>Mandatory Conversion</u>.

5.1 <u>Trigger Events</u>. Upon either (a) the closing of the sale of shares of Common Stock to the public at a price of at least \$5.00 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$30,000,000 of proceeds, net of the underwriting discount and

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commissions, to the Corporation (a "Qualified Public Offering") or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least sixty six and two thirds percent (66 2/3%) of the then outstanding shares of Preferred Stock and at least sixty six and two thirds percent (66 2/3%) of the outstanding shares Series B Preferred Stock (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the "Mandatory Conversion Time"), (i) all outstanding shares of Preferred Stock shall automatically be converted into shares of Common Stock, at the then effective applicable conversion rate and (ii) such shares may not be reissued by the Corporation.

Procedural Requirements. All holders of record of shares of Preferred Stock shall be sent written 5.2 notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Preferred Stock converted pursuant to Subsection 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

6. <u>Redeemed or Otherwise Acquired Shares</u>. Any shares of Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

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7. Waiver. Any of the rights, powers, preferences and other terms of the Preferred Stock set forth herein may be waived on behalf of all holders of Preferred Stock by the affirmative written consent or vote of the holders of at least sixty six and two thirds percent (66 2/3%) of the shares of Preferred Stock then outstanding, considered as a single class. Any of the rights, powers, preferences and other terms of the Series A-1 Preferred Stock set forth herein may be waived on behalf of all holders of Series A-1 Preferred Stock by the affirmative written consent or vote of the holders of at least sixty six and two thirds percent (66 2/3%) of the shares of Series A-1 Preferred Stock then outstanding. Any of the rights, powers, preferences and other terms of the Series A-2 Preferred Stock set forth herein may be waived on behalf of all holders of Series A-2 Preferred Stock by the affirmative written consent or vote of the shares of Series A-2 Preferred Stock then outstanding. Any of the rights, powers, preferences and other terms of the Series A-3 Preferred Stock set forth herein may be waived on behalf of all holders of Series A-3 Preferred Stock set forth herein may be waived on behalf of all holders of Series A-3 Preferred Stock set forth herein may be waived on behalf of all holders of Series A-3 Preferred Stock set forth herein may be waived on behalf of all holders of series A-3 Preferred Stock set forth herein may be waived on behalf of all holders of Series A-3 Preferred Stock set forth herein may be waived on behalf of all holders of series B Preferred Stock by the affirmative written consent or vote of the holders of at least sixty six and two thirds percent (66 2/3%) of the shares of Series B Preferred Stock by the affirmative written consent or vote of the holders of at least sixty six and two thirds percent (66 2/3%) of the shares of Series B Preferred Stock by the affirmative written consent or vote of the holders of at least sixty six and two thirds percent (66 2/3%) of the shares of Series B Prefer

Series B Preferred Stock as the case may be, may not be waived with respect to any particular holder without such holder's consent unless such waiver applies to all holders of the same class and series of stock in the same fashion.

8. <u>Notices</u>. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by the Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by the Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

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NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification.

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

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IN WITNESS WHEREOF, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 8th day of October, 2014.

SYROS PHARMACEUTICALS, INC.

By: /s/ Nancy Simonian, M.D. Name: Nancy Simonian, M.D. Title: Chief Executive Officer and President

BY-LAWS

OF

LS22, INC.

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ARTICLE I

STOCKHOLDERS

1.1 <u>Place of Meetings</u>. All meetings of stockholders shall be held at such place as may be designated from time to time by the Board of Directors, the Chairman of the Board, the Chief Executive Officer or the President or, if not so designated, at the principal office of the corporation. The Board of Directors may, in its sole discretion, determine that a meeting shall not be held at any place, but may instead be held solely by means of remote communication in a manner consistent with the General Corporation Law of the State of Delaware.

1.2 <u>Annual Meeting</u>. The annual meeting of stockholders for the election of directors and for the transaction of such other business as may properly be brought before the meeting shall be held on a date and at a time designated by the Board of Directors, the Chairman of the Board, the Chief Executive Officer or the President (which date shall not be a legal holiday in the place where the meeting is to be held).

1.3 <u>Special Meetings</u>. Special meetings of stockholders for any purpose or purposes may be called at any time by only the Board of Directors, the Chairman of the Board, the Chief Executive Officer or the President, and may not be called by any other person or persons. The Board of Directors may postpone or reschedule any previously scheduled special meeting of stockholders. Business transacted at any special meeting of stockholders shall be limited to matters relating to the purpose or purposes stated in the notice of meeting.

1.4 <u>Notice of Meetings</u>. Except as otherwise provided by law, notice of each meeting of stockholders, whether annual or special, shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting. Without limiting the manner by which notice otherwise may be given to stockholders, any notice shall be effective if given by a form of electronic transmission consented to (in a manner consistent with the General Corporation Law of the State of Delaware) by the stockholder to whom the notice is given. The notices of all meetings shall state the place, if any, date and time of the meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting. The notice of a special meeting shall state, in addition, the purpose or purposes for which the meeting is called. If notice is given by mail, such notice shall be deemed given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. If notice is given by electronic transmission, such notice shall be deemed given at the time specified in Section 232 of the General Corporation Law of the State of Delaware.

1.5 <u>Voting List</u>. The Secretary shall prepare, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, for a period of at least 10 days prior to the meeting: (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the principal place of business of the corporation. If the meeting is to

be held at a physical location (and not solely by means of remote communication), then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. The list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

1.6 Quorum. Except as otherwise provided by law, the Certificate of Incorporation or these By-laws, the holders of a majority in voting power of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at the meeting, present in person, present by means of remote communication in a manner, if any, authorized by the Board of Directors in its sole discretion, or represented by proxy, shall constitute a quorum for the transaction of business; provided, however, that where a separate vote by a class or classes or series of capital stock is required by law or the Certificate of Incorporation, the holders of a majority in voting power of the shares of such class or classes or series of the capital stock of the corporation issued and outstanding and entitled to vote on such matter, present in person, present by means of remote communication in a manner, if any, authorized by the Board of Directors in its sole discretion, or represented by proxy, shall constitute a quorum entitled to take action with respect to the vote on such matter. A quorum, once established at a meeting, shall not be broken by the withdrawal of enough votes to leave less than a quorum.

1.7 <u>Adjournments</u>. Any meeting of stockholders may be adjourned from time to time to any other time and to any other place at which a meeting of stockholders may be held under these By-laws by the chairman of the meeting or by the stockholders present or represented at the meeting and entitled to vote, although less than a quorum. It shall not be necessary to notify any stockholder of any adjournment of less than 30 days if the time and place, if any, of the adjourned meeting, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting, are announced at the meeting at which adjournment is taken, unless after the adjournment a new record date is fixed for the adjourned meeting. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting.

1.8 <u>Voting and Proxies</u>. Each stockholder shall have one vote for each share of stock entitled to vote held of record by such stockholder and a proportionate vote for each fractional share so held, unless otherwise provided by law or the Certificate of Incorporation. Each stockholder of record entitled to vote at a meeting of stockholders, or to express consent or dissent to corporate action without a meeting, may vote or express such consent or dissent in person (including by means of remote communications, if any, by which stockholders may be deemed to be present in person and vote at such meeting) or may authorize another person or persons to vote or act for such stockholder by a proxy executed or transmitted in a manner permitted by the General Corporation Law of the State of Delaware by the stockholder or such stockholder's authorized agent and delivered (including by electronic transmission) to the Secretary of the corporation. No such proxy shall be voted or acted upon after three years from the date of its execution, unless the proxy expressly provides for a longer period.

1.9 Action at Meeting. When a quorum is present at any meeting, any matter other than the election of directors to be voted upon by the stockholders at such meeting shall be decided by the vote of the holders of shares of stock having a majority in voting power of the votes cast by the holders of all of the shares of stock present or represented at the meeting and voting affirmatively or negatively on such matter (or if there are two or more classes or series of stock entitled to vote as separate classes, then in the case of each such class or series, the holders of a majority in voting power of the shares of stock of that class or series present or represented at the meeting and voting affirmatively or negatively on such matter), except when a different vote is required by law, the Certificate of Incorporation or these By-laws. When a quorum is present at any meeting, any election by stockholders of directors shall be determined by a plurality of the votes cast by the stockholders entitled to vote on the election.

1.10 <u>Conduct of Meetings</u>.

(a) <u>Chairman of Meeting</u>. Meetings of stockholders shall be presided over by the Chairman of the Board, if any, or in the Chairman's absence by the Vice Chairman of the Board, if any, or in the Vice Chairman's absence by the Chief Executive Officer, or in the Chief Executive Officer's absence, by the President, or in the President's absence by a Vice President, or in the absence of all of the foregoing persons by a chairman designated by the Board of Directors, or in the absence of such designation by a chairman chosen by vote of the stockholders at the meeting. The Secretary shall act as secretary of the meeting, but in the Secretary's absence the chairman of the meeting may appoint any person to act as secretary of the meeting.

(b) <u>Rules, Regulations and Procedures.</u> The Board of Directors may adopt by resolution such rules, regulations and procedures for the conduct of any meeting of stockholders of the corporation as it shall deem appropriate including, without limitation, such guidelines and procedures as it may deem appropriate regarding the participation by means of remote communication of stockholders and proxyholders not physically present at a meeting. Except to the extent inconsistent with such rules, regulations and procedures as adopted by the Board of Directors, the chairman of any meeting of stockholders shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board of Directors or prescribed by the chairman of the meeting, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders of record of the corporation, their duly authorized and constituted proxies or such other persons as shall be determined; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the Board of Directors or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

1.11 <u>Action without Meeting</u>.

(a) <u>Taking of Action by Consent</u>. Any action required or permitted to be taken at any annual or special meeting of stockholders of the corporation may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, is signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote on such action were present and voted. Except as otherwise provided by the Certificate of Incorporation, stockholders may act by written consent to elect directors; provided, however, that, if such consent is less than unanimous, such action by written consent may be in lieu of holding an annual meeting only if all of the directorships to which directors could be elected at an annual meeting held at the effective time of such action are vacant and are filled by such action.

Electronic Transmission of Consents. A telegram, cablegram or other electronic transmission consenting to an (b)action to be taken and transmitted by a stockholder or proxyholder, or by a person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed and dated for the purposes of this section, provided that any such telegram, cablegram or other electronic transmission sets forth or is delivered with information from which the corporation can determine (i) that the telegram, cablegram or other electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder or proxyholder and (ii) the date on which such stockholder or proxyholder or authorized person or persons transmitted such telegram, cablegram or electronic transmission. The date on which such telegram, cablegram or electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by telegram, cablegram or other electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by telegram, cablegram or other electronic transmission may be otherwise delivered to the principal place of business of the corporation or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded if, to the extent and in the manner provided by resolution of the Board of Directors. Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

(c) <u>Notice of Taking of Corporate Action</u>. Prompt notice of the taking of corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of holders to take the action were delivered to the corporation.

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ARTICLE II

DIRECTORS

2.1 <u>General Powers</u>. The business and affairs of the corporation shall be managed by or under the direction of a Board of Directors, who may exercise all of the powers of the corporation except as otherwise provided by law or the Certificate of Incorporation.

2.2 <u>Number, Election and Qualification</u>. Subject to the rights of holders of any series of Preferred Stock to elect directors, the number of directors of the corporation shall be established from time to time by the stockholders or the Board of Directors. The directors shall be elected at the annual meeting of stockholders by such stockholders as have the right to vote on such election. Election of directors need not be by written ballot. Directors need not be stockholders of the corporation.

2.3 <u>Chairman of the Board; Vice Chairman of the Board</u>. The Board of Directors may appoint from its members a Chairman of the Board and a Vice Chairman of the Board, neither of whom need be an employee or officer of the corporation. If the Board of Directors appoints a Chairman of the Board, such Chairman shall perform such duties and possess such powers as are assigned by the Board of Directors and, if the Chairman of the Board is also designated as the corporation's Chief Executive Officer, shall have the powers and duties of the Chief Executive Officer prescribed in Section 3.7 of these By-laws. If the Board of Directors appoints a Vice Chairman shall perform such duties and possess such powers as are assigned by the Board of Directors. Unless otherwise provided by the Board of Directors, the Chairman of the Board or, in the Chairman's absence, the Vice Chairman of the Board, if any, shall preside at all meetings of the Board of Directors.

2.4 <u>Tenure</u>. Each director shall hold office until the next annual meeting of stockholders and until a successor is elected and qualified, or until such director's earlier death, resignation or removal.

2.5 <u>Quorum</u>. The greater of (a) a majority of the directors at any time in office and (b) one-third of the number of directors fixed pursuant to Section 2.2 of these By-laws shall constitute a quorum of the Board of Directors. If at any meeting of the Board of Directors there shall be less than such a quorum, a majority of the directors present may adjourn the meeting from time to time without further notice other than announcement at the meeting, until a quorum shall be present.

2.6 <u>Action at Meeting</u>. Every act or decision done or made by a majority of the directors present at a meeting of the Board of Directors duly held at which a quorum is present shall be regarded as the act of the Board of Directors, unless a greater number is required by law or by the Certificate of Incorporation.

2.7 <u>Removal</u>. Except as otherwise provided by the General Corporation Law of the State of Delaware, any one or more or all of the directors of the corporation may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors, except that the directors elected by the holders of a particular class or series

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of stock may be removed without cause only by vote of the holders of a majority of the outstanding shares of such class or series.

2.8 <u>Vacancies</u>. Subject to the rights of holders of any series of Preferred Stock to elect directors, unless and until filled by the stockholders, any vacancy or newly-created directorship on the Board of Directors, however occurring, may be filled by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director. A director elected to fill a vacancy shall be elected for the unexpired term of such director's predecessor in office, and a director chosen to fill a position resulting from a newly-created directorship shall hold office until the next annual meeting of stockholders and until a successor is elected and qualified, or until such director's earlier death, resignation or removal.

2.9 <u>Resignation</u>. Any director may resign by delivering a resignation in writing or by electronic transmission to the corporation at its principal office or to the Chairman of the Board, the Chief Executive Officer, the President or the Secretary. Such resignation shall be effective upon delivery unless it is specified to be effective at some later time or upon the happening of some later event.

2.10 <u>Regular Meetings</u>. Regular meetings of the Board Of Directors may be held without notice at such time and place as shall be determined from time to time by the Board of Directors; provided that any director who is absent when such a determination is made shall be given notice of the determination. A regular meeting of the Board of Directors may be held without notice immediately after and at the same place as the annual meeting of stockholders.

2.11 <u>Special Meetings</u>. Special meetings of the Board of Directors may be held at any time and place designated in a call by the Chairman of the Board, the Chief Executive Officer, the President, two or more directors, or by one director in the event that there is only a single director in office.

2.12 <u>Notice of Special Meetings</u>. Notice of the date, place, if any, and time of any special meeting of directors shall be given to each director by the Secretary or by the officer or one of the directors calling the meeting. Notice shall be duly given to each director (a) in person or by telephone at least 24 hours in advance of the meeting, (b) by sending written notice by reputable overnight courier, telecopy, facsimile or electronic transmission, or delivering written notice by hand, to such director's last known business, home or electronic transmission address at least 48 hours in advance of the meeting, or (c) by sending written notice by first-class mail to such director's last known business or home address at least 72 hours in advance of the meeting. A notice or waiver of notice of a meeting of the Board of Directors need not specify the purposes of the meeting.

2.13 <u>Meetings by Conference Communications Equipment</u>. Directors may participate in meetings of the Board of Directors or any committee thereof by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation by such means shall constitute presence in person at such meeting.

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2.14 <u>Action by Consent</u>. Any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent to the action in writing or by electronic transmission, and the written consents or electronic transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

2.15 <u>Committees</u>. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the corporation with such lawfully delegable powers and duties as the Board of Directors thereby confers, to serve at the pleasure of the Board of Directors. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members of the committee present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors and subject to the provisions of law, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation and may authorize the seal of the conduct of its business, but unless otherwise provided by the directors or in such rules, its business shall be conducted as nearly as possible in the same manner as is provided in these By-laws for the Board of Directors. Except as otherwise provided in the Certificate of Incorporation, these By-laws, or the resolution of the Board of Directors designating the committee, a committee may create one or more subcommittees, each

subcommittee to consist of one or more members of the committee, and delegate to a subcommittee any or all of the powers and authority of the committee.

2.16 <u>Compensation of Directors</u>. Directors may be paid such compensation for their services and such reimbursement for expenses of attendance at meetings as the Board of Directors may from time to time determine. No such payment shall preclude any director from serving the corporation or any of its parent or subsidiary entities in any other capacity and receiving compensation for such service.

ARTICLE III

OFFICERS

3.1 <u>Titles</u>. The officers of the corporation shall consist of a Chief Executive Officer, a President, a Secretary, a Treasurer and such other officers with such other titles as the Board of Directors shall determine, including one or more Vice Presidents, Assistant Treasurers and Assistant Secretaries. The Board of Directors may appoint such other officers as it may deem appropriate.

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3.2 <u>Election</u>. The Chief Executive Officer, President, Treasurer and Secretary shall be elected annually by the Board of Directors at its first meeting following the annual meeting of stockholders. Other officers may be appointed by the Board of Directors at such meeting or at any other meeting.

3.3 <u>Qualification</u>. No officer need be a stockholder. Any two or more offices may be held by the same person.

3.4 <u>Tenure</u>. Except as otherwise provided by law, by the Certificate of Incorporation or by these By-laws, each officer shall hold office until such officer's successor is elected and qualified, unless a different term is specified in the resolution electing or appointing such officer, or until such officer's earlier death, resignation or removal.

3.5 <u>Resignation and Removal</u>. Any officer may resign by delivering a written resignation to the corporation at its principal office or to the Chief Executive Officer, the President or the Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some later time or upon the happening of some later event. Any officer may be removed at any time, with or without cause, by vote of a majority of the directors then in office. Except as the Board of Directors may otherwise determine, no officer who resigns or is removed shall have any right to any compensation as an officer for any period following such officer's resignation or removal, or any right to damages on account of such removal, whether such officer's compensation be by the month or by the year or otherwise, unless such compensation is expressly provided for in a duly authorized written agreement with the corporation.

3.6 <u>Vacancies</u>. The Board of Directors may fill any vacancy occurring in any office for any reason and may, in its discretion, leave unfilled for such period as it may determine any offices other than those of Chief Executive Officer, President, Treasurer and Secretary. Each such successor shall hold office for the unexpired term of such officer's predecessor and until a successor is elected and qualified, or until such officer's earlier death, resignation or removal.

3.7 <u>President: Chief Executive Officer</u>. Unless the Board of Directors has designated another person as the corporation's Chief Executive Officer, the President shall be the Chief Executive Officer of the corporation. The Chief Executive Officer shall have general charge and supervision of the business of the corporation subject to the direction of the Board of Directors, and shall perform all duties and have all powers that are commonly incident to the office of chief executive or that are delegated to such officer by the Board of Directors. The President shall perform such other duties and shall have such other powers as the Board of Directors or the Chief Executive Officer (if the President is not the Chief Executive Officer) may from time to time prescribe. In the event of the absence, inability or refusal to act of the Chief Executive Officer or the President (if the President is not the Chief Executive Officer), the Vice President (or if there shall be more than one, the Vice Presidents in the order determined by the Board of Directors) shall perform the duties of the Chief Executive Officer and when so performing such duties shall have all the powers of and be subject to all the restrictions upon the Chief Executive Officer.

3.8 <u>Vice Presidents</u>. Each Vice President shall perform such duties and possess such powers as the Board of Directors or the Chief Executive Officer may from time to time

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prescribe. The Board of Directors may assign to any Vice President the title of Executive Vice President, Senior Vice President or any other title selected by the Board of Directors.

3.9 <u>Secretary and Assistant Secretaries</u>. The Secretary shall perform such duties and shall have such powers as the Board of Directors or the Chief Executive Officer may from time to time prescribe. In addition, the Secretary shall perform such duties and have such powers as are incident to the office of the secretary, including without limitation the duty and power to give notices of all meetings of stockholders and special meetings of the Board of Directors, to attend all meetings of stockholders and the Board of Directors and keep a record of the proceedings, to maintain a stock ledger and prepare lists of stockholders and their addresses as required, to be custodian of corporate records and the corporate seal and to affix and attest to the same on documents.

Any Assistant Secretary shall perform such duties and possess such powers as the Board of Directors, the Chief Executive Officer or the Secretary may from time to time prescribe. In the event of the absence, inability or refusal to act of the Secretary, the

Assistant Secretary (or if there shall be more than one, the Assistant Secretaries in the order determined by the Board of Directors) shall perform the duties and exercise the powers of the Secretary.

In the absence of the Secretary or any Assistant Secretary at any meeting of stockholders or directors, the chairman of the meeting shall designate a temporary secretary to keep a record of the meeting.

3.10 <u>Treasurer and Assistant Treasurers</u>. The Treasurer shall perform such duties and shall have such powers as may from time to time be assigned by the Board of Directors or the Chief Executive Officer. In addition, the Treasurer shall perform such duties and have such powers as are incident to the office of treasurer, including without limitation the duty and power to keep and be responsible for all funds and securities of the corporation, to deposit funds of the corporation in depositories selected in accordance with these By-laws, to disburse such funds as ordered by the Board of Directors, to make proper accounts of such funds, and to render as required by the Board of Directors statements of all such transactions and of the financial condition of the corporation.

The Assistant Treasurers shall perform such duties and possess such powers as the Board of Directors, the Chief Executive Officer or the Treasurer may from time to time prescribe. In the event of the absence, inability or refusal to act of the Treasurer, the Assistant Treasurer (or if there shall be more than one, the Assistant Treasurers in the order determined by the Board of Directors) shall perform the duties and exercise the powers of the Treasurer.

3.11 <u>Salaries</u>. Officers of the corporation shall be entitled to such salaries, compensation or reimbursement as shall be fixed or allowed from time to time by the Board of Directors.

3.12 <u>Delegation of Authority</u>. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

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ARTICLE IV

CAPITAL STOCK

4.1 <u>Issuance of Stock</u>. Subject to the provisions of the Certificate of Incorporation, the whole or any part of any unissued balance of the authorized capital stock of the corporation or the whole or any part of any shares of the authorized capital stock of the corporation held in the corporation's treasury may be issued, sold, transferred or otherwise disposed of by vote of the Board of Directors in such manner, for such lawful consideration and on such terms as the Board of Directors may determine.

4.2 <u>Stock Certificates; Uncertificated Shares</u>. The shares of the corporation shall be represented by certificates, provided that the Board of Directors may provide by resolution or resolutions that some or all of any or all classes or series of the corporation's stock shall be uncertificated shares. Every holder of stock of the corporation represented by certificates shall be entitled to have a certificate, in such form as may be prescribed by law and by the Board of Directors, representing the number of shares held by such holder registered in certificate form. Each such certificate shall be signed in a manner that complies with Section 158 of the General Corporation Law of the State of Delaware.

Each certificate for shares of stock which are subject to any restriction on transfer pursuant to the Certificate of Incorporation, these By-laws, applicable securities laws or any agreement among any number of stockholders or among such holders and the corporation shall have conspicuously noted on the face or back of the certificate either the full text of the restriction or a statement of the existence of such restriction.

If the corporation shall be authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of each certificate representing shares of such class or series of stock, provided that in lieu of the foregoing requirements there may be set forth on the face or back of each certificate representing shares of such class or series of such class or series of stock a statement that the corporation will furnish without charge to each stockholder who so requests a copy of the full text of the powers, designations, limitations or restrictions of such preferences and the qualifications, limitations or restrictions of such class of stock or series thereof and the qualifications, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

Within a reasonable time after the issuance or transfer of uncertificated shares, the corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to Sections 151, 202(a) or 218(a) of the General Corporation Law of the State of Delaware or, with respect to Section 151 of the General Corporation Law of the State of Delaware or, with respect to Section 151 of the General Corporation Law of the State of Delaware, a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

4.3 <u>Transfers</u>. Shares of stock of the corporation shall be transferable in the manner prescribed by law and in these Bylaws. Transfers of shares of stock of the corporation shall be made only on the books of the corporation or by transfer agents designated to transfer shares of stock of the corporation. Subject to applicable law, shares of stock represented by certificates shall be transferred only on the books of the corporation by the surrender to the corporation or its transfer agent of the certificate representing such shares properly endorsed or accompanied by a written assignment or power of attorney properly executed, and with such proof of authority or the authenticity of signature as the corporation or its transfer agent may reasonably require. Except as may be otherwise required by law, by the Certificate of Incorporation or by these By-laws, the corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect to such stock, regardless of any transfer, pledge or other disposition of such stock until the shares have been transferred on the books of the corporation in accordance with the requirements of these By-laws.

4.4 Lost Stolen or Destroyed Certificates. The corporation may issue a new certificate of stock in place of any previously issued certificate alleged to have been lost, stolen or destroyed, upon such terms and conditions as the Board of Directors may prescribe, including the presentation of reasonable evidence of such loss, theft or destruction and the giving of such indemnity and posting of such bond as the Board of Directors may require for the protection of the corporation or any transfer agent or registrar.

4.5 <u>Record Date</u>. The Board of Directors may fix in advance a date as a record date for the determination of the stockholders entitled to notice of or to vote at any meeting of stockholders or to express consent (or dissent) to corporate action without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action. Such record date shall not precede the date on which the resolution fixing the record date is adopted, and such record date shall not be more than 60 nor less than 10 days before the date of such meeting, nor more than 10 days after the date of adoption of a record date for a consent without a meeting, nor more than 60 days prior to any other action to which such record date relates.

If no record date is fixed, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day before the day on which notice is given, or, if notice is waived, at the close of business on the day before the day on which the meeting is held. If no record date is fixed, the record date for determining stockholders entitled to express consent to corporate action without a meeting, when no prior action by the Board of Directors is necessary, shall be the day on which the first consent is properly delivered to the corporation. If no record date is fixed, the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating to such purpose.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

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4.6 <u>Regulations</u>. The issue, transfer, conversion and registration of shares of stock of the corporation shall be governed by such other regulations as the Board of Directors may establish.

ARTICLE V

GENERAL PROVISIONS

5.1 <u>Fiscal Year</u>. Except as from time to time otherwise designated by the Board of Directors, the fiscal year of the corporation shall begin on the first day of January of each year and end on the last day of December in each year.

5.2 <u>Corporate Seal</u>. The corporate seal shall be in such form as shall be approved by the Board of Directors.

5.3 <u>Waiver of Notice</u>. Whenever notice is required to be given by law, by the Certificate of Incorporation or by these Bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before, at or after the time of the event for which notice is to be given, shall be deemed equivalent to notice required to be given to such person. Neither the business nor the purpose of any meeting need be specified in any such waiver. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

5.4 <u>Voting of Securities</u>. Except as the Board of Directors may otherwise designate, the Chief Executive Officer, the President or the Treasurer may waive notice of, vote, or appoint any person or persons to vote, on behalf of the corporation at, and act as, or appoint any person or persons to act as, proxy or attorney-in-fact for this corporation (with or without power of substitution) at, any meeting of stockholders or securityholders of any other entity, the securities of which may be held by this corporation.

5.5 <u>Evidence of Authority</u>. A certificate by the Secretary, or an Assistant Secretary, or a temporary Secretary, as to any action taken by the stockholders, directors, a committee or any officer or representative of the corporation shall as to all persons who rely on the certificate in good faith be conclusive evidence of such action.

5.6 <u>Certificate of Incorporation</u>. All references in these By-laws to the Certificate of Incorporation shall be deemed to refer to the Certificate of Incorporation of the corporation, as amended and in effect from time to time.

5.7 <u>Severability</u>. Any determination that any provision of these By-laws is for any reason inapplicable, illegal or ineffective shall not affect or invalidate any other provision of these By-laws.

5.8 <u>Pronouns</u>. All pronouns used in these By-laws shall be deemed to refer to the masculine, feminine or neuter, singular or plural, as the identity of the person or persons may require.

ARTICLE VI

AMENDMENTS

6.1 <u>By the Board of Directors</u>. These By-laws may be altered, amended or repealed, in whole or in part, or new by-laws may be adopted by the Board of Directors.

6.2 <u>By the Stockholders</u>. These By-laws may be altered, amended or repealed, in whole or in part, or new by-laws may be adopted by the affirmative vote of the holders of a majority of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at any annual meeting of stockholders, or at any special meeting of stockholders, provided notice of such alteration, amendment, repeal or adoption of new by-laws shall have been stated in the notice of such special meeting.

SYROS PHARMACEUTICALS, INC.

SECOND AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

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SECOND AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS SECOND AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT is made as of the 9th day of October, 2014, by and among Syros Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), and each of the investors listed on <u>Schedule A</u> hereto, each of which is referred to in this Agreement as an "**Investor**," and any Additional Purchaser (as defined in the Purchase Agreement (as defined below)) that becomes a party to this Agreement in accordance with <u>Section 6.9</u> hereof.

RECITALS

WHEREAS, prior to the date hereof, the Company and certain of the Investors (the "Initial Investors") entered into an Investors' Rights Agreement, dated as of August 8, 2012 (the "Initial Agreement"), by and among the Company and the individuals and entities listed on Schedule A thereto, in connection with the issuance and sale by the Company to the Initial Investors of shares of the Company's Series A-1 Convertible Preferred Stock, par value \$0.001 per share (the "Series A-1 Preferred Stock"), pursuant to the Series A-1 Preferred Stock Purchase Agreement, dated as of August 8, 2012, by and among the Company and the Initial Investors;

WHEREAS, the Initial Agreement was amended and restated by the Amended and Restated Investors' Rights Agreement, dated as of April 10, 2013, as amended (the "Existing Agreement"), entered into by and among the Company and certain of the Investors (the "Existing Investors"), in connection with (i) the issuance and sale by the Company to such Existing Investors of shares of the Company's Series A-2 Convertible Preferred Stock, par value \$0.001 per share (the "Series A-2 Preferred Stock") pursuant to the Series A-2 Preferred Stock Purchase Agreement, dated as of April 10, 2013, by and among the Company and the Existing Investors, and (ii) the issuance and sale by the Company to such Existing Investors of shares of the Company's Series A-3 Convertible Preferred Stock, par value \$0.001 per share (the "Series A-3 Preferred Stock," and together with the Series A-1 Preferred Stock and the Series A-2 Preferred Stock, the "Series A Preferred Stock") pursuant to the Series A-3 Preferred Stock Put/Call Purchase Agreement, dated as of April 10, 2013, by and among the Company and the Existing Investors;

WHEREAS, the Company and certain of the Investors (the "Series B Investors") have entered into a Series B Preferred Stock Purchase Agreement of even date herewith (as amended and/or restated from time to time, the "Purchase Agreement"), in connection with the issuance and sale by the Company to such Series B Investors of shares of the Company's Series B Convertible Preferred Stock, par value \$0.001 per share (the "Series B Preferred Stock," and together with the Series A-1 Preferred Stock, the Series A-2 Preferred Stock and Series A-3 Preferred Stock, the "Preferred Stock");

WHEREAS, the Company and the Investors desire to amend and restate the Existing Agreement to, among other things, make the Series B Investors parties thereto;

WHEREAS, the Company and the Investors desire to provide for certain arrangements with respect to (i) the registration of shares of capital stock of the Company under

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the Securities Act (as defined below), (ii) the Investors' right of first refusal with respect to certain issuances of securities of the Company, and (iii) certain covenants of the Company;

WHEREAS, pursuant to Section 6.6 of the Existing Agreement, any amendment and restatement of the Existing Agreement requires the written consent of the Company and Existing Investors holding Registrable Securities (as defined in the Existing Agreement) representing at least sixty-six and two-thirds percent (66 2/3%) of the Registrable Securities then outstanding; and

WHEREAS, the signatories of this Agreement hold the requisite number of Registrable Securities to effect the amendment and restatement of the Existing Agreement and desire to amend and restate the Existing Agreement in its entirety.

NOW, THEREFORE, the parties hereby agree as follows:

1. <u>Definitions.</u> For purposes of this Agreement:

1.1. "Affiliate" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer or director of such Person or any venture capital fund now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company with, such Person.

1.2. "Common Stock" means shares of the Company's common stock, par value \$0.001 per share.

1.3. "**Competitor**" means a Person engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in any business or enterprise that is competitive with the Company's business, but shall not include any financial investment firm or collective investment vehicle that, together with its Affiliates, holds less than 20% of the outstanding equity of any Competitor and does not, nor do any of its Affiliates, have a right to designate any members of the Board of Directors of any Competitor.

1.4. **"Damages**" means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

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1.5. **"Derivative Securities**" means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.6. **"Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.7. **"Excluded Registration**" means (i) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.8. **"Fidelity Investors**" means (i) Fidelity Growth Company Commingled Pool; (ii) Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund; (iii) Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund; (iv) Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund; and (v) Fidelity Select Portfolios: Biotechnology Portfolio.

1.9. **"FOIA Party"** means a Person that, in the determination of the Board of Directors, may be subject to, and thereby required to disclose non-public information furnished by or relating to the Company under, the Freedom of Information Act, 5 U.S.C. 552 ("FOIA"), any state public records access law, any state or other jurisdiction's laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.

1.10. **"Form S-1"** means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.11. **"Form S-3"** means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.12. "GAAP" means generally accepted accounting principles in the United States.

1.13. "Holder" means any holder of Registrable Securities who is a party to this Agreement.

1.14. **"Immediate Family Member"** means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

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Agreement.

1.15.

1.16. "IPO" means the Company's first underwritten public offering of its Common Stock under the Securities Act.

"Initiating Holders" means, collectively, Holders who properly initiate a registration request under this

1.17. **"Key Employee**" means any executive-level employee (including division director and vice president-level positions) as well as any employee who, either alone or in concert with others, develops, invents, programs, or designs any Company Intellectual Property (as defined in the Purchase Agreement).

1.18. **"Major Investor**" means any Investor that, individually or together with such Investor's Affiliates, holds at least 2,000,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.19. "**New Securities**" means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

entity.

1.20.

"Person" means any individual, corporation, partnership, trust, limited liability company, association or other

1.21. "**Registrable Securities**" means (i) the Common Stock issuable or issued upon conversion of the Series A Preferred Stock; (ii) the Common Stock issuable or issued upon conversion of the Series B Preferred Stock, (iii) any Common Stock, or any Common Stock issued or issuable (directly or indirectly) upon conversion and/or exercise of any other securities of the Company, acquired by the Investors after the date hereof; (iv) solely for the purposes of <u>Subsection 2.1</u> through <u>Subsection 2.9</u>, <u>Subsection 2.11</u> and <u>Subsection 2.13</u> of this Agreement, the Common Stock issuable upon exercise of options to purchase common stock granted to The Branta Group LLC (the "**Branta Group**") pursuant to that certain consulting agreement, dated as of December 1, 2012 by and between the Company and the Branta Group; and (v) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clauses (i) and (ii) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to <u>Subsection 6.1</u>, and excluding for purposes of <u>Section 2</u> any shares for which registration rights have terminated pursuant to <u>Subsection 2.13</u> of this Agreement.

1.22. "**Registrable Securities then outstanding**" means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.23. **"Restricted Securities**" means the securities of the Company required to bear the legend set forth in <u>Subsection 2.12(b)</u> hereof.

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1.24. "SEC" means the Securities and Exchange Commission.

1.25. "SEC Rule 144" means Rule 144 promulgated by the SEC under the Securities Act.

1.26. "SEC Rule 145" means Rule 145 promulgated by the SEC under the Securities Act.

1.27. **"Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.28. **"Selling Expenses"** means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in <u>Subsection 2.6.</u>

1.29. **"Series A Director**" means any director of the Company that the holders of record of the Series A Preferred Stock are entitled to elect pursuant to the Company's Certificate of Incorporation.

- 1.30. "Series A Preferred Stock" has the meaning ascribed to it in the recitals hereto.
- 1.31. "Series A-1 Preferred Stock" has the meaning ascribed to it in the recitals hereto.

1.32. "Series A-2 Preferred Stock" has the meaning ascribed to it in the recitals hereto.

- 1.33. "Series A-3 Preferred Stock" has the meaning ascribed to it in the recitals hereto.
- 1.34. "Series B Preferred Stock" has the meaning ascribed to it in the recitals hereto.
- 2. <u>Registration Rights.</u> The Company covenants and agrees as follows:
 - 2.1. Demand Registration.

(a) <u>Form S-1 Demand</u>. If at any time after the earlier of (i) five (5) years after the date of this Agreement or (ii) one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of twenty-five percent (25%) of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to the Registrable Securities then outstanding, having an anticipated aggregate offering price, net of Selling Expenses, that would exceed \$5 million, then the Company shall (i) within ten (10) days after the date such request is given, give notice thereof (the "**Demand Notice**") to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within sixty (60) days after the date such request is given

by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of <u>Subsection 2.1(c)</u> and <u>Subsection 2.3</u>.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least twenty-five percent (25%) of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$2 million, then the Company shall (i) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of <u>Subsection 2.1(c)</u> and <u>Subsection 2.3</u>.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this <u>Subsection 2.1</u> a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Company's Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to be filed and it is therefore necessary to defer the filing of such registration statement, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than ninety (90) days after the request of the Initiating Holders is given; <u>provided</u>, <u>however</u>, that the Company may not invoke this right more than once in any twelve (12) month period; and <u>provided further</u> that the Company shall not register any securities for its own account or that of any other stockholder during such ninety (90) day period other than an Excluded Registration.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to <u>Subsection 2.1(a)(i)</u> during the period that is sixty (60) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, <u>provided</u>, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to <u>Subsection 2.1(a)</u>; or (iii) if the Initiating Holders propose to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to <u>Subsection 2.1(b)</u>. The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to <u>Subsection 2.1(b)</u> (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration pursuant to Subsection 2.1(b) (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two

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registrations pursuant to <u>Subsection 2.1(b)</u> within the twelve (12) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this <u>Subsection 2.1(d)</u> until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to <u>Subsection 2.6</u>, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this <u>Subsection 2.1(d)</u>.

2.2. <u>Company Registration</u>. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its securities under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of <u>Subsection 2.3</u>, cause to be registered all of the Registrable Securities that each such Holder this <u>Subsection 2.2</u> before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with <u>Subsection 2.6</u>.

2.3. <u>Underwriting Requirements.</u>

(a) If, pursuant to <u>Subsection 2.1</u>, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to <u>Subsection 2.1</u>, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriter(s) selected for such underwriting. Notwithstanding any other provision of this <u>Subsection 2.3</u>, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the

number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; <u>provided</u>, <u>however</u>, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.

In connection with any offering involving an underwriting of shares of the Company's capital stock (b)pursuant to Subsection 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares. Notwithstanding the foregoing, in no event shall the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Subsection 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

2.4. <u>Obligations of the Company.</u> Whenever required under this <u>Section 2</u> to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such one hundred twenty (120) day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration;

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(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) use its commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; <u>provided that</u> the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) use its commercially reasonable efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing

underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

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In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5. <u>Furnish Information</u>. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this <u>Section 2</u> with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6. Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to <u>Section 2</u>, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; <u>provided, however</u>, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to <u>Subsection 2.1</u> if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to <u>Subsection 2.1(a)</u> or <u>Subsection 2.1(b)</u>, as the case may be; <u>provided further</u> that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to <u>Subsection 2.1(a)</u> or <u>Subsection 2.1(b)</u>. All Selling Expenses relating to Registrable Securities registered pursuant to this <u>Section 2</u> shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7. <u>Delay of Registration</u>. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this <u>Section 2</u>.

2.8. <u>Indemnification</u>. If any Registrable Securities are included in a registration statement under this <u>Section 2</u>:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter,

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controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; <u>provided</u>, <u>however</u>, that the indemnity agreement contained in this <u>Subsection 2.8(a)</u> shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other

aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; <u>provided, however</u>, that the indemnity agreement contained in this <u>Subsection 2.8(b)</u> shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and <u>provided further</u> that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under <u>Subsections 2.8(b)</u> and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this <u>Subsection 2.8</u> of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnifying party will, if a claim in respect thereof is to be made against any indemnifying party under this <u>Subsection 2.8</u>, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; <u>provided</u>, however, that an indemnified party (together with all other indemnifying party would be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this

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Subsection 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Subsection 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Subsection 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Subsection 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Subsection 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; provided, however, that, in any such case, (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Subsection 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Subsection 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this <u>Subsection 2.8</u> shall survive the completion of any offering of Registrable Securities in a registration under this <u>Section 2</u>, and otherwise shall survive the termination of this Agreement.

2.9. <u>Reports Under Exchange Act</u>. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at

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any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies) and (ii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10. <u>Limitations on Subsequent Registration Rights</u>. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that (i) would provide to such holder the right to include securities in any registration on other than either a pro rata basis with respect to the Registrable Securities or on a subordinate basis after all Holders have had the opportunity to include in the registration and offering all shares of Registrable Securities that they wish to so include or (ii) allow such holder or prospective holder to initiate a demand for registration of any securities held by such holder or prospective holder; provided that this limitation shall not apply to any additional Investor who becomes a party to this Agreement in accordance with Subsection 6.9.

2.11. <u>"Market Stand-off" Agreement.</u> Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the initial registration by the Company of shares of its Common Stock or any other equity securities under the Securities Act on a registration statement on Form S-1, and ending on the date specified by the Company and the managing underwriter (such period not to exceed (x) one hundred eighty (180) days, or such other period in each case as may be requested by the Company or an underwriter to accommodate regulatory restrictions on (1) the publication or other distribution of research reports and (2) analyst recommendations and opinions, including, but not limited to, the restrictions contained in FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4), or any successor provisions or amendments thereto), (i) lend; offer; pledge; sell; contract to sell; sell any option or

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contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for the initial public offering or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. The foregoing provisions of this Subsection 2.11 shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the immediate family of the Holder, provided that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and provided further that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if all officers, directors and stockholders individually owning more than one percent (1%) of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock) are subject to the same restrictions. The underwriters in connection with such registration are intended third-party beneficiaries of this Subsection 2.11 and shall have the right, power, and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Subsection 2.11. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Holders subject to such agreements, based on the number of shares subject to such agreements. Notwithstanding the following, the Company shall use its reasonable efforts to obtain the agreement of the managing underwriter(s) (i) to periodic early releases of portions of the securities subject to such agreements upon the occurrence of certain specified events and (ii) that in the event of any early release, all Holders will be released on a pro rata basis from such agreements.

2.12. <u>Restrictions on Transfer</u>.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledge, or transfere of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement.

(b) Each certificate or instrument representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of <u>Subsection 2.12(c)</u>) be stamped or otherwise imprinted with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT

BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT.

THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Subsection 2.12.

The holder of each certificate representing Restricted Securities, by acceptance thereof, agrees to (c)comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144 or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; provided that each transferee agrees in writing to be subject to the terms of this Subsection 2.12. Each certificate or instrument evidencing the Restricted Securities transferred as above provided shall bear, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Subsection 2.12(b), except that such certificate shall not bear such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable 2.13. Securities in any registration pursuant to Subsection 2.1 or Subsection 2.2 shall terminate upon the earliest to occur of:

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Incorporation;

such time as Rule 144 or another similar exemption under the Securities Act is available for the sale (b)of all of such Holder's shares without limitation during a three-month period without registration; and

the closing of a Deemed Liquidation Event, as such term is defined in the Company's Certificate of

- the fifth anniversary of the IPO. (c)
- 3. Information and Observer Rights.

(a)

Delivery of Financial Statements. The Company shall deliver to each Major Investor and the Fidelity 3.1.

Investors:

as soon as practicable, but in any event within one hundred eighty (180) days after the end of each (a) fiscal year of the Company, a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, and (iii) a statement of stockholders' equity as of the end of such year, all such financial statements audited and certified by independent public accountants of regionally recognized standing selected by the Company; notwithstanding the foregoing, the Company shall deliver audited financial statements for the fiscal year ended December 31, 2013 and unaudited financial statements as of August 31, 2014 within forty-five (45) days of the date hereof;

as soon as practicable, but in any event within thirty (30) days after the end of each of the first three (b) (3) quarters of each fiscal year of the Company, unaudited statements of income and of cash flows for such fiscal quarter, and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP);

as soon as practicable after the end of quarter of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct; and

(d) as soon as practicable, but in any event thirty (30) days before the end of each fiscal year, a budget and business plan for the next fiscal year (collectively, the "**Budget**"), approved by the Board of Directors and prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this <u>Subsection 3.1</u> to the contrary, the Company may cease providing the information set forth in this <u>Subsection 3.1</u> during the period starting with the date thirty (30) days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; provided that the Company's covenants under this <u>Subsection 3.1</u> shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

3.2. <u>Inspection</u>. The Company shall permit each Major Investor, at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; <u>provided</u>, <u>however</u>, that the Company shall not be obligated pursuant to this <u>Subsection 3.2</u> to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3. <u>Termination of Information</u>. The covenants set forth in <u>Subsection 3.1</u> and <u>Subsection 3.2</u> shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, or (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, whichever event occurs first.

3.4. <u>Confidentiality</u>. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of this Agreement (including notice of the Company's intention to file a registration statement), unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this <u>Subsection 3.4</u> by such Investor), (b) is or has been independently developed or conceived by the Investor without use of the Company's confidential information, or (c) is or has been made known or disclosed to the Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; <u>provided</u>, however, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this <u>Subsection 3.4</u>; (iii) to any Affiliate, partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, <u>provided</u>, that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; or (iv) as may otherwise be

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required by law, <u>provided</u>, <u>that</u> the Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

3.5. For purposes of this <u>Section 3</u> only, each of the Fidelity Investors and Aisling Capital III, L.P. shall be considered a Major Investor.

4. <u>Rights to Future Stock Issuances</u>.

4.1. <u>Right of First Offer</u>. Subject to the terms and conditions of this <u>Subsection 4.1</u> and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to it in such proportions as it deems appropriate, among (i) itself, (ii) its Affiliates and (iii) its beneficial interest holders, such as limited partners, members or any other Person having "beneficial ownership," as such term is defined in Rule 13d-3 promulgated under the Exchange Act, of such Major Investor ("**Investor Beneficial Owners**"); <u>provided, that</u>, each such Affiliate or Investor Beneficial Owner: (x) is not a Competitor or FOIA Party, unless such party's purchase of New Securities is otherwise consented to by the Board of Directors, (y) agrees to enter into this Agreement and each of the Amended and Restated Voting Agreement and Amended and Restated Right of First Refusal and Co-Sale Agreement of even date herewith among the Company, the Investors and the other parties named therein, as an "**Investor**" under each such agreement (provided that, any Competitor or FOIA Party shall not be entitled to any rights as a Major Investor under Subsections 3.1, 3.2 and 4.1 hereof), and (z) agrees to purchase at least such number of New Securities as are allocable hereunder to the Major Investor holding the fewest number of Preferred Stock and any other Derivative Securities.

(a) The Company shall give notice (the "**Offer Notice**") to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within twenty (20) days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by such Major Investor bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all Preferred Stock and other Derivative Securities and not including any shares of Common Stock issued after the date hereof to employees of the Company, including shares issued upon exercise of stock options). At the expiration of such twenty (20) day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a "Fully Exercising Investor") of any other Major Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors

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which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this <u>Subsection 4.1(b)</u> shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to <u>Subsection 4.1(c)</u>-

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in <u>Subsection 4.1(b)</u>, the Company may, during the ninety (90) day period following the expiration of the periods provided in <u>Subsection 4.1(b)</u>, offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this <u>Subsection 4.1</u>.

(d) The right of first offer in this <u>Subsection 4.1</u> shall not be applicable to (i) Exempted Securities (as defined in the Company's Certificate of Incorporation) and (ii) shares of Common Stock issued in the IPO.

4.2. <u>Termination</u>. The covenants set forth in <u>Subsection 4.1</u> shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO or (ii) when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, whichever event occurs first.

4.3. <u>Additional Major Investor</u>. For purposes of this <u>Section 4</u>, only, each of Alexandria Equities, LLC the Fidelity Investors and Aisling Capital III, L.P. shall be considered a Major Investor.

5. <u>Additional Covenants</u>.

5.1. <u>Insurance</u>. The Company shall use its commercially reasonable efforts to obtain, within ninety (90) days of the date hereof, from financially sound and reputable insurers Directors and Officers liability insurance in an amount and on terms and conditions satisfactory to the Board of Directors, and will use commercially reasonable efforts to cause such insurance policies to be maintained until such time as the Board of Directors determines that such insurance should be discontinued. They key person policy shall name the Company as loss payee, and neither policy shall be cancelable by the Company without prior approval by the Board of Directors.

5.2. <u>Employee Agreements</u>. The Company will cause each person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a

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consultant/independent contractor) with access to confidential information and/or trade secrets (i) to enter into a nondisclosure and proprietary rights assignment agreement and (ii) to enter into a one (1) year noncompetition and nonsolicitation agreement, substantially in the form approved by the Board of Directors. In addition, the Company shall not amend, modify, terminate, waive, or otherwise alter, in whole or in part, any of the above-referenced agreements or any restricted stock agreement between the Company and any employee, without the consent of the Series A Directors.

5.3. <u>Employee Stock</u>. Unless otherwise approved by the Board of Directors, including at least one Series A Director, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal quarterly installments over the following thirty-six (36) months, and (ii) a market stand-off provision substantially similar to that in <u>Subsection 2.11</u>.

5.4. Qualified Small Business Stock. The Company shall use its best commercial efforts to cause the shares of Preferred Stock, as well as any shares into which such shares are converted, within the meaning of Section 1202(f) of the Internal Revenue Code (the "**Code**"), to constitute "qualified small business stock" as defined in Section 1202(c) of the Code, including not to undertake redemptions of its capital stock that would cause the loss of such qualification; provided, however, that such requirement shall not be applicable if the Board of Directors of the Company determines, in its good-faith business judgment, that such qualification is inconsistent with the best interests of the Company. The Company shall submit to its stockholders (including the Investors) and to the Internal Revenue Service any reports that may be required under Section 1202(d)(1)(C) of the Code and the regulations promulgated thereunder. In addition, within twenty (20) business days after any Investor's written request therefor, the Company shall, at its option, either (i) deliver to such Investor a written statement indicating whether (and what portion of) such Investor's interest in the Company constitutes "qualified small business stock" as defined in Section 1202(c) of the Code or (ii) deliver to such Investor such factual information in the Company's possession as is reasonably necessary to enable such Investor to determine whether (and what portion of) such Investor's interest in the Company constitutes "qualified small business stock" as defined in Section 1202(c) of the Code.

5.5. <u>Matters Requiring Investor Director Approval.</u> So long as the holders of Series A Preferred Stock are entitled to elect a Series A Director, the Company hereby covenants and agrees with each of the Investors that it shall not, without approval of the Board of Directors, which approval must include the affirmative vote of one of the Series A Directors:

(a) increase the size of the Board of Directors above eight (8) members;

(b) make, or permit any subsidiary to make, any loan or advance to, or own any stock or other securities of, any subsidiary or other corporation, partnership, or other entity unless it is wholly owned by the Company;

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(c) make, or permit any subsidiary to make, any loan or advance to any Person, including, without limitation, any employee or director of the Company or any subsidiary, except advances and similar expenditures in the ordinary course of business or under the terms of an employee stock or option plan approved by the Board of Directors;

(d) guarantee, directly or indirectly, or permit any subsidiary to guarantee, directly or indirectly, any indebtedness except for trade accounts of the Company or any subsidiary arising in the ordinary course of business;

(e) make any investment other than investments in prime commercial paper, money market funds, certificates of deposit in any United States bank having a net worth in excess of \$100,000,000 or obligations issued or guaranteed by the United States of America, in each case having a maturity not in excess of one year;

(f) incur any aggregate indebtedness in excess of \$100,000 that is not already included in a budget approved by the Board of Directors, other than trade credit incurred in the ordinary course of business;

(g) otherwise enter into or be a party to any transaction with any director, officer, or employee of the Company or any "associate" (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such Person, except for transactions contemplated by this Agreement and the Purchase Agreement;

(h) hire or terminate any senior executive, or change the compensation of any senior executive other than changes contemplated in the Company's annual budget or the executives' respective employment agreements, including approving any option grants or stock awards to executive officers;

(i) change the principal business of the Company, enter new lines of business that are not primarily related to the business of the Company as currently conducted, or exit the current line of business;

(j) grant an exclusive license to any of the Company's material intellectual property rights; or

(k) acquire all or substantially all of the properties, assets or stock of any other company or entity.

5.6. <u>Board Matters</u>. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet in person or by conference call at least eight times per year in accordance with an agreed-upon schedule. The Company shall reimburse the directors for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors. Each Board Committee that the Board chooses to establish shall include at least one of the Series A Directors.

5.7. <u>Successor Indemnification.</u> If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or

surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, its Certificate of Incorporation, or elsewhere, as the case may be.

5.8. <u>Termination of Covenants</u>. The covenants set forth in this <u>Section 5</u>, except for <u>Subsection 5.7</u>, shall terminate and be of no further force or effect immediately before the consummation of the IPO or when the Company first becomes subject to the periodic reporting requirements of Section 12(g) or 15(d) of the Exchange Act, whichever event occurs first.

6. <u>Miscellaneous</u>.

Successors and Assigns. The rights under this Agreement may be assigned (but only with all related 6.1. obligations) by a Holder to a transferee of Registrable Securities that (i) is an Affiliate of a Holder; (ii) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; or (iii) after such transfer, holds at least 1,000,000 shares of Registrable Securities (subject to appropriate adjustment for stock splits, stock dividends, combinations, and other recapitalizations); provided, however, that (x) the Company is, within a reasonable time after such transfer. furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of <u>Subsection 2.11</u>. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (1) that is an Affiliate or stockholder of a Holder; (2) who is a Holder's Immediate Family Member; or (3) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall have a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2. <u>Governing Law</u>. This Agreement shall be governed by the internal law of the State of Delaware.

6.3. <u>Counterparts.</u> This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

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6.4. <u>Titles and Subtitles</u>. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5. <u>Notices</u>. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail or facsimile during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one (1) business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on <u>Schedule A</u> hereto, or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address, facsimile number, or address as subsequently modified by written notice given in accordance with this <u>Subsection 6.5</u>. If notice is given to the Company, a copy shall also be sent to Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston MA 02109, Attn: Steven D. Singer, Esq.

Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of 6.6. this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of sixty-six and two-thirds percent (66 2/3%) of the Registrable Securities then outstanding; provided that the Company may in its sole discretion waive compliance with Subsection 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Subsection 2.12(c) shall be deemed to be a waiver provided, further that Sections 2.11, 3 and 4 and this sentence of Section 6.6 of this Agreement may not be amended to reduce or terminate the rights of the Fidelity Investors or their Affiliates thereunder, and the observance of any term of Section 3 may not be waived with respect to the Fidelity Investors or their Affiliates without the prior written consent of the Fidelity Investors; provided, further that Sections 3 and 4 and this sentence of Section 6.6 of this Agreement may not be amended to reduce or terminate the rights of the Aisling Capital III, L.P. or its Affiliates thereunder, and the observance of any term of Section 3 or 4 may not be waived with respect to Aisling Capital III, L.P. or its Affiliates without the prior written consent of Aisling Capital III, L.P. or its Affiliates; and provided, further, that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, this Agreement may not be amended or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction). The Company shall give prompt notice of any amendment or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, termination, or waiver. Any amendment, termination, or waiver effected in accordance with this Subsection 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or

more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7. <u>Severability</u>. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8. <u>Aggregation of Stock</u>. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

6.9. <u>Additional Investors</u>. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Company's Preferred Stock after the date hereof, any purchaser of such shares of Preferred Stock who is not already a party to this Agreement may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.10. <u>Entire Agreement</u>. This Agreement (including any Schedules and Exhibits hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

6.11. <u>Dispute Resolution</u>. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of the state of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of the state of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS

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TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.12. <u>Delays or Omissions</u>. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

[Remainder of Page Intentionally Left Blank.]

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IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

Syros Pharmaceuticals, Inc.

By: /s/ Nancy Simonian Name: Nancy Simonian, M.D. Title: President and Chief Executive Officer

Flagship Ventures Fund IV, L.P.

Flagship Ventures Fund IV-Rx, L.P.

Each by: Flagship Ventures Fund IV General Partner LLC Its: General Partner

By: /s/ Noubar Afeyan Name: Noubar Afeyan Title: Manager

ARCH Venture Fund VII, L.P.

By: ARCH Venture Partners VII, L.P. Its: General Partner

By: ARCH Venture Partners VII, LLC Its: General Partner

By: /s/ Robert Nelsen Name: Robert Nelsen

Title: Managing Director

Wuxi PharmaTech Healthcare Fund I, L.P..

By: Wuxi PharmaTech Fund I General Partner L.P. Its: General Partner

By: WuXi PharmaTech Investments (Cayman) Inc. Its: General Partner

By: /s/ Edward Lim Name: Edward Lim

Title: Director

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

Fidelity Growth Company Commingled Pool

By: /s/ Kenneth Robins Name: Kenneth Robins Title: Authorized Signatory

Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund

By: /s/ Kenneth Robins Name: Kenneth B Robins

Title: Treasurer

Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund

By: /s/ Kenneth Robins Name: Kenneth B Robins Title: Treasurer

Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund

By: /s/ Kenneth Robins Name: Kenneth B Robins Title: Treasurer

Fidelity Select Portfolios: Biotechnology Portfolio

By: /s/ Kenneth Robins

Name: Kenneth B Robins Title: Treasurer

SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

Alexandria Equities, LLC

By:		
Nan	ne:	
Title	e:	
Phi	llip A. Sharp 2008 Irrevocable Trust f/b/o Christine S. Carey	
By:	/s/ Phillip Sharp	
Nan	ne: Phillip A. Sharp	
Title	e: Professor	
Phil	llip A. Sharp 2008 Irrevocable Trust f/b/o Helena S. Gordon	
By:	/s/ Phillip Sharp	
Nan	ne: Phillip A. Sharp	
Title	e: Professor	
Phil	llip A. Sharp 2008 Irrevocable Trust f/b/o Sarah S. Brokaw	
By:	/s/ Phillip Sharp	
Nan	ne: Phillip A. Sharp	
Title	e: Professor	
SIGNATURE PAGE TO AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT		

SOLELY WITH RESPECT TO SECTIONS 2.1 through 2.9, 2.11 and 2.13 OF THIS AGREEMENT:

THE BRANTA GROUP LLC

By:	/s/ Scott L. Rakestraw
Name:	Scott L. Rakestraw
Title:	President
Title:	

SIGNATURE PAGE TO AMENDED AND RESTATED

SYROS PHARMACEUTICALS, INC.

OMNIBUS SIGNATURE PAGE

This Omnibus Signature Page, dated as of October 17, 2014, constitutes a counterpart signature page to each of the following agreements:

The SERIES B PREFERRED STOCK PURCHASE AGREEMENT, dated as of October 9, 2014, by and among Syros Pharmaceuticals, Inc., a Delaware corporation (the "<u>Company</u>") and each of the Purchasers of the Company's Series B Preferred Stock listed on <u>Exhibit A</u> attached thereto (the "<u>Purchase Agreement</u>"), the undersigned being a "Purchaser" thereunder;

The SECOND AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT dated as of October 9, 2014, by and among the Company and each of the Investors listed on <u>Schedule A</u> attached thereto (the "<u>Investors' Rights Agreement</u>"), the undersigned being an "Investor" thereunder;

The SECOND AMENDED AND RESTATED VOTING AGREEMENT dated as of October 9, 2014, by and among the Company and each of the Investors listed on <u>Schedule A</u> attached thereto and certain of the stockholders of the Company listed on <u>Schedule B</u> attached thereto (the "<u>Voting Agreement</u>"), the undersigned being an "Investor" thereunder;

The SECOND AMENDED AND RESTATED RIGHT OF FIRST REFUSAL AND CO-SALE AGREEMENT dated as of October 9, 2014, by and among the Company and each of the Investors listed on <u>Schedule A</u> attached thereto and Key Holders listed on <u>Schedule B</u> attached thereto (the "<u>ROFR Agreement</u>"), the undersigned being an "Investor" thereunder;

By executing and delivering this Omnibus Signature Page, the undersigned is entering into, and agreeing to be bound by, the Purchase Agreement, the Investors' Rights Agreement, the Voting Agreement and the ROFR Agreement. The undersigned has carefully read each of the agreements listed above, including without limitation the representations and warranties of the Purchasers in Section 3 of the Purchase Agreement. The undersigned authorizes this Omnibus Signature Page to be attached to each of the agreements listed above, or counterparts thereof.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned has caused this Omnibus Signature Page to be executed as of the date first written above.

NAME OF PURCHASER/INVESTOR:

Alexandria Equities, LLC, a Delaware limited liability company By: Alexandria Real Estate Equities, Inc., a Maryland corporation, managing member

By: <u>/s/ Eric S. Johnson</u> Name: Eric S. Johnson Title: Vice President, Real Estate Legal Affairs

Address: 385 E. Colorado Blvd., Ste. 299 Pasadena, CA 91101

SCHEDULE A

Investors

Name and Address

Cambridge, MA 02142 Attn: Douglas Cole, M.D. E-mail: dcole@flagshipventures.com Phone: 617-868-1888 Fax: 617-868-1115

ARCH Venture Fund VII c/o ARCH Venture Partners 8725 West Higgins Road, Suite 290 Chicago, IL 60631 Attn: Mark McDonnell E-mail: mmcdonnell@archventure.com Phone: 773-380-6600 Fax: 773-380-6606

WuXi PharmaTech Healthcare Fund I, L.P. c/o WuXi PharmaTech Fund I General Partner, L.P. PO Box 309 Ugland House Grand Cayman, KY1-1104 Cayman Islands

With a mandatory copy to:

Attention: Edward Hu WuXi PharmaTech Healthcare Fund I, L.P. 288 Fe Te Zhong Road, Building 1, Room 214 Wai Gao Qiao Free Trade Zone Shanghai, 200131 CHINA Email: Edward_hu@wuxiapptec.com

Alexandria Equities, LLC 385 E. Colorado Blvd., Ste. 299 Pasadena, CA 91101 E-mail: investments@are.com Phone: 626-578-0777 Fax: 626-578-0770

Fidelity Growth Company Commingled Pool Brown Brothers Harriman & Co. 525 Washington Blvd Jersey City NJ 07310 Attn: Michael Lerman 15th Floor Corporate Actions Email: michael.lerman@bbh.com Fax number: 617 772-2418

Fidelity Mt. Vernon Street Trust: Fidelity Growth Company Fund Ball & Co C/o Citibank N.A/Custody IC&D Lock Box P.O Box 7247-7057 Philadelphia, P.A 19170-7057 Account #: 206681 Email: fidelity.tpacd@citi.com Fax number: 813-604-1415

Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund State Street Bank & Trust PO Box 5756 Boston, Massachusetts 02206 Attn: WAVELENGTH + CO Fidelity Mt. Vernon Street Trust: Fidelity Series Growth Company Fund Email: SSBCORPACTIONS@StateStreet.com Fax number: 617-988-9110

Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund State Street Bank & Trust PO Box 5756 Boston, Massachusetts 02206 Attn: Bangle & Co fbo Fidelity Advisor Series VII: Fidelity Advisor Biotechnology Fund Email: SSBCORPACTIONS@StateStreet.com Fax number: 617-988-9110

Fidelity Select Portfolios: Biotechnology Portfolio Brown Brothers Harriman & Co. 525 Washington Blvd Jersey City NJ 07310 Attn: Michael Lerman 15th Floor Corporate Actions Email: michael.lerman@bbh.com Fax number: 617 772-2418

Phillip A. Sharp 2008 Irrevocable Trust f/b/o Christine S. Carey 36 Fairmont Ave. Newton, MA 02458 E-mail: sharppa@mit.edu Phone: 617-253-6421 Fax: 617-253-3867

Phillip A. Sharp 2008 Irrevocable Trust f/b/o Helena S. Gordon 36 Fairmont Ave. Newton, MA 02458 E-mail: sharppa@mit.edu Phone: 617-253-6421 Fax: 617-253-3867

Phillip A. Sharp 2008 Irrevocable Trust f/b/o Sarah S. Brokaw 36 Fairmont Ave. Newton, MA 02458 E-mail: sharppa@mit.edu Phone: 617-253-6421 Fax: 617-253-3867

Phillip A. Sharp, Ph.D. 36 Fairmont Ave. Newton, MA 02458 E-mail: sharppa@mit.edu Phone: 617-253-6421 Fax: 617-253-3867

Nancy Simonian, M.D. c/o Syros Pharmaceuticals, Inc. 480 Arsenal Street, Suite 130 Watertown, MA 02472 E-mail: nsimonian@syros.com Phone: 617-744-1340 Fax: 617-744-1377

Stephane Bancel 68 Pinckney Street Boston, MA 02114

The Branta Group, LLC* c/o Scott L. Rakestraw PO Box 712 Washington Crossing, PA 18977

* Solely with respect to Sections 2.1 through 2.9, 2.11 and 2.13 of this Agreement

SYROS PHARMACEUTICALS, INC.

Incentive Stock Option Agreement Granted Under 2012 Equity Incentive Plan

1. <u>Grant of Option</u>.

This agreement evidences the grant by Syros Pharmaceuticals, Inc., a Delaware corporation (the "Company"), on [], 20 (the "Grant Date") to [], an employee of the Company (the "Participant"), of an option to purchase, in whole or in part, on the terms provided herein and in the Company's 2012 Equity Incentive Plan (the "Plan"), a total of [] shares (the "Shares") of common stock, \$0.001 par value per share, of the Company ("Common Stock") at \$[] per Share. Unless earlier terminated, this option shall expire at 5:00 p.m., Eastern time, on [] (the "Final Exercise Date").

It is intended that the option evidenced by this agreement shall be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code"). Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. <u>Vesting Schedule</u>.

This option will become exercisable ("vest") as to 25% of the original number of Shares on the first anniversary of the Vesting Commencement Date (as defined below) and as to an additional 2.0833% of the original number of Shares at the end of each successive month following the first anniversary of the Vesting Commencement Date until the fourth anniversary of the Vesting Commencement Date. On the fourth anniversary of the Vesting Commencement Date, this option will be exercisable as to all Shares. For purposes of this Agreement, "Vesting Commencement Date" shall mean [___].

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all Shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. <u>Exercise of Option</u>.

(a) <u>Form of Exercise</u>. Each election to exercise this option shall be accompanied by a completed Notice of Stock Option Exercise in the form attached hereto as <u>Exhibit A</u>, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, and payment in full in the manner provided in the Plan. The Participant may purchase less than the number of Shares covered hereby, provided that no partial exercise of this option may be for any fractional share or for fewer than ten whole shares.

(b) <u>Continuous Relationship with the Company Required</u>. Except as otherwise provided in this Section 3, this option may not be exercised unless the Participant, at the time he

or she exercises this option, is, and has been at all times since the Grant Date, an employee or officer of, or consultant or advisor to, the Company or any parent or subsidiary of the Company as defined in Section 424(e) or (f) of the Code (an "Eligible Participant").

(c) <u>Termination of Relationship with the Company</u>. If the Participant ceases to be an Eligible Participant for any reason, then, except as provided in paragraphs (d) and (e) below, the right to exercise this option shall terminate three months after such cessation (but in no event after the Final Exercise Date), provided that this option shall be exercisable only to the extent that the Participant was entitled to exercise this option on the date of such cessation. Notwithstanding the foregoing, if the Participant, prior to the Final Exercise Date, violates the non-competition or confidentiality provisions of any employment contract, confidentiality and nondisclosure agreement or other agreement between the Participant and the Company, the right to exercise this option shall terminate immediately upon such violation.

(d) <u>Exercise Period Upon Death or Disability</u>. If the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the Final Exercise Date while he or she is an Eligible Participant and the Company has not terminated such relationship for "cause" as specified in paragraph (e) below, this option shall be exercisable, within the period of one year following the date of death or disability of the Participant, by the Participant (or in the case of death by an authorized transferee), <u>provided that</u> this option shall be exercisable only to the extent that this option was exercisable by the Participant on the date of his or her death or disability, and further provided that this option shall not be exercisable after the Final Exercise Date.

(e) <u>Termination for Cause</u>. If, prior to the Final Exercise Date, the Participant's employment is terminated by the Company for Cause (as defined below), the right to exercise this option shall terminate immediately upon the effective date of such termination of employment. If, prior to the Final Exercise Date, the Participant is given notice by the Company of the termination of his or her employment by the Company for Cause, and the effective date of such employment termination is subsequent to the date of delivery of such notice, the right to exercise this option shall be suspended from the time of the delivery of such notice until the earlier of (i) such time as it is determined or otherwise agreed that the Participant's employment shall not be terminated for Cause as provided in such notice or (ii) the effective date of such termination of employment (in which case the right to exercise this option shall, pursuant to

the preceding sentence, terminate upon the effective date of such termination of employment). If the Participant is party to an employment or severance agreement with the Company that contains a definition of "cause" for termination of employment, "Cause" shall have the meaning ascribed to such term in such agreement. Otherwise, "Cause" shall mean willful misconduct by the Participant or willful failure by the Participant to perform his or her responsibilities to the Company (including, without limitation, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between the Participant and the Company), as determined by the Company, which determination shall be conclusive. The Participant's employment shall be considered to have been terminated for Cause if the Company determines, within 30 days after the Participant's resignation, that termination for Cause was warranted.

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4. <u>Company Right of First Refusal</u>.

(a) <u>Notice of Proposed Transfer</u>. If the Participant proposes to sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively, "transfer") any Shares acquired upon exercise of this option, then the Participant shall first give written notice of the proposed transfer (the "Transfer Notice") to the Company. The Transfer Notice shall name the proposed transferee and state the number of such Shares the Participant proposes to transfer (the "Offered Shares"), the price per share and all other material terms and conditions of the transfer.

(b) <u>Company Right to Purchase</u>. For 30 days following its receipt of such Transfer Notice, the Company shall have the option to purchase all or part of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase all or part of the Offered Shares, it shall give written notice of such election to the Participant within such 30-day period. Within 10 days after his or her receipt of such notice, the Participant shall tender to the Company at its principal offices the certificates representing the Offered Shares to be purchased by the Company, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Offered Shares to the Company. Promptly following receipt of such Company shall deliver or mail to the Participant a check in payment of the purchase price for such Offered Shares; <u>provided that</u> if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Offered Shares on the same terms and conditions as were set forth in the Transfer Notice; and <u>provided further</u> that any delay in making such payment shall not invalidate the Company's exercise of its option to purchase the Offered Shares.

(c) <u>Shares Not Purchased By Company</u>. If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares which the Company has not elected to acquire to the proposed transferee, <u>provided that</u> such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred pursuant to this Section 4 shall remain subject to the right of first refusal set forth in this Section 4 and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Section 4.

(d) <u>Consequences of Non-Delivery</u>. After the time at which the Offered Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Offered Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Offered Shares, but shall, insofar as permitted by law, treat the Company as the owner of such Offered Shares.

(e) <u>Exempt Transactions</u>. The following transactions shall be exempt from the provisions of this Section 4:

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their benefit;

(1) any transfer of Shares to or for the benefit of any spouse, child or grandchild of the Participant, or to a trust for ;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the "Securities Act"); and

(3) the sale of all or substantially all of the outstanding shares of capital stock of the Company (including pursuant to a merger or consolidation);

provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to the right of first refusal set forth in this Section 4.

(f) <u>Assignment of Company Right</u>. The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 4 to one or more persons or entities.

(g) <u>Termination</u>. The provisions of this Section 4 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Company's voting securities immediately prior to such transaction beneficially own, directly or indirectly, more than 75% (determined on an as-converted basis) of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

(h) <u>No Obligation to Recognize Invalid Transfer</u>. The Company shall not be required (1) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Section 4, or (2) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

(i) <u>Legends</u>. The certificate representing Shares shall bear a legend substantially in the following form (in addition to, or in combination with, any legend required by applicable federal and state securities laws and agreements relating to the transfer of the Company securities):

"The shares represented by this certificate are subject to a right of first refusal in favor of the Company, as provided in a certain stock option agreement with the Company."

4

5. <u>Agreement in Connection with Initial Public Offering</u>.

The Participant agrees, in connection with the initial underwritten public offering of the Common Stock pursuant to a registration statement under the Securities Act, (i) not to (a) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any other securities of the Company or (b) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of shares of Common Stock or other securities of the Company, whether any transaction described in clause (a) or (b) is to be settled by delivery of securities, in cash or otherwise, during the period beginning on the date of the final prospectus relating to the offering (plus up to an additional 34 days to the extent requested by the managing underwriters for such offering in order to address FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4) or any similar successor provision), and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering. The Company may impose stop-transfer instructions with respect to the shares of Common Stock or other securities subject to the foregoing restriction until the end of the "lock-up" period.

6. <u>Tax Matters</u>.

(a) <u>Withholding</u>. No Shares will be issued pursuant to the exercise of this option unless and until the Participant pays to the Company, or makes provision satisfactory to the Company for payment of, any federal, state or local withholding taxes required by law to be withheld in respect of this option.

(b) <u>Disqualifying Disposition</u>. If the Participant disposes of Shares acquired upon exercise of this option within two years from the Grant Date or one year after such Shares were acquired pursuant to exercise of this option, the Participant shall notify the Company in writing of such disposition.

7. <u>Transfer Restrictions.</u>

(a) This option may not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the lifetime of the Participant, this option shall be exercisable only by the Participant.

(b) The Participant agrees that he or she will not transfer any Shares issued pursuant to the exercise of this option unless the transferee, as a condition to such transfer, delivers to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of Section 4 and Section 5; provided that such a written confirmation shall not be required with respect to (1) Section 4 after such provision has terminated in accordance with Section 4(g) or (2) Section 5 after the completion of the lock-up period in connection with the Company's initial underwritten public offering.

5

8. <u>Provisions of the Plan</u>.

This option is subject to the provisions of the Plan (including the provisions relating to amendments to the Plan), a copy of which is furnished to the Participant with this option.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Company has caused this option to be executed under its corporate seal by its duly authorized officer. This option shall take effect as a sealed instrument.

SYROS PHARMACEUTICALS, INC.

By:

Name: Title:

PARTICIPANT'S ACCEPTANCE

The undersigned hereby accepts the foregoing option and agrees to the terms and conditions thereof. The undersigned hereby acknowledges receipt of a copy of the Company's 2012 Equity Incentive Plan.

PARTICIPANT:

Name: Address:

SPOUSAL CONSENT:(1)

Name: Address:

(1) If the Participant resides in a community property state, it is desirable to have the Participant's spouse also accept the option by signature here. The following are community property states: Arizona, California, Idaho, Louisiana, Nevada, New Mexico, Texas, and Washington. Although Wisconsin is not formally a community property state, it has laws governing the division of marital property similar to community property states and it may be desirable to have a Wisconsin Participant's spouse also accept the option.

8

<u>Exhibit A</u>

NOTICE OF STOCK OPTION EXERCISE

Date: (2)

Syros Pharmaceuticals, Inc. One Memorial Drive 7th Floor Cambridge, MA 02142

Attention: Treasurer

Dear Sir or Madam:

I am the holder of an Incentive Stock Option granted to me under the Syros Pharmaceuticals, Inc. (the "Company") 2012 Equity Incentive Plan on (3) for the purchase of (4) shares of Common Stock of the Company at a purchase price of \$ (5) per share.

I hereby exercise my option to purchase (6) shares of Common Stock (the "Shares"), for which I have enclosed (7) in the amount of (8). Please register my stock certificate as follows:

Name(s):

(9)

Address:

(2) Enter the date of exercise.

(3) Enter the date of grant.

(4) Enter the total number of shares of Common Stock for which the option was granted.

(5) Enter the option exercise price per share of Common Stock.

(6) Enter the number of shares of Common Stock to be purchased upon exercise of all or part of the option.

(7) Enter "cash", "personal check" or if permitted by the option or Plan, "stock certificates No. XXXX and XXXX".

(8) Enter the dollar amount (price per share of Common Stock times the number of shares of Common Stock to be purchased), or the number of shares tendered. Fair market value of shares tendered, together with cash or check, must cover the purchase price of the shares issued upon exercise.

(9) Enter name(s) to appear on stock certificate: (a) Your name only; or (b) Your name and other name (i.e., John Doe and Jane Doe, Joint Tenants With Right of Survivorship).

Tax I.D. #:

(10)

I represent, warrant and covenant as follows:

1. I am purchasing the Shares for my own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act of 1933 (the "Securities Act"), or any rule or regulation under the Securities Act.

2. I have had such opportunity as I have deemed adequate to obtain from representatives of the Company such information as is necessary to permit me to evaluate the merits and risks of my investment in the Company.

3. I have sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.

4. I can afford a complete loss of the value of the Shares and am able to bear the economic risk of holding such Shares for an indefinite period.

5. I understand that (i) the Shares have not been registered under the Securities Act and are "restricted securities" within the meaning of Rule 144 under the Securities Act, (ii) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; (iii) in any event, the exemption from registration under Rule 144 will not be available for at least one year and even then will not be available unless a public market then exists for the Common Stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and (iv) there is now no registration statement on file with the Securities and Exchange Commission with respect to any stock of the Company and the Company has no obligation or current intention to register the Shares under the Securities Act.

Very truly yours,

(Signature)
Name:

(10) Social Security Number of Holder(s).

Nonstatutory Stock Option Agreement Granted Under 2012 Equity Incentive Plan

1. <u>Grant of Option</u>.

This agreement evidences the grant by Syros Pharmaceuticals, Inc., a Delaware corporation (the "Company"), on [], 20 (the "Grant Date") to [], an employee, consultant, or director of the Company (the "Participant"), of an option to purchase, in whole or in part, on the terms provided herein and in the Company's 2012 Equity Incentive Plan (the "Plan"), a total of [] shares (the "Shares") of common stock, \$0.001 par value per share, of the Company ("Common Stock") at \$[] per Share. Unless earlier terminated, this option shall expire at 5:00 p.m., Eastern time, on [] (the "Final Exercise Date").

It is intended that the option evidenced by this agreement shall not be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code"). Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. <u>Vesting Schedule</u>.

This option will become exercisable ("vest") as to 25% of the original number of Shares on the first anniversary of the Vesting Commencement Date (as defined below) and as to an additional 2.0833% of the original number of Shares at the end of each successive month following the first anniversary of the Vesting Commencement Date until the fourth anniversary of the Vesting Commencement Date. On the fourth anniversary of the Vesting Commencement Date, this option will be exercisable as to all Shares. For purposes of this Agreement, "Vesting Commencement Date" shall mean [___].

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all Shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. <u>Exercise of Option</u>.

(a) <u>Form of Exercise</u>. Each election to exercise this option shall be accompanied by a completed Notice of Stock Option Exercise in the form attached hereto as <u>Exhibit A</u>, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, and payment in full in the manner provided in the Plan. The Participant may purchase less than the number of Shares covered hereby, provided that no partial exercise of this option may be for any fractional share or for fewer than ten whole shares.

(b) <u>Continuous Relationship with the Company Required</u>. Except as otherwise provided in this Section 3, this option may not be exercised unless the Participant, at the time he

or she exercises this option, is, and has been at all times since the Grant Date, an employee, officer or director of, or consultant or advisor to, the Company or any other entity the employees, officers, directors, consultants, or advisors of which are eligible to receive option grants under the Plan (an "Eligible Participant").

(c) <u>Termination of Relationship with the Company</u>. If the Participant ceases to be an Eligible Participant for any reason, then, except as provided in paragraphs (d) and (e) below, the right to exercise this option shall terminate three months after such cessation (but in no event after the Final Exercise Date), provided that this option shall be exercisable only to the extent that the Participant was entitled to exercise this option on the date of such cessation. Notwithstanding the foregoing, if the Participant, prior to the Final Exercise Date, violates the non-competition or confidentiality provisions of any employment contract, confidentiality and nondisclosure agreement or other agreement between the Participant and the Company, the right to exercise this option shall terminate immediately upon such violation.

(d) <u>Exercise Period Upon Death or Disability</u>. If the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the Final Exercise Date while he or she is an Eligible Participant and the Company has not terminated such relationship for "cause" as specified in paragraph (e) below, this option shall be exercisable, within the period of one year following the date of death or disability of the Participant, by the Participant (or in the case of death by an authorized transferee), <u>provided that</u> this option shall be exercisable only to the extent that this option was exercisable by the Participant on the date of his or her death or disability, and further provided that this option shall not be exercisable after the Final Exercise Date.

(e) <u>Termination for Cause</u>. If, prior to the Final Exercise Date, the Participant's employment or other relationship with the Company is terminated by the Company for Cause (as defined below), the right to exercise this option shall terminate immediately upon the effective date of such termination of employment or other relationship. If, prior to the Final Exercise Date, the Participant is given notice by the Company of the termination of his or her employment or other relationship by the Company for Cause, and the effective date of such employment or other termination is subsequent to the date of the delivery of such notice, the right to exercise this option shall be suspended from the time of the delivery of such notice until the earlier of (i) such time as it is determined or otherwise agreed that the Participant's employment or other relationship shall not be terminated for Cause as provided in such notice or (ii) the effective date of

such termination of employment or other relationship (in which case the right to exercise this option shall, pursuant to the preceding sentence, terminate immediately upon the effective date of such termination of employment or other relationship). If the Participant is party to an employment, consulting or severance agreement with the Company that contains a definition of "cause" for termination of employment or other relationship, "Cause" shall have the meaning ascribed to such term in such agreement. Otherwise, "Cause" shall mean willful misconduct by the Participant or willful failure by the Participant to perform his or her responsibilities to the Company (including, without limitation, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between the Participant and the Company), as determined by the Company, which determination shall be conclusive. The Participant's employment or other relationship shall be considered to

have been terminated for "Cause" if the Company determines, within 30 days after the Participant's resignation, that termination for Cause was warranted.

4. <u>Company Right of First Refusal</u>.

(a) <u>Notice of Proposed Transfer</u>. If the Participant proposes to sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively, "transfer") any Shares acquired upon exercise of this option, then the Participant shall first give written notice of the proposed transfer (the "Transfer Notice") to the Company. The Transfer Notice shall name the proposed transferee and state the number of such Shares the Participant proposes to transfer (the "Offered Shares"), the price per share and all other material terms and conditions of the transfer.

(b) <u>Company Right to Purchase</u>. For 30 days following its receipt of such Transfer Notice, the Company shall have the option to purchase all or part of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase all or part of the Offered Shares, it shall give written notice of such election to the Participant within such 30-day period. Within 10 days after his or her receipt of such notice, the Participant shall tender to the Company at its principal offices the certificate or certificates representing the Offered Shares to be purchased by the Company, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Offered Shares to the Company. Promptly following receipt of such Company shall deliver or mail to the Participant a check in payment of the purchase price for such Offered Shares; <u>provided that</u> if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Offered Shares on the same terms and conditions as were set forth in the Transfer Notice; and <u>provided further</u> that any delay in making such payment shall not invalidate the Company's exercise of its option to purchase the Offered Shares.

(c) <u>Shares Not Purchased By Company</u>. If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares which the Company has not elected to acquire to the proposed transferee, <u>provided that</u> such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred pursuant to this Section 4 shall remain subject to the right of first refusal set forth in this Section 4 and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Section 4.

(d) <u>Consequences of Non-Delivery</u>. After the time at which the Offered Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Offered Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Offered Shares, but shall, insofar as permitted by law, treat the Company as the owner of such Offered Shares.

3

(e) <u>Exempt Transactions</u>. The following transactions shall be exempt from the provisions of this Section 4:

their benefit;

(1)

penetit;

any transfer of Shares to or for the benefit of any spouse, child or grandchild of the Participant, or to a trust for

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the "Securities Act"); and

(3) the sale of all or substantially all of the outstanding shares of capital stock of the Company (including pursuant to a merger or consolidation);

provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to the right of first refusal set forth in this Section 4.

(f) <u>Assignment of Company Right</u>. The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 4 to one or more persons or entities.

(g) <u>Termination</u>. The provisions of this Section 4 shall terminate upon the earlier of the following events:

the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective (1)registration statement filed by the Company under the Securities Act; or

the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, (2)by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Company's voting securities immediately prior to such transaction beneficially own, directly or indirectly, more than 75% (determined on an as-converted basis) of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

No Obligation to Recognize Invalid Transfer. The Company shall not be required (1) to transfer on its books any of (h)the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Section 4, or (2) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

Legends. The certificate representing Shares shall bear a legend substantially in the following form (in addition to, or in combination with, any legend required by applicable federal and state securities laws and agreements relating to the transfer of the Company securities):

> "The shares represented by this certificate are subject to a right of first refusal in favor of the Company, as provided in a certain stock option agreement with the Company."

> > 4

5. Agreement in Connection with Initial Public Offering.

The Participant agrees, in connection with the initial underwritten public offering of the Common Stock pursuant to a registration statement under the Securities Act, (i) not to (a) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any other securities of the Company or (b) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of shares of Common Stock or other securities of the Company, whether any transaction described in clause (a) or (b) is to be settled by delivery of securities, in cash or otherwise, during the period beginning on the date of the filing of such registration statement with the Securities and Exchange Commission and ending 180 days after the date of the final prospectus relating to the offering (plus up to an additional 34 days to the extent requested by the managing underwriters for such offering in order to address FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4) or any similar successor provision), and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering. The Company may impose stop-transfer instructions with respect to the shares of Common Stock or other securities subject to the foregoing restriction until the end of the "lock-up" period.

Withholding. 6.

No Shares will be issued pursuant to the exercise of this option unless and until the Participant pays to the Company, or makes provision satisfactory to the Company for payment of, any federal, state or local withholding taxes required by law to be withheld in respect of this option.

7. Transfer Restrictions.

This option may not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either (a) voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the lifetime of the Participant, this option shall be exercisable only by the Participant.

The Participant agrees that he or she will not transfer any Shares issued pursuant to the exercise of this option unless (b) the transferee, as a condition to such transfer, delivers to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of Section 4 and Section 5; provided that such a written confirmation shall not be required with respect to (1) Section 4 after such provision has terminated in accordance with Section 4(g) or (2) Section 5 after the completion of the lock-up period in connection with the Company's initial underwritten public offering.

8. Provisions of the Plan.

This option is subject to the provisions of the Plan (including the provisions relating to amendments to the Plan), a copy of which is furnished to the Participant with this option.

[Remainder of Page Intentionally Left Blank]

5

IN WITNESS WHEREOF, the Company has caused this option to be executed under its corporate seal by its duly authorized officer. This option shall take effect as a sealed instrument.

SYROS PHARMACEUTICALS, INC.

By:

Name: Title:

Signature Page to Nonstatutory Stock Option Agreement

PARTICIPANT'S ACCEPTANCE

The undersigned hereby accepts the foregoing option and agrees to the terms and conditions thereof. The undersigned hereby acknowledges receipt of a copy of the Company's 2012 Equity Incentive Plan.

PARTICIPANT:

Address:

SPOUSAL CONSENT:(1)

Name: Address:

(1) If the Participant resides in a community property state, it is desirable to have the Participant's spouse also accept the option by signature here. The following are community property states: Arizona, California, Idaho, Louisiana, Nevada, New Mexico, Texas, and Washington. Although Wisconsin is not formally a community property state, it has laws governing the division of marital property similar to community property states and it may be desirable to have a Wisconsin Participant's spouse also accept the option.

7

<u>Exhibit A</u>

NOTICE OF STOCK OPTION EXERCISE

Date: (2)

Syros Pharmaceuticals, Inc. One Memorial Drive 7th Floor Cambridge, MA 02142

Attention: Treasurer

Dear Sir or Madam:

I am the holder of a Nonstatutory Stock Option granted to me under the Syros Pharmaceuticals, Inc. (the "Company") 2012 Equity Incentive Plan on (3) for the purchase of (4) shares of Common Stock of the Company at a purchase price of \$ (5) per share.

I hereby exercise my option to purchase (6) shares of Common Stock (the "Shares"), for which I have enclosed (7) in the amount of (8). Please register my stock certificate as follows:

Name(s):

(9)

(2) Enter the date of exercise.

(3) Enter the date of grant.

(4) Enter the total number of shares of Common Stock for which the option was granted.

(5) Enter the option exercise price per share of Common Stock.

(6) Enter the number of shares of Common Stock to be purchased upon exercise of all or part of the option.

(7) Enter "cash", "personal check" or if permitted by the option or Plan, "stock certificates No. XXXX and XXXX".

(8) Enter the dollar amount (price per share of Common Stock times the number of shares of Common Stock to be purchased), or the number of shares tendered. Fair market value of shares tendered, together with cash or check, must cover the purchase price of the shares issued upon exercise.

(9) Enter name(s) to appear on stock certificate: (a) Your name only; (b) Your name and other name (i.e., John Doe and Jane Doe, Joint Tenants With Right of Survivorship); or (c) a Child's name, with you as custodian (i.e., Jane Doe, Custodian for Tommy Doe). Note: There may be income and/or gift tax consequences of registering shares in a Child's name.

Signature Page to Nonstatutory Stock Option Agreement

Address:

Tax I.D. #: (10)

I represent, warrant and covenant as follows:

1. I am purchasing the Shares for my own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act of 1933 (the "Securities Act"), or any rule or regulation under the Securities Act.

2. I have had such opportunity as I have deemed adequate to obtain from representatives of the Company such information as is necessary to permit me to evaluate the merits and risks of my investment in the Company.

3. I have sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.

4. I can afford a complete loss of the value of the Shares and am able to bear the economic risk of holding such Shares for an indefinite period.

5. I understand that (i) the Shares have not been registered under the Securities Act and are "restricted securities" within the meaning of Rule 144 under the Securities Act, (ii) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; (iii) in any event, the exemption from registration under Rule 144 will not be available for at least one year and even then will not be available unless a public market then exists for the Common Stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and (iv) there is now no registration statement on file with the Securities and Exchange Commission with respect to any stock of the Company and the Company has no obligation or current intention to register the Shares under the Securities Act.

Very truly yours,

(Signature)

Name:

(10) Social Security Number of Holder(s).

SYROS PHARMACEUTICALS, INC.

Restricted Stock Agreement Granted Under 2012 Equity Incentive Plan

AGREEMENT made this day of , 20, between Syros Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and (the "Participant").

For valuable consideration, receipt of which is acknowledged, the parties hereto agree as follows:

1. <u>Purchase of Shares</u>.

The Company shall issue and sell to the Participant, and the Participant shall purchase from the Company, subject to the terms and conditions set forth in this Agreement and in the Company's 2012 Equity Incentive Plan (the "Plan"), shares (the "Shares") of common stock, \$0.001 par value, of the Company ("Common Stock"), at a purchase price of \$ per share. The aggregate purchase price for the Shares shall be paid by the Participant by check payable to the order of the Company or such other method as may be acceptable to the Company. Upon receipt by the Company of payment for the Shares, the Company shall issue to the Participant one or more certificates in the name of the Participant for that number of Shares purchased by the Participant. The Participant agrees that the Shares shall be subject to the purchase options set forth in Sections 2 and 5 of this Agreement and the restrictions on transfer set forth in Section 4 of this Agreement.

2. Purchase Option.

(a) In the event that the Participant ceases to be employed by the Company for any reason or no reason, with or without cause, prior to the fourth anniversary of the Vesting Commencement Date (as defined below), the Company shall have the right and option (the "Purchase Option") to purchase from the Participant, for a sum of \$ per share (the "Option Price"), some or all of the Unvested Shares (as defined below).

"Unvested Shares" means the total number of Shares multiplied by the Applicable Percentage (as defined below) at the time the Purchase Option becomes exercisable by the Company. The "Applicable Percentage" shall be (i) 100% during the period ending on the first anniversary of the Vesting Commencement Date, (ii) 75% less 2.0833% for each month of employment completed by the Participant with the Company from and after the first anniversary of the Vesting Commencement Date. For purposes of this Agreement, "Vesting Commencement Date" shall mean

(b) For purposes of this Agreement, employment with the Company shall include employment with a parent or subsidiary of the Company and service to the Company as an advisor, consultant or member of the Board of Directors of the Company.

3. Exercise of Purchase Option and Closing.

(a) The Company may exercise the Purchase Option by delivering or mailing to the Participant (or his estate), within 90 days after the termination of the employment of the Participant with the Company, a written notice of exercise of the Purchase Option. Such notice shall specify the number of Shares to be purchased. If and to the extent the Purchase Option is not so exercised by the giving of such a notice within such 90-day period, the Purchase Option shall automatically expire and terminate effective upon the expiration of such 90-day period.

(b) Within 10 days after delivery to the Participant of the Company's notice of the exercise of the Purchase Option pursuant to subsection (a) above, the Participant (or his estate) shall, pursuant to the provisions of the Joint Escrow Instructions referred to in Section 7 below, tender to the Company at its principal offices the certificate or certificates representing the Shares which the Company has elected to purchase in accordance with the terms of this Agreement, duly endorsed in blank or with duly endorsed stock powers attached thereto, all in form suitable for the transfer of such Shares to the Company. Promptly following its receipt of such certificate or certificates, the Company shall pay to the Participant the aggregate Option Price for such Shares (provided that any delay in making such payment shall not invalidate the Company's exercise of the Purchase Option with respect to such Shares).

(c) After the time at which any Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Shares, but shall, in so far as permitted by law, treat the Company as the owner of such Shares.

(d) The Option Price may be payable, at the option of the Company, in cancellation of all or a portion of any outstanding indebtedness of the Participant to the Company or in cash (by check) or both.

(e) The Company shall not purchase any fraction of a Share upon exercise of the Purchase Option, and any fraction of a Share resulting from a computation made pursuant to Section 2 of this Agreement shall be rounded to the nearest whole Share (with any one-half Share being rounded upward).

(f) The Company may assign its Purchase Option to one or more persons or entities.

4. <u>Restrictions on Transfer</u>.

(a) The Participant shall not sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively "transfer") any Shares, or any interest therein, that are subject to the Purchase Option, except that the Participant may transfer such Shares (i) to or for the benefit of any spouse, children, parents, uncles, aunts, siblings, grandchildren and any other relatives approved by the Board of Directors (collectively, "Approved Relatives") or to a trust established solely for the benefit of the Participant and/or Approved Relatives, provided that such Shares shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in this Section 4, the Purchase Option and

the right of first refusal set forth in Section 5) and such permitted transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement or (ii) as part of the sale of all or substantially all of the shares of capital stock of the Company (including pursuant to a merger or consolidation), <u>provided</u> that, in accordance with the Plan, the securities or other property received by the Participant in connection with such transaction shall remain subject to this Agreement.

(b) The Participant shall not transfer any Shares, or any interest therein, that are no longer subject to the Purchase Option, except in accordance with Section 5 below.

5. <u>Right of First Refusal</u>.

(a) If the Participant proposes to transfer any Shares that are no longer subject to the Purchase Option (either because they are no longer Unvested Shares or because the Purchase Option expired unexercised), then the Participant shall first give written notice of the proposed transfer (the "Transfer Notice") to the Company. The Transfer Notice shall name the proposed transfere and state the number of such Shares the Participant proposes to transfer (the "Offered Shares"), the price per share and all other material terms and conditions of the transfer.

(b) For 30 days following its receipt of such Transfer Notice, the Company shall have the option to purchase all or part of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase all or part of the Offered Shares, it shall give written notice of such election to the Participant within such 30-day period. Within 10 days after his or her receipt of such notice, the Participant shall tender to the Company at its principal offices the certificate or certificates representing the Offered Shares to be purchased by the Company, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Offered Shares to the Company. Promptly following receipt of such Offered Shares; provided that if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Offered Shares on the same terms and conditions as were set forth in the Transfer Notice; and provided further that any delay in making such payment shall not invalidate the Company's exercise of its option to purchase the Offered Shares.

(c) If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares which the Company has not elected to acquire to the proposed transferee, <u>provided that</u> such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred pursuant to this Section 5 shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in Section 4 and the right of first refusal set forth in this Section 5) and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement.

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(d) After the time at which the Offered Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Offered Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Offered Shares, but shall, insofar as permitted by law, treat the Company as the owner of such Offered Shares.

(e) The following transactions shall be exempt from the provisions of this Section 5:

(1) a transfer of Shares to or for the benefit of any Approved Relatives, or to a trust established solely for the benefit of the Participant and/or Approved Relatives;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the "Securities Act"); and

(3) the sale of all or substantially all of the outstanding shares of capital stock of the Company

(including pursuant to a merger or consolidation);

<u>provided</u>, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in Section 4 and the right of first refusal set forth in this Section 5) and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement.

(f) The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 5 to one or more persons or entities.

(g) The provisions of this Section 5 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Company's voting securities immediately prior to such transaction beneficially own, directly or indirectly, more than 75% (determined on an as-converted basis) of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

(h) The Company shall not be required (1) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Agreement, or (2) to treat as owner of such Shares or to pay dividends to any transferre to whom any such Shares shall have been so sold or transferred.

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6. Agreement in Connection with Initial Public Offering.

The Participant agrees, in connection with the initial underwritten public offering of the Common Stock pursuant to a registration statement under the Securities Act, (i) not to (a) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for shares of Common Stock or (b) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of shares of Common Stock, whether any transaction described in clause (a) or (b) is to be settled by delivery of shares of Common Stock or other securities, in cash or otherwise, during the period beginning on the date of the filing of such registration statement with the Securities and Exchange Commission and ending 180 days from the date of the final prospectus relating to the offering (plus up to an additional 34 days to the extent requested by the managing underwriters for such offering in order to address FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4) or any similar successor provision), and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering. The Company may impose stop-transfer instructions with respect to the shares of Common Stock or other securities subject to the foregoing restriction until the end of the "lock-up" period.

7. <u>Escrow</u>.

The Participant shall, upon the execution of this Agreement, execute Joint Escrow Instructions in the form attached to this Agreement as <u>Exhibit A</u>. The Joint Escrow Instructions shall be delivered to the Secretary of the Company, as escrow agent thereunder. The Participant shall deliver to such escrow agent a stock assignment duly endorsed in blank, in the form attached to this Agreement as <u>Exhibit B</u>, and hereby instructs the Company to deliver to such escrow agent, on behalf of the Participant, the certificate(s) evidencing the Shares issued hereunder. Such materials shall be held by such escrow agent pursuant to the terms of such Joint Escrow Instructions.

8. <u>Restrictive Legends</u>.

All certificates representing Shares shall have affixed thereto legends in substantially the following form, in addition to any other legends that may be required under federal or state securities laws:

"The shares of stock represented by this certificate are subject to restrictions on transfer and an option to purchase set forth in a certain Restricted Stock Agreement between the corporation and the registered owner of these shares (or his predecessor in interest), and such Agreement is available for inspection without charge at the office of the Secretary of the corporation."

"The shares represented by this certificate have not been registered under the Securities Act of 1933, as amended, and may not be sold,

transferred or otherwise disposed of in the absence of an effective registration statement under such Act or an opinion of counsel satisfactory to the corporation to the effect that such registration is not required."

9. <u>Provisions of the Plan</u>.

This Agreement is subject to the provisions of the Plan, a copy of which is furnished to the Participant with this Agreement.

10. <u>Investment Representations</u>.

The Participant represents, warrants and covenants as follows:

(a) The Participant is purchasing the Shares for his own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act, or any rule or regulation under the Securities Act.

(b) The Participant has had such opportunity as he has deemed adequate to obtain from representatives of the Company such information as is necessary to permit him to evaluate the merits and risks of his investment in the Company.

(c) The Participant has sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.

(d) The Participant can afford a complete loss of the value of the Shares and is able to bear the economic risk of holding such Shares for an indefinite period.

(e) The Participant understands that (i) the Shares have not been registered under the Securities Act and are "restricted securities" within the meaning of Rule 144 under the Securities Act; (ii) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; (iii) in any event, the exemption from registration under Rule 144 will not be available for at least one year and even then will not be available unless a public market then exists for the Common Stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and (iv) there is now no registration statement on file with the Securities and Exchange Commission with respect to any stock of the Company and the Company has no obligation or current intention to register the Shares under the Securities Act.

11. Withholding Taxes; Section 83(b) Election.

(a) The Participant acknowledges and agrees that the Company has the right to deduct from payments of any kind otherwise due to the Participant any federal, state or local taxes of any kind required by law to be withheld with respect to the purchase of the Shares by the Participant or the lapse of the Purchase Option.

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(b) The Participant has reviewed with the Participant's own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Agreement. The Participant is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. The Participant understands that the Participant (and not the Company) shall be responsible for the Participant's own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement. The Participant understands that it may be beneficial in many circumstances to elect to be taxed at the time the Shares are granted by the Company rather than when and as the Company's Purchase Option expires by filing an election under Section 83(b) of the Internal Revenue Code of 1986 with the I.R.S. within 30 days from the date of grant by the Company.

THE PARTICIPANT ACKNOWLEDGES THAT IT IS SOLELY THE PARTICIPANT'S RESPONSIBILITY AND NOT THE COMPANY'S TO FILE TIMELY THE ELECTION UNDER SECTION 83(b), EVEN IF THE PARTICIPANT REQUESTS THE COMPANY OR ITS REPRESENTATIVES TO MAKE THIS FILING ON THE PARTICIPANT'S BEHALF.

12. <u>Miscellaneous</u>.

(a) <u>No Rights to Employment</u>. The Participant acknowledges and agrees that the vesting of the Shares pursuant to Section 2 hereof is earned only by continuing service as an employee at the will of the Company (not through the act of being hired or purchasing shares hereunder). The Participant further acknowledges and agrees that the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of continued engagement as an employee or consultant for the vesting period, for any period, or at all.

(b) <u>Severability</u>. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

(c) <u>Waiver</u>. Any provision for the benefit of the Company contained in this Agreement may be waived, either generally or in any particular instance, by the Board of Directors of the Company.

(d) <u>Binding Effect</u>. This Agreement shall be binding upon and inure to the benefit of the Company and the Participant and their respective heirs, executors, administrators, legal representatives, successors and assigns, subject to the restrictions on transfer set forth in Sections 4 and 5 of this Agreement.

(e) <u>Notice</u>. All notices required or permitted hereunder shall be in writing and deemed effectively given upon

personal delivery or five days after deposit in the United States Post Office, by registered or certified mail, postage prepaid, addressed to the other party hereto at the address shown beneath his or its respective signature to this Agreement, or at such other address or addresses as either party shall designate to the other in accordance with this Section 12(e).

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(f) <u>Pronouns</u>. Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine or neuter forms, and the singular form of nouns and pronouns shall include the plural, and vice versa.

(g) <u>Entire Agreement</u>. This Agreement and the Plan constitute the entire agreement between the parties, and supersedes all prior agreements and understandings, relating to the subject matter of this Agreement.

(h) <u>Amendment</u>. This Agreement may be amended or modified only by a written instrument executed by both the Company and the Participant.

(i) <u>Governing Law</u>. This Agreement shall be construed, interpreted and enforced in accordance with the internal laws of the State of Delaware without regard to any applicable conflicts of laws.

(j) <u>Participant's Acknowledgments</u>. The Participant acknowledges that he or she: (i) has read this Agreement; (ii) has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of the Participant's own choice or has voluntarily declined to seek such counsel; (iii) understands the terms and consequences of this Agreement; (iv) is fully aware of the legal and binding effect of this Agreement; and (v) understands that the law firm of WilmerHale, is acting as counsel to the Company in connection with the transactions contemplated by the Agreement, and is not acting as counsel for the Participant.

[Remainder of Page Intentionally Left Blank]

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

SYROS PHARMACEUTICALS, INC.

By: Name:

Title:

PARTICIPANT:

Name: Address:

Signature Page to Restricted Stock Agreement

Exhibit A

SYROS PHARMACEUTICALS, INC.

Joint Escrow Instructions

, 20

Syros Pharmaceuticals, Inc. One Memorial Drive 7th Floor Cambridge, MA 02142 Attn: Secretary Dear Sir:

As Escrow Agent for Syros Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and its successors in interest under the Restricted Stock Agreement (the "Agreement") of even date herewith, to which a copy of these Joint Escrow Instructions is attached, and the undersigned person ("Holder"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of the Agreement in accordance with the following instructions:

1. <u>Appointment</u>. Holder irrevocably authorizes the Company to deposit with you any certificates evidencing Shares (as

defined in the Agreement) to be held by you hereunder and any additions and substitutions to said Shares. For purposes of these Joint Escrow Instructions, "Shares" shall be deemed to include any additional or substitute property. Holder does hereby irrevocably constitute and appoint you as his attorney-in-fact and agent for the term of this escrow to execute with respect to such Shares all documents necessary or appropriate to make such Shares negotiable and to complete any transaction herein contemplated. Subject to the provisions of this Section 1 and the terms of the Agreement, Holder shall exercise all rights and privileges of a stockholder of the Company while the Shares are held by you.

2. <u>Closing of Purchase</u>.

(a) Upon any purchase by the Company of the Shares pursuant to the Agreement, the Company shall give to Holder and you a written notice specifying the number of Shares to be purchased, the purchase price for the Shares, as determined pursuant to the Agreement, and the time for a closing hereunder (the "Closing") at the principal office of the Company. Holder and the Company hereby irrevocably authorize and direct you to close the transaction contemplated by such notice in accordance with the terms of said notice.

(b) At the Closing, you are directed (i) to date the stock assignment form or forms necessary for the transfer of the Shares, (ii) to fill in on such form or forms the number of Shares being transferred, and (iii) to deliver the same, together with the certificate or certificates

evidencing the Shares to be transferred, to the Company against the simultaneous delivery to you of the purchase price for the Shares being purchased pursuant to the Agreement.

3. <u>Withdrawal</u>. The Holder shall have the right to withdraw from this escrow any Shares as to which the Purchase Option (as defined in the Agreement) has terminated or expired.

4. <u>Duties of Escrow Agent.</u>

(a)

Your duties hereunder may be altered, amended, modified or revoked only by a writing signed by all

of the parties hereto.

(b) You shall be obligated only for the performance of such duties as are specifically set forth herein and may rely and shall be protected in relying or refraining from acting on any instrument reasonably believed by you to be genuine and to have been signed or presented by the proper party or parties. You shall not be personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact of Holder while acting in good faith and in the exercise of your own good judgment, and any act done or omitted by you pursuant to the advice of your own attorneys shall be conclusive evidence of such good faith.

(c) You are hereby expressly authorized to disregard any and all warnings given by any of the parties hereto or by any other person or entity, excepting only orders or process of courts of law, and are hereby expressly authorized to comply with and obey orders, judgments or decrees of any court. If you are uncertain of any actions to be taken or instructions to be followed, you may refuse to act in the absence of an order, judgment or decrees of a court. In case you obey or comply with any such order, judgment or decree of any court, you shall not be liable to any of the parties hereto or to any other person or entity, by reason of such compliance, notwithstanding any such order, judgment or decree being subsequently reversed, modified, annulled, set aside, vacated or found to have been entered without jurisdiction.

(d) You shall not be liable in any respect on account of the identity, authority or rights of the parties executing or delivering or purporting to execute or deliver the Agreement or any documents or papers deposited or called for hereunder.

(e) You shall be entitled to employ such legal counsel and other experts as you may deem necessary properly to advise you in connection with your obligations hereunder and may rely upon the advice of such counsel.

(f) Your rights and responsibilities as Escrow Agent hereunder shall terminate if (i) you cease to be Secretary of the Company or (ii) you resign by written notice to each party. In the event of a termination under clause (i), your successor as Secretary shall become Escrow Agent hereunder; in the event of a termination under clause (ii), the Company shall appoint a successor Escrow Agent hereunder.

(g) If you reasonably require other or further instruments in connection with these Joint Escrow Instructions or obligations in respect hereto, the necessary parties hereto shall join in furnishing such instruments.

(h) It is understood and agreed that if you believe a dispute has arisen with respect to the delivery and/or ownership or right of possession of the securities held by you hereunder, you are authorized and directed to retain in your possession without liability to anyone all or any part of said securities until such dispute shall have been settled either by mutual written agreement of the parties concerned or by a final order, decree or judgment of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but you shall be under no duty whatsoever to institute or defend any such proceedings.

(i) These Joint Escrow Instructions set forth your sole duties with respect to any and all matters pertinent hereto and no implied duties or obligations shall be read into these Joint Escrow Instructions against you.

(j) The Company shall indemnify you and hold you harmless against any and all damages, losses, liabilities, costs, and expenses, including attorneys' fees and disbursements, (including without limitation the fees of counsel retained pursuant to Section 4(e) above, for anything done or omitted to be done by you as Escrow Agent in connection with this Agreement or the performance of your duties hereunder, except such as shall result from your gross negligence or willful misconduct.

5. <u>Notice</u>. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States Post Office, by registered or certified mail with postage and fees prepaid, addressed to each of the other parties thereunto entitled at the following addresses, or at such other addresses as a party may designate by ten days' advance written notice to each of the other parties hereto.

COMPANY:	Notices to the Company shall be sent to the address set forth in the salutation hereto, Attn: President
HOLDER:	Notices to Holder shall be sent to the address set forth below Holder's signature below.
ESCROW AGENT:	Notices to the Escrow Agent shall be sent to the address set forth in the salutation hereto.

6. <u>Miscellaneous</u>.

(a) By signing these Joint Escrow Instructions, you become a party hereto only for the purpose of said Joint Escrow Instructions, and you do not become a party to the Agreement.

(b) This instrument shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

Very truly yours,

SYROS PHARMACEUTICALS, INC.

By: Name: Title:

HOLDER:

(Signature)

Name: Address:

Date Signed:

ESCROW AGENT:

Secretary

Exhibit B

(STOCK ASSIGNMENT SEPARATE FROM CERTIFICATE)

FOR VALUE RECEIVED, I hereby sell, assign and transfer unto() shares of Common Stock, \$0.001 par valueper share, of Syros Pharmaceuticals, Inc. (the "Corporation") standing in my name on the books of the Corporation represented by
Certificate(s) Number() shares of Common Stock, \$0.001 par valuecertificate(s) Numberherewith, and do hereby irrevocably constitute and appoint
on the books of the Corporation with full power of substitution in the premises.attorney to transfer the said stock

Dated:

NOTICE: The signature(s) to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration, enlargement, or any change whatever.

SYROS PHARMACEUTICALS, INC. One Memorial Drive 7th Floor Cambridge, MA 02142

November 13, 2012 (and effective as of July 2, 2012)

Nancy Simonian, M.D.

Dear Nancy:

I am pleased to offer you the position of Chief Executive Officer with Syros Pharmaceuticals, Inc. (the "Company") working out of the Company's headquarters in Cambridge, Massachusetts. Outlined below are the terms of this Offer Letter for your review.

Effective as of July 2, 2012, you will be employed by the Company, on a full-time basis, as its Chief Executive Officer and shall have all authority commensurate with such position, subject to the supervision of, and any conditions or restrictions on such authority as determined from time to time by, the Board of Directors (the "Board").

You agree to perform the duties and responsibilities inherent in such position, and such other duties and responsibilities as shall from time to time be mutually agreed upon between you and the Board, including, but not limited to, (i) leadership regarding efforts to create value for the Company, (ii) guiding the Company's effort to identify and diligence business development opportunities that are consistent with the strategic goals of the Company, and to negotiate such opportunities as are approved by the Board, (iii) leading the effort to develop and achieve the annual financial and business plan goals for the Company, and (iv) development and ongoing maintenance of the Company's values and positive culture, reinforcing the Company's mission to be a highly productive organization that aspires to become one of the leading companies in the industry. You also agree that, while employed by the Company, you will devote your full business time and your best efforts, business judgment, skill and knowledge exclusively to the advancement of the business and interests of the Company and to the discharge of your duties and responsibilities for it. Provided, however, it is agreed that you may serve on outside boards and participate in charitable and civic organizations to the extent such activities do not interfere with your duties and responsibilities to the Company. You agree to abide by the rules, regulations, instructions, personnel practices and policies of the Company, as adopted and amended from time to time by the Company, from and after the date that they are disclosed to you.

You will receive a semi-monthly salary of \$17,708.34 which, if annualized, is equivalent to \$425,000.00. All payments will be payable in accordance with the normal payroll practices of the Company, and will be subject to legally required and otherwise authorized withholdings.

Your performance will be reviewed by the Compensation Committee of the Board on an annual basis in conjunction with an annual salary review, with your salary subject to increase but not decrease at such times.

You will be eligible to receive an annual incentive bonus commencing in calendar year 2012, equal to up to 50% of your thencurrent base salary. Your 2012 award, which will be prorated based upon your start date, and future bonuses, will be subject to the terms of the applicable bonus plan developed under your leadership and approved by the Board. Additional details will be determined by mutual agreement between you and the Board. Any bonus awarded will be paid, subject to required withholdings and deductions, on or before March 15 of the calendar year immediately following the year for which the bonus was awarded.

On or about the first date on which the Company receives aggregate gross proceeds equal to or exceeding \$12,500,000 from the sale to one or more third parties of shares of its capital stock, or notes or other indebtedness that is convertible into or exercisable for shares of its capital stock, in a venture capital financing (the "Qualified Financing Date"), you will, subject to approval by the Board, be awarded a stock option (the "Initial Option") to purchase that number of shares of the Company's Common Stock, \$0.001 par value per share ("Common Stock") representing 5% of the fully diluted shares of Common Stock of the Company calculated immediately following the Qualified Financing Date. The exercise price of the Initial Option will be equal to the fair market value of the Company's Common Stock on the date of grant, and will be subject to the standard terms and conditions of the Company's 2012 Stock Plan and the stock incentive agreement evidencing such award. The Initial Option will vest and become exercisable over four years at the rate of 25% of the shares underlying the award on the first anniversary of the date of your July 2, 2012 commencement of employment, and then at the rate of 1/36th of the remaining shares of Common Stock underlying the award at the end of each additional month after the first anniversary of the date of your commencement of employment until the option is fully vested and exercisable, subject to your continued service to the Company. The Initial Option shall be an incentive stock option to the extent permitted by law, and shall be subject to a right of early exercise (in which case there shall be a Company right of repurchase on any unvested shares of Common Stock issued upon such early exercise that shall lapse in accordance with the same schedule as the vesting described above).

In addition to your Initial Option, on or about the Qualified Financing Date you shall also, subject to approval by the Board, be awarded an additional stock option (the "Milestone Option") to purchase the number of shares of the Company's Common Stock representing 2% of the fully diluted shares of Common Stock of the Company calculated immediately following the Qualified Financing Date. The exercise price of the Milestone Option will be equal to the fair market value of the Company's Common Stock on the date of grant, and will be subject to the standard terms and conditions of the Company's 2012 Stock Plan and the stock incentive agreement evidencing such award. The Milestone Option will vest and become exercisable on the earlier of (1) the date on which the Performance Objective (as defined below) is achieved, and (2) six years from your July 2, 2012 commencement of employment, subject to your

continued service to the Company. The Milestone Option shall be an incentive stock option to the extent permitted by law, and shall be subject to a right of early exercise (in which case there shall be a Company right of repurchase on any unvested shares of Common Stock issued upon such early exercise that shall lapse in accordance with the same schedule as the vesting described above). The Performance Objective shall be a corporate objective that will be mutually agreed upon by you and the Company, acting in good faith, and approved by the Board, on or before the date that the Milestone Option is granted.

This Offer Letter shall not be construed as an agreement, either express or implied, to employ you for any stated term, and shall in no way alter the Company's policy of employment at-will, under which both the Company and you remain free to end the employment relationship for any reason, at any time, with or without cause or notice. Although your job duties, title, compensation and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at-will" nature of your employment may only be changed by a written agreement signed by you and a member of the Board which expressly states the intention to modify the at-will nature of your employment. Similarly, nothing in this offer letter shall be construed as an agreement, either express or implied, to pay you any compensation or grant you any benefit beyond the end of your employment with the Company, except as otherwise explicitly set forth herein. This offer letter supersedes all prior understandings, whether written or oral, relating to the terms of your employment. Your employment and this letter will be governed by the laws of Massachusetts.

Without otherwise limiting the "at-will" nature of your employment, in the event your employment is terminated at any time by the Company without Cause or by you for Good Reason, then: (i) you shall receive your base salary accrued through the last day of your employment with the Company, (ii) you shall continue to receive your base salary at the then-current rate per semi-monthly pay period, reduced by all applicable taxes and withholdings, for a period of twelve (12) months in accordance with the Company's then-current payroll policies and practices, and (iii) you shall receive an incentive bonus (which assumes the achievement of annual targets) pro-rated for the portion of the then-current calendar year during which you were employed by the Company. In the event of a Change in Control, 100% of all unvested stock options then held by you shall become fully vested and exercisable on the earlier to occur of (a) the date your employment is terminated by the Company without Cause or by you for Good Reason (either in contemplation of, pursuant to or following a Change in Control) or (b) the date that is twelve (12) months following the effective date of the Change in Control. Notwithstanding the foregoing, you will not be entitled to receive any severance payments unless, within sixty (60) days following the date of termination, you (i) have executed a general release in a form prescribed by the Company of all known and unknown claims that you may then have against the Company or persons affiliated with the Company, and (ii) have agreed not to prosecute any legal action or other proceeding based on those claims. The severance payments shall be paid or commence on the first payroll period following the date the release becomes effective (the "Payment Date"). Notwithstanding the foregoing, if the 60th day following the date of termination occurs in the calendar year following the calendar year of the termination, then the Payment Date shall be no earlier than January 1 of such subsequent calendar year.

For purposes of this Agreement, "Change of Control" means any transaction or series of related transactions (i) the result of which is a change in the ownership of the Company, such that more than 50% of the equity securities of the Company are acquired by any person or group (as such terms are defined for purposes of Section 13(d)(3) of the Securities Exchange Act of 1934, as amended) that does not own capital stock of the Company on the effective date of such change in control, (ii) that results in the sale of all or substantially all of the assets of the Company, or (iii) that results in the consolidation or merger of the Company with or into another corporation or corporations or other entity in which the Company is not the survivor (except any such corporation or entity controlled, directly or indirectly, by the Company).

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"Cause" means: (i) your conviction of, or plea of guilty or nolo contendere to, any crime involving dishonesty or moral turpitude or any felony; or (ii) you have (A) engaged in material dishonesty, willful misconduct or gross negligence, (B) breached or threatened to breach either or both of the Ancillary Agreements (as defined below), (C) materially violated a Company policy or procedure causing or threatening to cause substantial injury to the Company, and/or (D) willfully refused to perform your assigned duties to the Company, following written notice of such refusal by the Company and a period of fifteen (15) days to cure the same.

"Good Reason" means the occurrence of one or more of the following without your written consent: (i) a change in your principal work location resulting in a new one-way commute that is more than thirty-five (35) miles greater than your one-way commute prior to the change in your principal work location, regardless of whether you receive an offer of relocation benefits, (ii) a material reduction in your authority, duties and/or responsibilities as compared to your authority, duties and/or responsibilities in effect immediately prior to the occurrence of the event (for example, but not by way of limitation, this determination will include an analysis of whether you maintain at least the same level, scope and type of duties and responsibilities with respect to the management, strategy, operations and business of the Company), or (iii) a material reduction in your base compensation as compared to your base compensation in effect immediately prior to the occurrence of the event; provided, however, that no such occurrence shall constitute Good Reason unless (A) you give the Company a written notice of termination for Good Reason not more than ninety (90) days after the initial existence of the condition, (B) the grounds for termination (if susceptible to correction) are not corrected by the Company's receipt of such notice, and (C) your termination of employment occurs within one year following the Company's receipt of such notice.

Any severance payments to you under this Offer Letter shall begin only after the date of your "separation from service" (determined as set forth below), which occurs on or after date of the termination of your employment, and shall be subject to the following provisions:

(i) It is intended that each installment of the severance payments under this Offer Letter shall be treated as a separate "payment" for purposes of Section 409A of the Internal Revenue Code of 1986, as amended, and the guidance issued thereunder ("Section 409A").

Neither the Company nor you shall have the right to accelerate or defer the delivery of any such payments except to the extent specifically permitted or required by Section 409A.

(ii) If, as of the date of your "separation from service" from the Company, you are not a "specified employee" (within the meaning of Section 409A), then each installment of the severance payments shall be made on the dates and terms set forth in this Offer Letter.

(iii) If, as of the date of your "separation from service" from the Company, you are a "specified employee" (within the meaning of Section 409A), then:

A. Each installment of the severance payments that, in accordance with the dates and terms set forth in this Offer Letter, will in all circumstances, regardless of when the "separation from service" occurs, be paid within the short-term deferral period (as defined in Section 409A) shall be treated as a "short-term deferral" within the meaning of Treasury

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Regulation Section 1.409A-l(b)(4) to the maximum extent permissible under Section 409A and shall be paid on the dates and terms set forth in this Offer Letter; and

B. Each installment of the severance payments that is not described in clause (iii)(A) above and that would, absent this clause (B), be paid within the six-month period following your "separation from service" from the Company shall not be paid until the date that is six (6) months and one (1) day after such "separation from service" (or, if earlier, your death), with any such installments that are required to be delayed being accumulated during the six-month period and paid in a lump sum on the date that is six (6) months and one (1) day following your "separation from service" and any subsequent installments, if any, being paid in accordance with the dates and terms set forth in this Offer Letter; provided, however, that the preceding provisions of this clause (B) shall not apply to any installment of severance payments if and to the maximum extent that that such installment is deemed to be paid under a separation pay plan that does not provide for a deferral of compensation by reason of the application of Treasury Regulation 1.409A-1(b)(9)(iii) (relating to separation pay upon an involuntary separation from service). Any installments that qualify for the exception under Treasury Regulation Section 1.409A-1(b)(9)(iii) must be paid no later than the last day of your second taxable year following the taxable year in which the "separation from service" occurs.

(iv) The determination of whether and when your "separation from service" from the Company has occurred shall be made in a manner consistent with, and based on the presumptions set forth in, Treasury Regulation Section 1.409A-1(h). Solely for purposes of this paragraph (iv), "Company" shall include all persons with whom the Company would be considered a single employer under Section 414(b) and 414(c) of the Code.

(v) All reimbursements and in-kind benefits provided under the Offer Letter shall be made or provided in accordance with the requirements of Section 409A to the extent that such reimbursements or in-kind benefits are subject to Section 409A, including, where applicable, the requirements that (i) any reimbursement is for expenses incurred during your lifetime (or during a shorter period of time specified in this Offer Letter), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of any eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to set off or liquidation or exchange for any other benefit.

(vi) Notwithstanding any other provision of this Offer Letter, the Company makes no representation or warranty and shall have no liability to you or to any other person if any provisions of this Offer Letter are determined to constitute deferred compensation subject to Section 409A but do not satisfy an exemption from, or the conditions of, that section.

You will be eligible to participate in any and all benefit programs that the Company establishes and makes available to its employees from time to time, provided that you are eligible under (and subject to all provisions of) the plan documents that govern those programs. Benefits are subject to change at any time in the Company's sole discretion.

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You represent that you are not bound by any employment contract, restrictive covenant or other restriction preventing you from entering into employment with or carrying out your responsibilities for the Company, or which is in any way inconsistent with the terms of this offer letter.

This offer of employment is contingent upon satisfactory reference checks, and upon your execution of the Company's (i) Invention and Non-Disclosure Agreement and (ii) Non-Competition and Non-Solicitation Agreement (collectively, the "Ancillary Agreements"), which are attached hereto as Exhibit A and Exhibit B. You will be required to submit documentation that establishes identity and employment eligibility in accordance with the US Immigration and Naturalization requirements.

I am very excited about having you join our team and I anticipate that you will make many important contributions to our Company and strategic mission. Please acknowledge your acceptance of this offer by returning a signed copy of this letter.

Very truly yours,

SYROS PHARMACEUTICALS, INC.

By: /s/ Robert Nelsen Robert Nelsen Member, Board of Directors

Agreed and acknowledged as of the date first written above.

/s/ Nancy Simonian Nancy Simonian



May 14, 2014

Jorge Conde

Dear Jorge:

On behalf of Syros Pharmaceuticals, Inc. (the "Company"), I am pleased to extend the following offer and set forth the terms of your employment with the Company:

1. You will be employed to serve on a FULL-TIME basis as Chief Product Officer and interim Chief Financial Officer. As CPO/CFO you will report to Nancy Simonian, CEO and will be responsible for overseeing the Company's finances, financing and non-therapeutic platform strategy plus such other duties as may from time to time be assigned to you by the Company. As discussed, the interim nature of the CFO role reflects the agreed upon need of the company to bring in a CFO with a different skill set at the time of a significant change in the financial needs such as at an IPO.

2. Your salary will be \$290,000 per year, paid semi-monthly in arrears in accordance with the Company's normal payroll processes and subject to tax and other withholdings as required by law. Such salary may be adjusted upwards from time to time in accordance with normal business practice and in the sole discretion of the Company.

3. You may participate in any and all bonus and benefit programs that the Company establishes and makes available to its employees from time to time, provided you are eligible under (and subject to all provisions of) the plan documents governing those programs. Specifically you will be eligible to receive a 25% bonus in your first year of employment with the company, prorated based on your start date and approved by the Board of Directors. Future bonus eligibility will be based on the Bonus Plan and approved by the Board of Directors.

4. Without otherwise limiting the "at-will" nature of your employment, in the event your employment is terminated at any time by the Company without Cause or by you for Good Reason, then: (a) you shall receive your base salary accrued through the last day of your employment with the Company and, (b) you shall receive your base salary at the then-current rate per semi-monthly pay period, reduced by all applicable taxes and withholdings, for a period of six (6) mouths commencing on the Payment Date (as defined below), payable in accordance with the Company's then current payroll policies and practices, in the event of a Change in Control, 100% of all unvested stock options then held by you shall become fully vested and exercisable on the earlier to occur of (a) the date your

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employment is terminated by the Company without Cause or by you for Good Reason (either in contemplation of, pursuant to or following a Change in Control) or (b) the date that is twelve (12) months following the effective date of the Change in Control, provided that you remain employed by us or our successor on such date.. Notwithstanding the foregoing, you will not be entitled to receive any severance payments unless, within sixty (60) days following the date of termination, you (i) have executed a general release in a form prescribed by the Company or persons affiliated with the Company, and (ii) have agreed not to prosecute any legal action or other proceeding based on those claims. The severance payments shall be paid, or commence on the first payroll period following the date the release becomes effective (the "Payment Date"). Notwithstanding the foregoing, if the 60th day following the date of termination occurs in the calendar year following the calendar year of the termination, then the Payment Date shall be no earlier than January 1st of such subsequent calendar year. The severance payments are subject to the terms and conditions set forth on Attachment A.

For purposes of this Agreement, "Change in Control" means any transaction or series of related transactions (a) the result of which is a change in the ownership of the Company, such that more than 50% of the equity securities of the Company are acquired by any person or group (as such terms are defined for purposes of Section 13(d)(3) of the Securities Exchange Act of 1934, as amended) that does not own capital stock of the Company immediately prior to the effective date of such change in control, (b) that results in the sale of all or substantially all of the assets of the Company, or (c) that results in the consolidation or merger of the Company with or into another corporation or corporations or other entity in which the Company is not the survivor and where less than 50% of the equity securities of the surviving or resulting corporation are held by holders of equity securities of the company immediately preceding such merger or consolidation(except any such corporation or entity controlled, directly or indirectly, by the Company).

"Cause" means: (a) your conviction of, or plea of guilty or nolo contendere to, any crime involving dishonesty or moral turpitude or any felony; or (b) you have (i) engaged in material dishonesty, willful misconduct or gross negligence, (ii) breached either or both of the Ancillary Agreements (as defined below), (iii) materially violated a Company policy or procedure causing or threatening to cause

substantial injury to the Company, and/or (iv) willfully refused to perform your assigned duties to the Company, following written notice of such refusal by the Company and a period of fifteen (15) days to cure the same.

"Good Reason" means the occurrence of one or more of the following without your written consent: (a) a material reduction in your authority, duties and/or responsibilities as compared to your authority, duties and/or responsibilities in effect immediately prior to the occurrence of the event (for example, but not by way of limitation, this determination will include an analysis of whether you maintain at least the same level, scope and type of duties and responsibilities with respect to the management, strategy, operations and business of the Company), (b) a material reduction in your base compensation as compared to your base compensation in effect immediately prior to the occurrence of the event, (c) the Company's material relocation of more than 50 (fifty) miles from the city of Boston, or (d) a material breach by the Company of this Agreement; provided, however, that no such occurrence shall constitute Good Reason unless: (i) you give the Company a written notice of termination for Good Reason not more than ninety (90)

days after the initial existence of the condition, (ii) the grounds for termination (if susceptible to correction) are not corrected by the Company within fifteen (15) days of its receipt of such notice, and (iii) your termination of employment occurs within one (1) year following the Company's receipt of such notice. For purposes of clarity, your transition from the interim chief financial officer position, as contemplated in Section 1 above, shall not constitute good reason.

5. You may be eligible for a maximum of three (3) weeks of vacation per calendar year to be taken at such times as may be approved by the Company. The number of vacation days for which you are eligible shall accrue at the rate of 1.25 days per month that you are employed during such calendar year.

6 Subject to the approval of the Board of Directors of (he Company, the Company will grant to you an incentive stock option (an "Time-Vested Option") under the Company's 2012 Equity Incentive Plan (the "Plan") for the initial purchase of one percent (1.0%) of the outstanding shares of common stock of the Company as of the date of grant of the Option at a price per share equal to the fair market value at the time of Board approval. The Time-Vested Option shall vest as to 25% of the shares on the one-year anniversary of date of hire, and shall vest in equal monthly installments for the next 36 months, becoming fully vested at the four-year anniversary of grant, in each case provided that you remain employed by us on the applicable vest date. In addition, you shall also be granted an Option to purchase an additional one quarter percent (0.25%) shares of common stock of the Company's outstanding shares as of the date of grant of the Option at a price per share equal to the fair market value at the time of Board approval, which option will vest based on the achievement of the Performance Objectives described below (the "Performance Option"). The "Performance Objectives" are as follows: One third of the Performance Option would vest upon adoption by the Board of Directors of a value creation plan that complements the Company's therapeutic strategy and 2/3 of the Performance Option would vest upon signing by the Company of deal(s) and/or grants consistent with the plan that in the aggregate, provide at least \$20,000,000 in consideration (including upfront payments and any guaranteed future payments, but not including any contingent payments) to the Company, in each case as determined by the Board of Directors in its sole discretion and provided that you remain employed by us on the applicable vest date. The Time-Vested Option and the Performance Option shall each be granted pursuant to the Company's stock incentive plan and shall be subject to the terms and conditions of such plan and the applicable option agreement. You may be eligible to receive such future stock options grants as the Board of Directors of the Company shall deem appropriate. You will be required to execute an Invention and Non-Disclosure Agreement and a Non-Competition and Non-Solicitation Agreement in the forms attached as Exhibit A and Exhibit B, respectively, as a condition of employment (such Agreements are referred to as the "Ancillary Agreements").

7. You represent that you are not bound by any employment contract, restrictive covenant or other restriction preventing you from entering into employment with or carrying out your responsibilities for the Company, or which is in any way inconsistent with the terms of this letter.

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8. You agree to provide to the Company, within three days of your hire date, documentation of your eligibility to work in the United States, as required by the Immigration Reform and Control Act of 1986. You may need to obtain a work visa in order to be eligible to work in the United States. If that is the case, your employment with the Company will be conditioned upon your obtaining a work visa in a timely manner as determined by the Company.

9. This letter shall not be construed as an agreement, either expressed or implied, to employ you for any stated term, and shall in no way alter the Company's policy of employment at will, under which both you and the Company remain free to terminate the employment relationship, with or without cause, at any time, with or without notice. Similarly, nothing in this letter shall be construed as an agreement, either express or implied, to pay you any compensation or grant you any benefit beyond the end of your employment with the Company.

THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK

If you agree with the employment provisions of this letter, please sign the enclosed duplicate of this letter in the space provided below and return it to Lisa Roberts, Operations Manager at Syros Pharmaceuticals Inc., 480 Arsenal St. Suite 130, Watertown, MA 02472. If you do not accept this offer by May 16, 2014, this offer will be revoked.

You will also find enclosed employment and payroll forms which will need to be completed and returned to Lisa prior to your start date.

Very Truly Yours,

By: <u>/s/ Nancy Simonian</u> Name: Nancy Simonian Title: CEO

The foregoing correctly sets forth the terms of my employment by Syros Pharmaceuticals, Inc.

/s/ Jorge Conde Jorge Conde Date: 5/16/2014

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Attachment A

Payments Subject to Section 409A

1. Subject to this Exhibit A, any severance payments that may be due under the Agreement shall begin only upon the date of your "separation from service" (determined as set forth below) which occurs on or after the termination of your employment. The following rules shall apply with respect to distribution of the severance payments, if any, to be provided to you under the Agreement, as applicable:

(a) It is intended that each installment of the severance payments under the Agreement provided under shall be treated as a separate "payment" for purposes of Section 409A. Neither the Company nor you shall have the right to accelerate or defer the delivery of any such payments except to the extent specifically permitted or required by Section 409A.

(b) If, as of the date of your "separation from service" from the Company, you are not a "specified employee" (within the meaning of Section 409A), then each installment of the severance payments shall be made on the dates and terms set forth in the Agreement.

(c) If, as of the date of your "separation from service" from the Company, you are a "specified employee" (within the meaning of Section 409A), then:

(i) Each installment of the severance payments due under the Agreement that, in accordance with the dates and terms set forth herein, will in all circumstances, regardless of when your separation from service occurs, be paid within the short-term deferral period (as defined under Section 409A) shall be treated as a short-term deferral within the meaning of Treasury Regulation Section 1.409A-1(b)(4) to the maximum extent permissible under Section 409A and shall be paid on the dates and terms set forth in the Agreement; and

(ii) Each installment of the severance payments due under the Agreement that is not described in this Exhibit A, Section 1(c)(i) and that would, absent this subsection, be paid within the six-month period following your "separation from service" from the Company shall not be paid until the date that is six months and one day after such separation from service (or, if earlier, your death), with any such installments that are required to be delayed being accumulated during the six-month period and paid in a lump sum on the date that is six months and one day following your separation from service and any subsequent installments, if any, being paid in accordance with the dates and terms set forth herein; provided, however, that the preceding provisions of this sentence shall not apply to any installment of payments if and to the maximum extent that that such installment is deemed to be paid under a separation pay plan that does not provide for a deferral of compensation by reason of the application of Treasury Regulation 1.409A-1(b)(9)(iii) (relating to separation pay upon an involuntary separation from service). Any installments that qualify for the exception under Treasury Regulation Section 1.409A-1(b)(9)(iii) must be paid no later than the last day of

your second taxable year following the taxable year in which the separation from service occurs.

2. The determination of whether and when your separation from service from the Company has occurred shall be made and in a manner consistent with, and based on the presumptions set forth in, Treasury Regulation Section 1.409A-1(h). Solely for purposes of this Attachment A, Section 2, "Company" shall include all persons with whom the Company would be considered a single employer under Section 414(b) and 414(c) of the Code.

3. All reimbursements and in-kind benefits provided under the Offer Letter shall be made or provided in accordance with the requirements of Section 409A to the extent that such reimbursements or in-kind benefits are subject to Section 409A, including, where applicable, the requirements that (i) any reimbursement is for expenses incurred during your lifetime (or during a shorter period of time specified in this Offer Letter), (ii) the amount of expenses eligible for reimbursement during a calendar year may not affect the expenses eligible for reimbursement in any other calendar year, (iii) the reimbursement of any eligible expense will be made on or before the last day of the calendar year following the year in which the expense is incurred, and (iv) the right to reimbursement is not subject to set off or liquidation or exchange for any other benefit.

4. The Company makes no representation or warranty and shall have no liability to you or to any other person if any of the provisions of the Agreement (including this Exhibit) are determined to constitute deferred compensation subject to Section 409A but that do not satisfy an exemption from, or the conditions of, that section.

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Exhibit A

Invention and Non-Disclosure Agreement

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Exhibit B

Non-Competition and Non-Solicitation Agreement

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NON-COMPETITION AND NON-SOLICITATION AGREEMENT

This Agreement is made between Syros Pharmaceuticals, Inc., a Delaware corporation (hereinafter referred to collectively with its subsidiaries as the "Company"), and Jorge Conde (the "Employee").

For good consideration and in consideration of the employment or continued employment of the Employee by the Company, including the equity consideration in the Company, the Employee and the Company agree as follows;

1. <u>Non-Competition and Non-Solicitation</u>. While the Employee is employed by the Company and for a period of one year after the termination or cessation of such employment for any reason, the Employee will not directly or indirectly:

(a) Engage or assist others in engaging in any business or enterprise (whether as owner, partner, officer, director, employee, consultant, investor, lender or otherwise, except as the holder of not more than 1% of the outstanding stock of a publicly-held company) that is competitive with the Company's business, including but not limited to any business or enterprise that develops, manufactures, markets, licenses, sells or provides any product or service that competes with any product or service developed, manufactured, marketed, licensed, sold or provided, or planned to he developed, manufactured, marketed, licensed, sold or provided, by the Company; or

Notwithstanding the foregoing, Section 1(a) shall not preclude the Employee from becoming an employee of, or from otherwise providing services to, a separate division or operating unit of a multi-divisional business or enterprise (a "Division") if: (i) the Division by which the Employee is employed, or to which the Employee provides services, is not competitive with the Company's business (within the meaning of Section 1(a)), (ii) the Employee does not provide services, directly or indirectly, to any other division or operating unit of such multi-divisional business or enterprise which is competitive with the Company's business (within the meaning of Section 1 (a)) (individually, a "Competitive Division" and collectively, the "Competitive Divisions") and (iii) the Competitive Divisions, in the aggregate, accounted for less than one-third of the multi-divisional business or enterprises' consolidated revenues for the fiscal year, and each subsequent quarterly period, prior to the Employee's commencement of employment with the Division.

(b) Either alone or in association with others, solicit, divert or take away, or attempt to divert or take away, the business or patronage of any of the clients, customers, or business partners of the Company which were contacted, solicited, or served by the Company during the 12-month period prior to the termination or cessation of the Employee's employment with the Company; or

(c) Either alone or in association with others (i) solicit, induce or attempt to induce, any employee or independent contractor of the Company to terminate his or her employment or other engagement with the Company, or (ii) hire, or recruit or attempt to hire, or engage or attempt to engage as an independent contractor, any person who was employed or

clause (ii) shall not apply to the recruitment or hiring or other engagement of any individual whose employment or other engagement with the Company has been terminated for a period of six months or longer.

(d) <u>Extension</u>. If the Employee violates the provisions of any of the preceding paragraphs of this Section 1, the Employee shall continue to be bound by the restrictions set forth in such paragraph until a period of one year has expired without any violation of such provisions.

2. <u>Miscellaneous</u>.

(a) <u>Equitable Remedies</u>. The restrictions contained in this Agreement are necessary for the protection of the business and goodwill of the Company and are considered by the Employee to be reasonable for such purpose. The Employee agrees that any breach of this Agreement is likely to cause the Company substantial and irrevocable damage which is difficult to measure. Therefore, in the event of any such breach or threatened breach, the Employee agrees that the Company, in addition to such other remedies which may be available, shall have the right to obtain an injunction from a court restraining such a breach or threatened breach and the right to specific performance of the provisions of this Agreement and the Employee hereby waives the adequacy of a remedy at law as a defense to such relief.

(b) <u>Obligations to Third Parties</u>. The Employee acknowledges and represents that this agreement and the Employee's employment with the Company will not violate any continuing obligation the Employee has to any former employer or other third party.

(c) <u>Disclosure of this Agreement</u>. The Employee hereby authorizes the Company to notify others, including but not limited to customers of the Company and any of the Employee's future employers or prospective business associates, of the terms and existence of this Agreement and the Employee's continuing obligations to the Company hereunder.

(d) <u>Not Employment Contract</u>. The Employee acknowledges that this Agreement does not constitute a contract of employment, does not imply that the Company will continue his/her employment for any period of time and does not change the at-will nature of his/her employment.

(e) <u>Successors and Assigns</u>. this Agreement shall he binding upon and inure to the benefit of both parties and their respective successors and assigns, including any corporation with which, or into which, the Company may be merged or which may succeed to the Company's assets or business, provided, however, that the obligations of the Employee are personal and shall not be assigned by him or her. The Employee expressly consents to be bound by the provisions of this Agreement for the benefit of the Company or any subsidiary or affiliate thereof to whose employ the Employee may be transferred without the necessity that this Agreement be re-signed at the time of such transfer. Notwithstanding the foregoing, if the Company is merged with or into a third party which is engaged in multiple lines of business, or if a third party engaged in multiple lines of business succeeds to the Company's assets or business, then for purposes of Section 1(a),

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the term "Company" shall mean and refer to the business of the Company as it existed immediately prior to such event and as it subsequently develops and not to the third party's other business.

(f) <u>Interpretation</u>. If any restriction set forth in Section 1 is found by any court of competent jurisdiction to be unenforceable because it extends for too long a period of time or over too great a range of activities or in too broad a geographic area, it shall be interpreted to extend only over the maximum period of time, range of activities or geographic area as to which it may be enforceable.

(g) <u>Severability</u>. In case any provision of this Agreement shall be invalid, illegal or otherwise unenforceable, the validity, legality and enforceability of the remaining provisions shall in no way be affected or impaired thereby.

(h) <u>Waivers</u>. No delay or omission by the Company in exercising any right under this Agreement will operate as a waiver of that or any other right. A waiver or consent given by the Company on any one occasion is effective only in that instance and will not be construed as a bar to or waiver of any right on any other occasion.

(i) <u>Governing Law</u>. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts (without reference to the conflicts of laws provisions thereof). Any action, suit, or other legal proceeding which is commenced to resolve any matter arising under or relating to any provision of this Agreement shall be commenced only in a court of the Commonwealth of Massachusetts (or, if appropriate, a federal court located within Massachusetts), and the Company and the Employee each consents to the jurisdiction of such a court. The Company and the Employee each hereby irrevocably waive any right to a trial by jury in any action, suit or other legal proceeding arising under or relating to any provision of this Agreement.

(j) <u>Entire Agreement; Amendment</u>. This Agreement supersedes all prior agreements, written or oral, between the Employee and the Company relating to the subject matter of this Agreement. This Agreement may not be modified, changed or discharged in whole or in part, except by an agreement in writing signed by the Employee and the Company. The Employee agrees that any change or changes in his/her duties, salary or compensation after the signing of this Agreement shall not affect the validity or scope of this Agreement.

(k) <u>Captions</u>. The captions of the sections of this Agreement are for convenience of reference only and in no way define, limit or affect the scope or substance of any section of this Agreement.

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THE EMPLOYEE ACKNOWLEDGES THAT HE/SHE HAS CAREFULLY READ THIS AGREEMENT AND UNDERSTANDS AND AGREES TO ALL OF THE PROVISIONS IN THIS AGREEMENT.

	SYROS PHARMACEUTICALS, INC.
Date:	By: /s/ Nancy Simonian
	Name: Nancy Simonian Title: CEO
Date: 5/16/2014	Jorge Conde
	/s/ Jorge Conde
	4

INVENTION AND NON-DISCLOSURE AGREEMENT

This Agreement is made by and between Syros Pharmaceuticals, Inc., a Delaware corporation (hereinafter referred to collectively with its subsidiaries as the "Company"), and Jorge Conde (the "Employee").

In consideration of the employment or the continued employment of the Employee by the Company, the Company and the Employee agree as follows:

1. <u>Condition of Employment</u>.

The Employee acknowledges that his/her employment and/or the continuance of that employment with the Company is contingent upon his/her agreement to sign and adhere to the provisions of this Agreement. The Employee further acknowledges that the nature of the Company's business is such that protection of its proprietary and confidential information is critical to the business' survival and success.

2. <u>Proprietary and Confidential Information</u>.

(a) The Employee agrees that all information and know-how, whether or not in writing, of a private, secret or confidential nature concerning the Company's business or financial affairs (collectively, "Proprietary Information") is and shall be the exclusive properly of the Company. By way of illustration, but not limitation, Proprietary Information may include discoveries, inventions, products, product improvements, product enhancements, processes, methods, techniques, formulas, compositions, compounds, negotiation strategies and positions, projects, developments, plans (including business and marketing plans), research data, clinical data, financial data (including sales costs, profits, pricing methods), personnel data, computer programs (including software used pursuant to a license agreement), customer, prospect and supplier lists, and contacts at or knowledge of customers or prospective customers of the Company. The Employee will not disclose any Proprietary Information to any person or entity other than employees of the Company or use the same for any purposes (other than in the performance of his/her duties as an employee of the Company) without written approval by an officer of the Company, either during or after his/her employment with the Company, unless and until such Proprietary Information has become public knowledge without fault by the Employee. While employed by the Company, the Employee will use the Employee's best efforts to prevent unauthorised publication or disclosure of any of the Company's Proprietary Information.

(b) The Employee agrees that all files, documents, letters, memoranda, reports, records, data, sketches, drawings, models, laboratory notebooks, program listings, computer equipment or devices, computer programs or other written, photographic, or other tangible or intangible material containing Proprietary Information, whether created by the Employee or others, which shall come into his/her custody or possession, shall be and are the exclusive property of the Company to be used by the Employee only in the performance of his/her duties for the Company and shall not be copied or removed from the Company premises except in the pursuit of the business of the Company. All such materials or copies thereof and all tangible properly of the Company in the custody or possession of the Employee shall be delivered to the Company, upon the earlier of (i) a request by the Company or (ii)

termination of his/her employment. After such delivery, the Employee shall not retain any such materials or copies thereof or any such tangible properly.

(c) The Employee agrees that his/her obligation not to disclose or to use information and materials of the types set forth in paragraphs 2(a) and 2(b) above, and his/her obligation to return materials and tangible property, set forth in paragraph 2(b) above,

also extends to such types of information, materials and tangible property of customers of the Company or suppliers to the Company or other third parties who may have disclosed or entrusted the same to the Company or to the Employee in the course of the Company's business.

3. <u>Developments</u>.

(a) The Employee will make full and prompt disclosure to the Company of all discoveries, inventions, improvements, enhancements, processes, methods, techniques, developments, software, and works of authorship, whether patentable or not, which are created, made, conceived or reduced to practice by him/her or under his/her direction or jointly with others during his/her employment by the Company, whether or not during normal working hours or on the premises of the Company (all of which are collectively referred to in this Agreement as "Developments").

(b) The Employee agrees to assign and does hereby assign to the Company (or any person or entity designated by the Company) all his/her right, title and interest in and to all Developments and all related patents, patent applications, copyrights and copyright applications. However, this paragraph 3(b) shall not apply to Developments which do not relate to the business or research and development conducted or planned to be conducted by the Company at the time such Development is created, made, conceived or reduced to practice and which are made and conceived by the Employee not during normal working hours, not on the Company's premises and not using the Company's tools, devices, equipment or Proprietary Information. The Employee understands that, to the extent this Agreement shall be construed in accordance with the laws of any state which precludes a requirement in an employee agreement to assign certain classes of inventions made by an employee, this paragraph 3(b) shall be interpreted not to apply to any invention which a court rules and/or the Company agrees falls within such classes. The Employee also hereby waives all claims to moral rights in any Developments.

(c) The Employee agrees to cooperate fully with the Company, both during and after his/her employment with the Company, with respect to the procurement, maintenance and enforcement of copyrights, patents and other intellectual property rights (both in the United States and foreign countries) relating to Developments. The Employee shall sign all papers, including, without limitation, copyright applications, patent applications, declarations, oaths, formal assignments, assignments of priority rights, and powers of attorney, which the Company may deem necessary or desirable in order to protect its rights and interests in any Development. The Employee further agrees that if the Company is unable, after reasonable effort, to secure the signature of the Employee on any such papers, any executive officer of the Company shall be entitled to execute any such papers as the agent and the attorney-in-fact of the Employee, and the Employee hereby irrevocably designates and appoints each executive officer of the Company as his/her agent and attorney-in-fact to execute any such papers on his/her behalf, and to take any and

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all actions as the Company may deem necessary or desirable in order to protect its rights and interests in any Development, under the conditions described in this sentence.

4. <u>Other Agreements</u>.

The Employee represents that, except as the Employee has disclosed in writing to the Company, the Employee is not bound by the terms of any agreement with any previous employer or other party to refrain from using or disclosing any trade secret or confidential or proprietary information in the course of his/her employment with the Company, to refrain from competing, directly or indirectly, with the business of such previous employer or any other party or to refrain from soliciting employees, customers or suppliers of such previous employer or other party. The Employee further represents that his/her performance of all the terms of this Agreement and the performance of his/her duties as an employee of the Company do not and will not conflict with or breach any agreement with any prior employer or other party to which the Employee is a party (including without limitation any nondisclosure or non-competition agreement), and that the Employee will not disclose to the Company or induce the Company to use any confidential or proprietary information or material belonging to any previous employer or others.

5. <u>United States Government Obligations</u>.

Tile Employee acknowledges that the Company from time to time may have agreements with other persons or with the United States Government, or agencies thereof, which impose obligations or restrictions on the Company regarding inventions made during the course of work under such agreements or regarding the confidential nature of such work. The Employee agrees to be bound by all such obligations and restrictions which are made known to the Employee and to take all action necessary to discharge the obligations of the Company under such agreements.

6. <u>Miscellaneous</u>.

(a) <u>Equitable Remedies</u>. The restrictions contained in this Agreement are necessary for the protection of the business and goodwill of the Company and are considered by the Employee to be reasonable for such purpose. The Employee agrees that any breach of this Agreement is likely to cause the Company substantial and irrevocable damage which is difficult to measure. Therefore, in the event of any such breach or threatened breach, the Employee agrees that the Company, in addition to such other remedies which may be available, shall have the right to obtain an injunction from a court restraining such a breach or threatened breach and the right to specific performance of the provisions of this Agreement and the Employee hereby waives the adequacy of a remedy at law as a defense to such relief.

(b) <u>Obligations to Third Parties</u>. The Employee acknowledges and represents that this agreement and the Employee's employment with the Company will not violate any continuing obligation the Employee has to any former employer or other

third party.

(c) <u>Disclosure of this Agreement</u>. The Employee hereby authorizes the Company to notify others, including but not limited to customers of the Company and any of the Employee's future employers or prospective business associates, of the terms and existence of this Agreement and the Employee's continuing obligations to the Company hereunder.

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(d) <u>Not Employment Contract</u>. The Employee acknowledges that this Agreement does not constitute a contract of employment, does not imply that the Company will continue his/her employment for any period of time and does not change the at-will nature of his/her employment.

(e) <u>Successors and Assigns</u>. This Agreement shall be binding upon and inure to the benefit of both parties and their respective successors and assigns, including any corporation with which, or into which, the Company may be merged or which may succeed to the Company's assets or business, provided, however, that the obligations of the Employee are personal and shall not be assigned by him or her. The Employee expressly consents to be bound by the provisions of this Agreement for the benefit of the Company or any subsidiary or affiliate thereof to whose employ the Employee may be transferred without the necessity that this Agreement be re-signed at the time of such transfer.

(f) <u>Severability</u>. In case any provision of this Agreement shall be invalid, illegal or otherwise unenforceable, the validity, legality and enforceability of the remaining provisions shall in no way be affected or impaired thereby.

(g) <u>Waivers</u>. No delay or omission by the Company in exercising any right under this Agreement will operate as a waiver of that or any other right. A waiver or consent given by the Company on any one occasion is effective only in that instance and will not be construed as a bar to or waiver of any right on any other occasion.

(h) <u>Governing Law</u>. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts (without reference to the conflicts of laws provisions thereof). Any action, suit, or other legal proceeding which is commenced to resolve any matter arising under or relating to any provision of this Agreement shall be commenced only in a court of the Commonwealth of Massachusetts (or, if appropriate, a federal court located within Massachusetts), and the Company and the Employee each consents to the jurisdiction of such a court. The Company and the Employee each hereby irrevocably waive any right to a trial by jury in any action, suit or other legal proceeding arising under or relating to any provision of this Agreement.

(i) <u>Entire Agreement; Amendment</u>. This Agreement supersedes all prior agreements, written or oral, between the Employee and the Company relating to the subject matter of this Agreement. This Agreement may not be modified, changed or discharged in whole or in part, except by an agreement in writing signed by the Employee and the Company. The Employee agrees that any change or changes in his/her duties, salary or compensation after the signing of this Agreement shall not affect the validity or scope of this Agreement.

(j) <u>Captions</u>. The captions of the sections of this Agreement are for convenience of reference only and in no way define, limit or affect the scope or substance of any section of this Agreement.

THE EMPLOYEE ACKNOWLEDGES THAT HE/SHE HAS CAREFULLY READ THIS AGREEMENT AND UNDERSTANDS AND AGREES TO ALL OF THE PROVISIONS IN THIS AGREEMENT.

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WITNESS our hands and seals:

By: /s/ Nancy Simonian

Name: Nancy Simonian Title: CEO

Jorge Conde

/s/ Jorge Conde

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Date:

Date: May 6, 2014

Confidential Materials omitted and filed separately with the Securities and Exchange Commission. Double asterisks denote omissions.

DANA-FARBER CANCER INSTITUTE, INC.

and

SYROS PHARMACEUTICALS, INC.

LICENSE AGREEMENT

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EXCLUSIVE LICENSE AGREEMENT

This Agreement, effective as of February 22, 2013 (the "EFFECTIVE DATE"), is between the **Dana-Farber Cancer Institute, Inc.** ("DFCI"), a Massachusetts non-profit organization having a principal place of business at 450 Brookline Ave., Boston, MA 02215 and Syros Pharmaceuticals, Inc. ("COMPANY"), a Delaware corporation, having a principal place of business at 1 Memorial Drive, Seventh Floor, Cambridge MA 02142.

RECITALS

WHEREAS, DFCI is the owner of certain PATENT RIGHTS (as later defined herein) relating to [**], and DFCI has the right to giant licenses under said PATENT RIGHTS;

WHEREAS, DFCI has the exclusive right to grant licenses under said PATENT RIGHTS, subject only to a royalty-free,

nonexclusive, non-transferable license to practice the PATENT RIGHTS granted to the United States Government for government purposes;

WHEREAS, DFCI desires to have the PATENT RIGHTS developed and commercialized to benefit the public by granting a license;

COMPANY has represented to DFCI that it has the financial capacity and the strategic commitment to facilitate the transfer of the technology for the public interest using commercially reasonable efforts; and

COMPANY desires to obtain a license to DFCI's rights under the PATENT RIGHTS and to use the DFCI MATERIALS and DFCI is willing to grant a license upon the terms and conditions of this Agreement.

NOW, THEREFORE, DFCI, and COMPANY hereby agree as follows:

1. DEFINITIONS

1.1 "<u>AFFILIATE</u>" will mean any legal entity (such as a corporation, partnership, or limited liability company) that directly or indirectly controls, or is controlled by, or is under common control with, COMPANY. For the purposes of this definition, the term "control" means (i) beneficial ownership of at least fifty percent (50%) of the voting securities of a corporation or other business organization with voting securities or (ii) a fifty percent (50%) or greater interest in the net assets or profits of a partnership or other business organization without voting securities, or (iii) the power to direct the management and policies of such entities. The

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parties acknowledge that in the case of certain entities organized under the laws of certain countries outside of the United States, the maximum percentage ownership permitted by law for a foreign investor may be less than fifty percent (50%), and that in such cases such lower percentage will be substituted in the preceding sentence.

1.2 "<u>COMBINATION PRODUCT</u>" will mean any PRODUCT or LICENSED PROCESS sold or used in combination with one or more other products or processes which are not PRODUCTS or LICENSED PROCESSES.

1.3 "<u>FIELD</u>" will mean all fields.

1.4 "<u>IMPROVEMENTS</u>" will mean any new inventions and/or technology created after the EFFECTIVE DATE and up until thirty six months (36) from the EFFECTIVE DATE and no longer: (i) which DFCI owns or has sufficient rights to license hereunder; that are (ii) from the activities of Dr. Nathanael Gray, and/or others working under their supervision; (iii) not included in the PATENT RIGHTS; and (iv) is dominated by one or more claims of the PATENT RIGHTS and whose practice infringes one or more claims of the PATENT RIGHTS.

1.5 "<u>IND</u>" will mean, with respect to a particular PRODUCT, an Investigational New Drug application submitted to the FDA, or a corresponding application filed with any other regulatory agency, seeking approval to begin tests of a new drug in human subjects.

1.6 "<u>LICENSED PROCESS</u>" will mean any process that, absent the license granted hereunder, would infringe one or more claims of the PATENT RIGHTS.

1.7 "<u>DFCI MATERIALS</u>" will mean those materials disclosed in the PATENT RIGHTS and improvements thereto set forth on Appendix C as of the EFFECTIVE DATE.

1.8 "<u>NDA</u>" will mean a New Drug Application submitted to the FDA seeking approval to market and sell a PRODUCT in the United States of America, or a corresponding application filed with any other regulatory agency seeking approval to market and sell a PRODUCT in a country in the TERRITORY.

1.9 "<u>NET SALES</u>" will mean the gross amount invoiced by COMPANY and its AFFILIATES and SUBLICENSEES for PRODUCTS sold to independent third party customers in bona-fide arms-length transactions, less the following deductions to the extent applicable, which may not exceed amounts which COMPANY, AFFILIATES and SUBLICENSEES in good faith believe are reasonable and customary in the country in which the transaction occurs

and which are consistent with similar deductions applied by COMPANY or the relevant AFFILIATE or SUBLICENSEE to sales of its other products:

(i) customary trade, quantity, or cash discounts to the extent actually allowed and taken;

(ii) amounts repaid or credited by reason of rejection or return which are specifically identifiable to PRODUCTS;

(iii) to the extent separately stated on purchase orders, invoices, or other documents of sale, any taxes or other

governmental charges levied on the production, sale, transportation, delivery, or use of a PRODUCT which is paid by or on behalf of COMPANY or AFFILIATES OR SUBLICENSEES;

- (iv) outbound fulfillment and transportation costs prepaid or allowed and costs of insurance in transit, and documented customs duties actually paid;
- (v) amounts written off for bad debts in accordance with customary accounting practices, provided that any such amounts subsequently paid shall be counted as NET SALES;
- (vi) charge back payments and rebates granted to (1) managed healthcare organizations, (2) federal, state and/or provincial and/or local governments or other agencies, (3) purchasers and reimbursers, or (4) trade customers, including wholesalers and chain and pharmacy buying groups, all only to the extent permitted by applicable law and regulations; and
- (vii) PRODUCTS provided at or below cost for (i) indigent care or patient assistance programs and/or humanitarian purposes, (ii) provided for promotional activities without payment, or (iii) provided to be administered in clinical trials.

COMPANY'S AFFILIATE'S or SUBLICENSEES' transfer of PRODUCT between each other will not result in any NET SALES. NET SALES includes the fair market value of any non-cash consideration from sale of PRODUCTS received by COMPANY, AFFILIATES or SUBLICENSEES. PRODUCTS are considered "Sold" when invoiced or payment is received, whichever occurs first.

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In the event that a PRODUCT or LICENSED PROCESS is sold as a COMBINATION PRODUCT, NET SALES, for the purposes of determining royalty payments on the COMBINATION PRODUCT, shall mean the gross amount collected for the COMBINATION PRODUCT less the deductions set forth above, multiplied by a proration factor that is determined as follows:

- (1) If all components of the COMBINATION PRODUCT were sold separately during the same or immediately preceding year, the proration factor shall be determined by the formula [A / (A+B)], where A is the average gross sales price of all PRODUCT or LICENSED PROCESS components (as applicable) during such period when sold separately from the other component(s), and B is the average gross sales price of the other component(s) during such period when sold separately from the PRODUCT or LICENSED PROCESS components (as applicable); or
- (2) If all components of the COMBINATION PRODUCT were not sold or provided separately during the same or immediately preceding year, the proration factor shall be determined by the Parties in good faith negotiations based on the relative value contributed by each component.

1.10 "<u>OTHER LICENSE AGREEMENTS</u>" will mean the one (1) other license agreement entered into on the EFFECTIVE DATE by the parties hereto and the Whitehead Institute for Biomedical Research, and the one (1) license agreement entered into on the EFFECTIVE DATE by the Company and the Whitehead Institute for Biomedical Research, as such license agreements are amended or restated.

1.11 "<u>PATENT CHALLENGE</u>" will mean a challenge to the validity or enforceability of any of the PATENT RIGHTS, and includes acts that institute, or cause counsel to institute, any interference, opposition, re-examination or similar proceeding with respect to any of the PATENT RIGHTS with the U.S. Patent and Trademark Office or any foreign patent office.

- 1.12 "<u>PATENT RIGHTS</u>" will mean:
 - (i) the United States and international patents listed on <u>Appendix A</u>;

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- (ii) the United States and international patent applications and/or provisional applications listed on <u>Appendix A</u> and/or additional provisional patent applications filed claiming priority to the provisional applications listed on <u>Appendix A</u>, and the resulting patents;
- (iii) any patent applications resulting from the provisional applications and invention disclosures listed on <u>Appendix</u> <u>A</u>, and any conversions, divisionals, continuations, continuation-in-part applications, and continued prosecution applications (and their relevant international equivalents) of the patent applications listed on <u>Appendix A</u> and of such patent applications that claim priority from or result from the provisional applications listed on <u>Appendix A</u> (including, without limitation, any related provisional patent applications filed during the one-year pendency of such provisional applications listed on <u>Appendix A</u>), to the extent the claims are directed to subject matter specifically described in the patent applications listed on <u>Appendix A</u>, and the resulting patents;
- (iv) any patents resulting from reissues, reexaminations, or extensions (and their relevant international equivalents)

of the patents described in (i), (ii), and (iii) above; and

(v) international (non-United States) patent applications and provisional applications filed after the EFFECTIVE DATE and the relevant international equivalents to divisionals, continuations, continuation-in-part applications and continued prosecution applications of the patent applications to the extent the claims are directed to subject matter specifically described in the patents or patent applications referred to in (i), (ii), (iii), and (iv) above, and the resulting patents.

Notwithstanding the above, PATENT RIGHTS with respect to JNK application DFCI #[**] shall include only subject matter related to cyclin dependent kinases and recited in Appendix D.

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1.13 "<u>PHASE I TRIAL</u>" will mean a clinical study of the first introduction of a PRODUCT into a human subject. In the United States, "PHASE I TRIAL" will mean a human clinical study that satisfies the requirements of 21 C.F.R. § 312.21(a).

1.14 "<u>PHASE II TRIAL</u>" will mean a clinical study of a PRODUCT conducted to obtain preliminary data on its effectiveness for a particular indication(s) in human subjects with the disease or condition and its possible short-term side effects and risks. In the United States, "PHASE II TRIAL" will mean a human clinical study that satisfies the requirements of 21 C.F.R. § 312.21 (b).

1.15 "<u>PHASE III TRIAL</u>" will mean a clinical study of a PRODUCT in human subjects for the purpose of gathering the definitive information about efficacy, dosage, and safety in the proposed therapeutic indication to demonstrate that the PRODUCT is safe and effective in order for the FDA or other appropriate regulatory agency to approve an NDA to market the PRODUCT for the proposed indication. In the United States, "PHASE III TRIAL" will mean a human clinical study that satisfies the requirements of 21 C.F.R. § 312.21 (c).

- 1.16 "<u>PRODUCT</u>" will mean any product that in whole or in part:
 - (i) absent the license granted hereunder, would infringe one or more claims of the PATENT RIGHTS; or
 - (ii) is manufactured using a LICENSED PROCESS or that, when used, practices a LICENSED PROCESS.
- 1.17 "<u>REPORTING PERIOD</u>" will begin on the first day of each calendar quarter and end on the last day of such calendar quarter.

1.18 "<u>SUBLICENSE INCOME</u>" will mean any payments that COMPANY receives from a SUBLICENSEE in consideration of the sublicense of rights granted COMPANY under Section 2.1 with respect to PRODUCTS, including without limitation upfront fees, license fees, milestone payments, annual license maintenance fees, distribution or joint marketing fees, and premiums above the fair market value on bona fide equity investments, debt or other types of investments in the COMPANY. Notwithstanding the foregoing, SUBLICENSE INCOME shall not include: (i) payments received for bona fide security investments, debt or other types of investments in the COMPANY, including the right to acquire COMPANY securities in the future, such as warrants, convertible debt and the like (other than premiums above the fair market value of such investments, debt or other types of investments as of the date of receipt of

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such payments), (ii) amounts received by COMPANY directly based on PRODUCTS sold by third parties, including without limitation earned royalties, profit sharing payments and the like; (iii) reimbursements for out-of-pocket patent prosecution, maintenance, defense and enforcement costs for the PATENT RIGHTS; or (iv) reimbursement of bona fide research, development and commercialization costs actually incurred (including, without limitation, payments for FTEs).

1.19 "SUBLICENSEE" will mean any non-AFFILIATE sublicensee of the rights granted COMPANY under Section 2.1.

1.20 "<u>SUBLICENSE AGREEMENT</u>" will mean a written contractual agreement between COMPANY and a SUBLICENSEE granting a sublicense of the rights granted COMPANY under Section 2.1.

1.21 "<u>TERM</u>" will mean the term of this Agreement, which shall commence on the EFFECTIVE DATE and shall remain in effect until the expiration or abandonment of the PATENT RIGHTS, unless earlier terminated in accordance with the provisions of this Agreement.

1.22 "<u>TERRITORY</u>" will mean worldwide.

1.23 "<u>VALID CLAIM</u>" will mean (i) any claim of an issued and unexpired PATENT RIGHT that (a) has not been held permanently revoked, unenforceable or invalid by a decision of a court or governmental agency of competent jurisdiction, which decision is unappealable or unappealed within the time allowed for appeal and (b) has not been abandoned, disclaimed, denied or admitted to be invalid or unenforceable through reissue or disclaimer or otherwise, or (ii) a claim of a pending PATENT RIGHT application that has not been pending for more than [**] years from the date of first action on the merits, which claim has not been abandoned or finally disallowed without the possibility of appeal or re-filing of the application.

2. GRANT OF RIGHTS

2.1 License Grants. Subject to the terms of this Agreement, DFCI hereby grants to COMPANY and its AFFILIATES for the TERM a royalty-bearing license under the PATENT RIGHTS to make, have made, use, sell, offer to sell, and import PRODUCTS in the FIELD in the TERRITORY and to perform and have performed LICENSED PROCESSES in the FIELD in the TERRITORY. Further, DFCI hereby grants to COMPANY and its AFFILIATES for the TERM a license under the DFCI MATERIALS. As COMPANY may reasonably request. DFCI

will provide DFCI MATERIALS in its possession and subject to availability within [**] days of such request.

2.2 <u>Exclusivity</u>. DFCI agrees that it shall not grant any other license or other rights under the PATENT RIGHTS to make, have made, use, sell, offer for sale or import PRODUCTS in all fields in the TERRITORY or to perform of have performed LICENSED PROCESSES in the FIELD in the TERRITORY during the TERM nor shall DFCI practice the PATENT RIGHTS, except as expressly permitted in Section 2.5.

2.3 <u>Sublicenses</u>. COMPANY will have the right to grant SUBLICENSE AGREEMENTS and other rights under Section 2.1 and this AGREEMENT and through multiple tiers; provided, however, that such multiple tier SUBLICENSE AGREEMENTS shall be consistent with the provisions herein with respect to SUBLICENSE AGREEMENTS and limited to SUBLICENSE AGREEMENTS where COMPANY has granted material COMPANY intellectual property rights and a SUBLICENSE AGREEMENT under this Agreement. For the purpose of clarity, Sublicensees do not have the right to grant further SUBLICENSE AGREEMENTS except provided under this Section 2.3. COMPANY shall incorporate terms and conditions into its SUBLICENSE AGREEMENTS sufficient to enable COMPANY to comply with this Agreement. Upon termination of this Agreement for any reason, any SUBLICENSEE not then in default shall have the right to take a direct license from DFCI on substantially identical terms as this AGREEMENT. DFCI agrees to execute such direct license and any non-identical terms will be negotiated between SUBLICENSEE and DFCI in good faith under reasonable terms and conditions in a timely manner. COMPANY remains responsible for the operations of any SUBLICENSEE under this Agreement, as if the operations were carried out by COMPANY.

2.3.1 Form and Content of Sublicenses. COMPANY shall issue any sublicense(s) granted by it under this Agreement in writing and COMPANY shall include the equivalent of at least the following provisions with COMPANY in all sublicenses.

(a) Sublicensees shall report [**] to COMPANY on its operations under the sublicense.

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(b) Sublicensees shall make payments due to COMPANY in relation to NET SALES of PRODUCTS in a timely manner, so that COMPANY may comply with its obligations to make payments to DFCI as set forth in Section 4.

(c) The terms and conditions of Section 2.4 (U.S. Manufacturing), Section 2.5 (Retained Rights), Section 5.3 (Record keeping), Section 11.3 (Non-Use of Name), Section 11.4 (Patent Marking), and Section 11.5 (Export Control) are binding on the sublicensee through the applicable SUBLICENSE AGREEMENT.

(d) A section substantially the same as Section 8 (Indemnification and Insurance) shall be included which also will state that the Indemnitees (as defined in Section 8) are intended third party beneficiaries of such SUBLICENSE AGREEMENT solely for the purpose of enforcing such indemnification and insurance provisions.

2.3.2 COMPANY shall forward to DFCI copies of any and all fully executed sublicenses promptly after execution, which copies may be reasonably redacted except for matters relevant to COMPANY'S obligations and DFCI's rights under this Agreement, provided that sufficient information remains unredacted to allow DFCI to reasonably assess whether COMPANY is in compliance with its obligations under this Agreement and to verify amounts payable hereunder in connection with such sublicense agreement. DFCI shall keep any such copies of sublicense agreements in their confidential files and shall use them solely for the purpose of monitoring COMPANY'S and SUBLICENSEES' compliance with their obligations hereunder and enforcing DFCI's rights under this Agreement. Such copy shall be postmarked within [**] days of the execution of the sublicense.

2.3.3 COMPANY'S Continuing Obligations. Nothing in Section 2.3 may be construed to relieve COMPANY of its obligations to DFCI under this Agreement, including but not limited to COMPANY'S obligations under Section 8.

2.4 <u>U.S. Manufacturing</u>. COMPANY agrees that any PRODUCTS used or sold in the United States will be manufactured substantially in the United States as required by 35 U.S.C. 204 and 37 C.F.R. 401 et. seq., as amended.

2.5

(a) <u>DFCI</u>. DFCI retains the right on behalf of itself, the right to practice the PATENT RIGHTS and use the DFCI MATERIALS for internal research, leaching and other educational purposes only, such internal research lo not include any commercial third party sponsored research or any industry sponsored clinical trials, and not for the purpose of commercial development, production, manufacture, distribution or sale of products or provision of services for a fee.

(b) <u>Academic and Not-For-Profit Research Institutes</u>. DFCI retains the right to grant non-exclusive licenses to other nonprofit or academic institutions to practice the PATENT RIGHTS and use DFCI MATERIALS in performing internal research or for education purposes (but in no case when sponsored or otherwise funded in any way by any for-profit entity); provided, however, that in no event shall any such license permit the practice or use of the PATENT RIGHTS for commercial activities of any kind or for commercial third party sponsored research. DFCI may distribute DFCI MATERIALS to other nonprofit or academic institutions for the uses expressly permitted above (and not others), but only on the basis of a Material Transfer Agreement with such institution, substantially in the form attached hereto as Exhibit C (an "<u>MTA</u>"). DFCI shall notify COMPANY when it enters into an MTA or distributes or otherwise provides any DFCI MATERIALS pursuant to this Section on a [**] basis. DFCI shall not provide any DFCI MATERIALS to any for-profit third party. DFCI shall refer any DFCI MATERIALS request from a for-profit third party to COMPANY.

(c) <u>Federal Government</u>. COMPANY acknowledges that the U.S. federal government retains a royaltyfree, non-exclusive, non-transferable license to practice any government-funded invention claimed in any PATENT RIGHTS as set forth in 35 U.S.C. §§ 201-211, and the regulations promulgated thereunder, as amended, or any successor statutes or regulations.

2.6 <u>IMPROVEMENTS</u>. Provided that COMPANY is not then in default or breach of this Agreement, and subject to DFCI's obligations under conflict of interest regulations or

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guidelines from the federal government or policies of DFCI or subject to DFCIs obligations under third party corporate sponsorship or any obligations existing as of the Effective Date associated with third party materials, which determination shall be made in DFCIs reasonable discretion, DFCI hereby grants to COMPANY an exclusive option to receive an exclusive commercial license to all IMPROVEMENTS ("OPTION"). The OPTION must be exercised within [**] days from the date of disclosure of any such IMPROVEMENT to COMPANY and the resulting license shall be incorporated into this Agreement as an amendment to the PATENT RIGHTS definition. COMPANY shall agree with DFCI on terms which are reasonable and appropriate in licenses between industry and academic institutions, to be negotiated in good faith within [**] days of exercising the OPTION, which will be added to the COMPANY'S diligence obligations under Section 3 with respect to such IMPROVEMENTS, and DFCI shall timely amend APPENDIX A to include all relevant information for such IMPROVEMENT. Should no license result from this process, DFCI shall be free to license IMPROVEMENTS to any third party, but DFCI, for a period of [**] shall not offer the IMPROVEMENT to a third party on lesser terms than offered to COMPANY.

2.7 <u>No Additional Rights</u>. Nothing in this Agreement shall be construed to confer any rights upon COMPANY by implication, estoppel, or otherwise as to any technology or patent rights of DFCI or any other entity other than the PATENT RIGHTS (save for patent rights on IMPROVEMENTS as provided above), regardless of whether such technology or patent rights shall be dominant or subordinate to any PATENT RIGHTS, and DFCI agrees to notify COMPANY in writing upon the determination that such dominant patent rights owned by DFCI exist.

3. COMPANY DILIGENCE OBLIGATIONS

3.1 COMPANY shall use commercially reasonable efforts, or shall cause one or more of its AFFILIATES and SUBLICENSEES to use commercially reasonable efforts, to develop one or more PRODUCTS or LICENSED PROCESSES and to introduce PRODUCTS or LICENSED PROCESSES into the commercial market; thereafter, COMPANY or its AFFILIATES or SUBLICENSEES shall make one or more PRODUCTS or LICENSED PROCESSES reasonably available to the public. Specifically, COMPANY or AFFILIATE or SUBLICENSEE shall fulfill the following obligations:

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- (i) Within [**] months after the EFFECTIVE DATE, COMPANY shall furnish DFCI with a written research and development plan describing the major tasks to be achieved in order to bring to market a PRODUCT, specifying the number of staff and other resources to be devoted to such development effort.
- (ii) Within [**] days after the end of each calendar year, COMPANY shall furnish DFCI with a written report (consistent with Section 5.1 (a)) on the progress of its efforts during the immediately preceding calendar year to develop and commercialize a PRODUCT. The report shall also contain a discussion of intended efforts for the year in which the report is submitted.

3.2 <u>Diligence Requirements</u>. If, in any full calendar year, COMPANY or any one or more AFFILIATES or SUBLICENSEES, alone or together, has performed any one of the following with respect to a PRODUCT or a LICENSED PROCESS, then COMPANY shall be deemed to have complied with COMPANY'S obligations under this Section 3 for such calendar year:

- (i) is actively researching or developing one or more PRODUCTS as evidenced by the commitment to such work of [**] or more full-time equivalent staff;
- (ii) has expended a minimum of [**] dollars (\$[**]) for development of one or more PRODUCTS annually, not including all amounts paid under this AGREEMENT;

[**].

COMPANY shall be actively conducting a trial during the process of activating sites and/or screening or enrolling patients. In the event that COMPANY or any of its AFFILIATES or SUBLICENSEES, alone or together, has not performed at least one of Sections 3.2(i) through (x) during such full calendar year with respect to at least one PRODUCT, then DFCI may treat such failure as a material breach in accordance with Section 12.3(b) (it being understood that performance of at least one of Sections 3.2(i) through (x) during the [**]-day cure period and as applicable during the [**] months thereafter shall cure such breach).

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4. ROYALTIES AND PAYMENT TERMS

4.1 Consideration for Grant of Rights.

(a) <u>License Issue Fee, Patent Cost Reimbursement, Ongoing Patent Costs and FUNDING MILESTONE</u>
 <u>PAYMENTS</u>. COMPANY shall pay to DFCI on the EFFECTIVE DATE a license issue fee of fifty thousand dollars
 (\$50,000), and, such amounts required as reimbursement in accordance with Section 6.3, relating to actual expenses incurred as of the EFFECTIVE DATE in connection with obtaining the PATENT RIGHTS (or [] Dollars
 (\$[])). In addition, in accordance with Section 6.3, COMPANY shall pay all such reasonable, direct, out-of-pocket, ongoing expenses in connection with obtaining the PATENT RIGHTS incurred after the EFFECTIVE DATE.

COMPANY shall pay to DFCI one FUNDING MILESTONE PAYMENT as follows: one hundred twenty-five thousand dollars (\$125,000) upon the earlier of (1) [**] years after the EFFECTIVE DATE or (2) COMPANY raising [**] Dollars (\$[**]) in one or more rounds of equity financing. This payment is nonrefundable and is due within [**] months of equity financing closing.

(b) <u>License Maintenance Fees</u>. COMPANY shall pay to DFCI the following license maintenance fees on January 1 of each year set forth below:

Year(s)	License Maintenance Fee	
[**]	[**]	
[**]	[**]	
[**]	[**]	
[**]	[**]	
[**]	[**]	

This license maintenance fee is nonrefundable; however, the license maintenance fee may be credited to all payments due during the same calendar year, if any except patent cost reimbursements as provided in Section 6.3. License maintenance fees paid in excess of such payments due in such calendar year shall not be creditable to amounts due for future years.

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(c) <u>Milestone Payments</u>. COMPANY shall pay to DFCI the following milestone payments upon first achievement of the following milestones whether by COMPANY, its AFFILIATE, or a SUBLICENSEE (in DOLLARS) for the first PRODUCT and the second PRODUCT only, wherein the first PRODUCT and the second PRODUCT are distinct and separate chemical entities requiring separate regulatory approvals:

[**]

A "MAJOR COUNTRY" will mean Germany, France, Italy, Spain or the United Kingdom.

COMPANY shall provide DFCI with written notice and such milestone payment within [**] days after achieving each milestone. Each such milestone payment shall be payable only once for each of the first PRODUCT and the second PRODUCT. These milestone payments are nonrefundable.

- (d) <u>Running Royalties on PRODUCTS</u>. COMPANY shall pay to DFCI:
 - a running royalty of [**] percent ([**]%) of NET SALES on an annualized basis up to \$[**] in Net Sales of PRODUCTS, by COMPANY, AFFILIATES and SUBLICENSEES in those countries where such sale infringes one or more VALID CLAIMS;

- a running royalty of [**] percent ([**]%) of NET SALES on an annualized basis between
 \$[**] and \$ [**] in Net Sales of PRODUCTS by COMPANY, AFFILIATES and
 SUBLICENSEES in those countries where such sale infringes one or more VALID CLAIMS; or
- a running royalty of [**] percent ([**]%) of NET SALES on an annualized basis in excess of \$[**] in Net Sales of PRODUCTS by COMPANY, AFFILIATES and SUBLICENSEES in those countries where such sale infringes one or more VALID CLAIMS.

(e) <u>Adjustments</u>. The provisions of Section 4.1(d) will be adjusted as follows:

(1) If the PRODUCT for a given therapeutic area (e.g. cancer, cardiovascular, and autoimmune disease) is the [**] from the EFFECTIVE DATE the applicable royalty rate for all PRODUCTS in that therapeutic area will be: (a) if there is a SUBLICENSEE, the lesser of: (1) the royalty rates as provided above for that PRODUCT or (2) [**]% of the royalty payments made to COMPANY by a SUBLICENSEE of that PRODUCT if sublicensed; or (b) if there is not a SUBLICENSEE, then the royalty rate as provided above for that PRODUCT.

(2) If the PRODUCT for a given therapeutic area becomes [**] from the EFFECTIVE DATE, the applicable royalty rate for all PRODUCTS in that therapeutic area will be: (a) if there is a SUBLICENSEE, the lesser of (1) [**]% of the royalty rates as provided above for that PRODUCT or (2) [**]% of the royalty payments made to COMPANY by a SUBLICENSEE of that PRODUCT if sublicensed; or (b) if there is not a SUBLICENSEE, then [**]% of the royalty rate as provided above for that PRODUCT.

(3) If the PRODUCT for a given therapeutic area becomes the [**] from the EFFECTIVE DATE, the applicable royalty rate for all PRODUCTS in that therapeutic area will be: (a) if there is a SUBLICENSEE, the lesser of (1) [**]% of the royalty rates as provided above for that PRODUCT or (2) [**]% of the royalty payments made to COMPANY by a SUBLICENSEE of that PRODUCT if sublicensed; or (b) if there is not a SUBLICENSEE, then [**]% of the royalty rate as provided above for that PRODUCT.

(4) For clarity, the above adjustments apply for a single therapeutic area. PRODUCTS developed for a second or third (or further) therapeutic area(s) will be subject anew to the adjustments provided for above under Section 4.1(e) 1-3.

Upon expiration of the AGREEMENT or completion of all of COMPANY'S royalty obligations with respect to all PRODUCTS, the license grants contained herein shall become fully paid-up, royalty-free, perpetual and irrevocable.

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Royalty Stacking. To the extent that COMPANY acquires or obtains licenses to third party patent rights or other intellectual property necessary for manufacture, use and sale of a PRODUCT, COMPANY may deduct from any royalties due to DFCI hereunder for such PRODUCT and no others, a maximum of [**] percent ([**]%) of the amounts due and/or paid to such third parties that exceed [**]% of NET SALES of such PRODUCT. As an example for purposes of illustration, if such third party royalty owed by COMPANY is [**] percent of Net Sales, only [**] percent (i.e. [**] percent) would be creditable to the amount owed DFCI. Any such credit shall not reduce the amounts owed DFCI by more than [**]% of what was otherwise owed for such PRODUCT.

<u>Royalty Minimums</u>. The adjustments provided for above or elsewhere in this AGREEMENT will not reduce the running royalty rate COMPANY shall pay to DFCI below the following levels:

[**] percent ([**]%) of NET SALES by COMPANY, AFFILIATES and SUBLICENSEES in those countries where such sale infringes one or more VALID CLAIMS for annualized NET SALES of less than \$[**];

[**] percent ([**]%) of NET SALES by COMPANY, AFFILIATES and SUBLICENSEES in those countries where such sale infringes one or more VALID CLAIMS for annualized NET SALES between \$[**] to \$[**];

[**] percent ([**]%) of NET SALES, by COMPANY, AFFILIATES and SUBLICENSEES in those countries where such sale infringes one or more VALID CLAIMS for annualized NET SALES of more than \$[**].

(f) <u>Sharing of NON-ROYALTY SUBLICENSE INCOME</u>. COMPANY shall pay DFCI the following percentage of SUBLICENSE INCOME:

(i) [**]% of SUBLICENSE INCOME received by COMPANY from the EFFECTIVE DATE until the earliest of (1) [**] months from the EFFECTIVE DATE; (2) [**]; or (3) the aggregate payment of [**] Dollars (\$[**]) to

DFCI under this Section 4.1 (f) (the earliest of (1), (2), and (3), the "FIRST STEPDOWN");

- (ii) From the FIRST STEPDOWN, [**]% of SUBLICENSE INCOME received by COMPANY until the earliest of (1) [**] months from the EFFECTIVE DATE; (2) [**], or (3) an aggregate payment of [**] Dollars (\$[**]) to DFCI under this Section 4.1(f)(ii) (the earliest of (1), (2), and (3), the "SECOND STEPDOWN");
- (iii) From the SECOND STEPDOWN, [**]% of SUBLICENSE INCOME received by COMPANY until the earliest of (1) [**] months from the EFFECTIVE DATE; (2) [**]; or (3) an aggregate payment of [**] Dollars (\$[**]) to DFCI under this Section 4.1 (f)(iii) (the earliest of (1), (2), and (3) the "THIRD STEPDOWN"); and
- (iv) from the THIRD STEPDOWN, [**]% of SUBLICENSE INCOME received by COMPANY thereafter.

For clarity, any of the foregoing STEPDOWNS specified above may apply to a single payment from a SUBLICENSEE if such payment triggers the payment thresholds specified above (so that such payment will be subject to different sharing percentages).

Such amounts shall be payable for each REPORTING PERIOD and shall be due to DFCI within [**] days of the end of each REPORTING PERIOD. Further, if COMPANY pays to DFCI a milestone payment under Section 4.1(c) for achieving a milestone for which COMPANY receives from a Sublicensee a payment for achieving the same or substantially same milestone with respect to the same Product and indication, as relevant, subject to this Section 4.1(f), then the amount of COMPANY'S payment to DFCI under Section 4.1 (c) shall be deducted from such SUBLICENSEE'S payment for purposes of this Section 4.1(f) and shall not be subject to such percentage share. To the extent that patent rights, other intellectual property rights or other rights or obligations other than PATENT RIGHTS for PRODUCTS are sublicensed hereunder by COMPANY, that portion of the consideration received by COMPANY and subject to this Section 4.1(f)

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shall be equitably apportioned between those PATENT RIGHTS and those other rights and obligations, and such apportionment shall be reasonable and in accordance with customary standards in the industry.

For clarity, (A) those other rights and obligations include, without limitation, other patent rights sublicensed under any OTHER LICENSE AGREEMENTS, and (B) there shall not be sharing of any specific SUBLICENSE INCOME among this Agreement and the OTHER LICENSE AGREEMENTS, since this AGREEMENT and the OTHER LICENSE AGREEMENTS apply to different patent rights.

COMPANY shall promptly deliver to DFCI a written report setting forth such apportionment. In the event DFCI disagrees with the determination made by COMPANY, DFCI shall so notify COMPANY within [**] days of receipt of COMPANY'S report and the parties shall meet to discuss and resolve such disagreement in good faith. If the parties are unable to agree in good faith as to such fair market values within [**] days, then the matter shall be submitted in accordance with the dispute resolution process set forth in Section 13.1, and if COMPANY owes additional monies to DFCI after the conclusion of such process COMPANY shall have [**] days after the completion of such process to make such payment to DFCI.

(g) <u>No Multiple Royalties</u>. If the manufacture, use, offer for sale, import, or sale of any PRODUCT or the performance of any LICENSED PROCESS is covered by more than one of the PATENT RIGHTS, multiple royalties shall not be due.

(h) <u>OTHER LICENSE AGREEMENTS</u>. As provided above for running royalties under Section 4.1(d) by reason of crediting, no more than one such running royalty shall be payable under this Agreement and the OTHER LICENSE AGREEMENTS when taken together with respect to the same or substantially same product, respectively, provided the higher amount will be due under any of those three (3) agreements with respect thereto. Likewise, as provided above for SUBLICENSE INCOME under Section 4.1(f), any SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME shall be

apportioned among those three (3) agreements so any portion of any SUBLICENSE INCOME shall be shared only once under one (1) of those three (3) agreements.

4.2 <u>Payments</u>.

(a) <u>Method of Payment</u>. All payments under this Agreement should be made payable to Dana-Farber Cancer Institute and sent to DFCIs address identified below.

Each payment should reference this Agreement and identify the obligation under this Agreement that the payment satisfies. Payments by check should be sent to:

Fiscal Manager Office of Research and Technology Ventures Dana Farber Cancer Institute 450 Brookline Ave. Boston, MA 02215

or if by wire transfer, using the following information:

Bank: [**] Bank Address: [**] Account#[**] ABA# [**] Reference: [**]

(b) <u>Payments in U.S. Dollars</u>. All payments due under this Agreement shall be drawn on a United States bank and shall be payable in United States dollars. Conversion of foreign currency to U.S. dollars shall be made at the conversion rate existing in the United States (as reported in the *Wall Street Journal*) on the last working day of the calendar quarter of the applicable REPORTING PERIOD. Such payments shall be without deduction of exchange, collection, or other charges, and, specifically, without deduction of withholding or similar taxes or other government imposed fees or taxes, except as permitted in the definition of NET SALES. To the extent it has the legal right to do so and at the reasonable request of COMPANY, DFCI will assist COMPANY in reclaiming or seeking reimbursement any amounts withheld under this Section 4.2(b) from the appropriate government, agency or taxing authority. For tax

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withholding purposes that arise with respect to such payments, COMPANY shall treat DFCI as a 501(c)(3) tax-exempt charitable organization, to the extent DFCI remains a tax-exempt charitable organization.

(c) <u>Late Payments</u>. Any payments by COMPANY that are not paid on or before the date such payments are due under this Agreement shall bear interest, to the extent permitted by law. The interest will be calculated at the annual rate of the sum of (a) [**] percent ([**]%) plus (b), the prime interest rate quoted by Bank of America on the date the payment is due, the interest being compounded on the last day of each calendar quarter. However, the annual rate may not exceed the maximum legal interest rate allowed in Massachusetts. The payment of interest as required by this Section does not foreclose DFCI from exercising any other rights or remedies it has as a consequence of the lateness of any payment.

5. REPORTS AND RECORD KEEPING

5.1 Frequency of Reports.

(a) <u>Before First Commercial Sale</u>. Prior to the first commercial sale of any PRODUCT or first commercial performance of any LICENSED PROCESS, COMPANY shall deliver reports to DFCI [**], within [**] days of the end of each [**], containing information concerning the immediately preceding [**], as further described in Section 5.2.

(b) <u>Upon First Commercial Sale of a PRODUCT or Commercial Performance of a LICENSED</u> <u>PROCESS</u>. COMPANY shall report to DFCI the date of first commercial sale of a PRODUCT and the date of first commercial performance of a LICENSED PROCESS within [**] days of occurrence in each country.

(c) <u>After First Commercial Sale</u>. After the first commercial sale of a PRODUCT or first commercial performance of a LICENSED PROCESS, COMPANY shall deliver reports to DFCI within [**] days of the end of each REPORTING PERIOD, containing information concerning the immediately preceding REPORTING PERIOD, as further described in Section 5.2.

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5.2 <u>Content of Reports and Payments</u>. Each report delivered by COMPANY to DFCI shall contain at least the following information for the immediately preceding REPORTING PERIOD:

- the number of PRODUCTS manufactured, sold, leased or distributed by COMPANY, its AFFILIATES and SUBLICENSEES to independent third parties in each country, and, if applicable, the number of PRODUCTS used by COMPANY, its AFFILIATES and SUBLICENSEES in the provision of services in each country;
- (ii) a description of LICENSED PROCESSES performed by COMPANY, its AFFILIATES and SUBLICENSEES in each country as may be pertinent to a royalty accounting hereunder;

- (iii) the gross price charged by COMPANY, its AFFILIATES and SUBLICENSEES for each PRODUCT and, if applicable, the gross price charged for each PRODUCT used to provide services in each country; and the gross price charged for each LICENSED PROCESS performed by COMPANY, its AFFILIATES and SUBLICENSEES in each country;
- (iv) calculation of NET SALES for the applicable REPORTING PERIOD in each country, including a listing of applicable deductions;
- (v) total royalty payable on NET SALES in U.S. dollars, together with the exchange rates used for conversion;
- (vi) the amount of SUBLICENSE INCOME received by COMPANY from each SUBLICENSEE and the amount deliverable to DFCI from such SUBLICENSE INCOME, including an itemized breakdown of the sources of income comprising the SUBLICENSE INCOME; and
- (vii) the number of sublicenses entered into for the PATENT RIGHTS, PRODUCTS and/or LICENSED PROCESSES.

If no amounts are due for any REPORTING PERIOD, the report shall so state. COMPANY shall use commercially reasonable efforts to enter into a SUBLICENSE AGREEMENT whereby the applicable SUBLICENSEE provides the information necessary for the foregoing, but if despite such commercially reasonable efforts, COMPANY is unable to obtain all such information from such SUBLICENSEE, then COMPANY shall be in compliance

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with this Section 5 by providing such relevant information as COMPANY is able to obtain from such SUBLICENSEE.

5.3 <u>Record keeping</u>. COMPANY shall maintain, and shall cause its AFFILIATES and SUBLICENSEES to maintain, complete and accurate records relating to the rights and obligations under this Agreement and any amounts payable to DFCI in relation to this Agreement, which records shall contain sufficient information to permit DFCI to confirm the accuracy of any reports delivered to DFCI and compliance in other respects with this Agreement. COMPANY shall keep it records at its principal place of business or the principal place of business of the appropriate division of COMPANY to which this Agreement relates and shall require its AFFILIATES to keep their books and records in the same manner.

The relevant party shall retain such records for at least [**] years following the end of the calendar year to which they pertain, during which lime DFCI or DFCIs appointed agents, shall have the right, at DFCIs expense, to inspect such records during normal business hours to verify any reports and payments made or compliance in other respects under this Agreement. In the event that any audit performed under this Section reveals an underpayment in excess of [**] percent ([**]%), COMPANY shall bear the full out-of-pocket cost of such audit and shall remit any amounts due to DFCI, plus interest as set forth in Section 4.2(c) above within [**] days of receiving notice thereof from DFCI. Any over-payments may be taken as a credit under this Agreement.

6. PATENT PROSECUTION

6.1 <u>Responsibility for PATENT RIGHTS</u>. DFCI, in its sole discretion, shall prepare, file, prosecute, and maintain all of the PATENT RIGHTS. For purposes of this Agreement, patent prosecution includes ex parte prosecution, interference proceedings, reissues, reexaminations and oppositions. As long as the license remains exclusive, DFCI shall provide, or cause its agent to provide, on a timely basis copies of relevant correspondence between DFCI and the United States Patent Office or the various foreign patent offices and give COMPANY reasonable opportunity to advise DFCI or DFCIs counsel on such matters. COMPANY shall designate an individual or department for receiving the patent-related correspondence.

COMPANY shall have reasonable opportunities to consult with and advise DFCI. DFCI shall consider the legitimate interests of COMPANY in performing its responsibility under this

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Section 6.1 and consider all reasonable comments from COMPANY regarding same COMPANY shall cooperate with DFCI in such filing, prosecution and maintenance. To the extent that DFCI uses outside patent counsel for the foregoing activities, COMPANY (and its outside patent counsel) will have direct access to such patent counsel for DFCI in coordination with the following individual or department, who will have primary responsibility for such requests by COMPANY.

Attorney for Intellectual Property Office of General Counsel Dana-Farber Cancer Institute, Inc. 450 Brookline Ave. Boston, MA 02215

(i) COMPANY shall cooperate with DFCI in preparing, filing, prosecuting and maintaining the patent applications and patents within PATENT RIGHTS. COMPANY shall provide prompt notice to DFCI of any non-privileged,

public information that comes to its attention that may affect the patentability, validity or enforceability of any patent application or patent within PATENT RIGHTS.

(ii) COMPANY may surrender its licenses under any, of the patents or patent applications within PATENT RIGHTS in any country of the licensed Territory by giving [**] days advance written notice to DFCI. If COMPANY so surrenders its rights, it will remain responsible for all patent-related expenses incurred by DFCI and not reimbursed by a third party during the applicable notice period, but DFCI shall take reasonable steps to minimize such expenses. Thereafter, COMPANY will have no further obligation to pay any patent expenses for the patents or patent applications that it surrendered. Notwithstanding the foregoing, if such surrender results in termination of all rights under this Agreement, then the termination notice provision in Section 12, below, shall apply.

6.2 <u>International (non-United States) Filings</u>. Appendix B is a list of countries in which patent applications corresponding to the United States patent applications listed in

Appendix A shall be filed, prosecuted, and maintained. Appendix B may be amended by mutual agreement of DFCI and COMPANY.

6.3 Payment of Expenses. Payment of all reasonable, direct, out-of-pocket fees and costs, including reasonable attorneys' fees, relating to the filing, prosecution and maintenance of the PATENT RIGHTS, will be the responsibility of COMPANY following receipt of invoices for such fees and costs from DFCI, whether such amounts were incurred before or after the EFFECTIVE DATE. As of the EFFECTIVE DATE such amount is []. COMPANY shall reimburse [**] percent ([**]%) of such amount due pursuant to this Section 6.3 within [**] days of the EFFECTIVE DATE and/or receipt of invoices from DFCI, whichever is the earlier to occur, and make [**] additional payments in successive [**] month periods thereafter equal to [**] percent ([**]%) each. As of the EFFECTIVE DATE COMPANY shall pay one hundred percent (100%) of all such fees and costs accrued after the EFFECTIVE DATE, until such time as there is another one or more licensees under the PATENT RIGHTS, in which event COMPANY shall only be required to pay its pro rata share of all such fees and costs based on the number of licensees (including COMPANY); late payments shall accrue interest pursuant to Section 4.2(c). In all instances, the fees prescribed for correct entities shall be paid to the United States Patent and Trademark Office. COMPANY shall pay up to \$[**] in patent expenses incurred for DFCI Case #[**].

7. INFRINGEMENT

7.1 <u>Notification of Infringement</u>. Each party agrees to provide written notice to the other parties promptly after becoming aware of infringement of the PATENT RIGHTS in the FIELD.

7.2 <u>Right to Prosecute Infringements</u>.

(a) <u>COMPANY Right to Prosecute</u>. So long as COMPANY remains the exclusive licensee of the PATENT RIGHTS in the FIELD in the TERRITORY, COMPANY, to the extent permitted by law, shall have the right, under its own control and at its own expense, to prosecute any third-party infringement of the PATENT RIGHTS in the FIELD in the TERRITORY, subject to Sections 7.4 and 7.5. If required by law, DFCI shall permit any action under this Section 7.2 to be brought in its name, including being joined as a party-

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plaintiff, provided that COMPANY shall hold DFCI harmless from, and indemnify DFCI against, any costs, expenses, or liability that DFCI incur in connection with such action.

Prior to commencing any such action, COMPANY shall consult with DFCI and shall consider the views of DFCI regarding the advisability of the proposed action and its effect on the public interest. COMPANY shall not enter into any settlement, consent judgment, or other voluntary final disposition of any infringement action under this Section 7.2 that results in an obligation or responsibility of DFCI without the prior written consent of DFCI, such consent not to be unreasonably withheld, delayed or conditioned.

(b) <u>DFCI Right to Prosecute</u>. In the event that COMPANY is unsuccessful in persuading the alleged infringer to desist or fails to have initiated an infringement action within a reasonable time after COMPANY first becomes aware of the basis for such action, DFCI shall have the right, at its sole discretion, to prosecute such infringement under its sole control and at its sole expense.

7.3 <u>Declaratory Judgment Actions</u>. In the event that a PATENT CHALLENGE or any suit or action alleging that the PATENT RIGHTS are not infringed or unpatentable is brought against DFCI or COMPANY or any AFFILIATES or SUBLICENSEES by a third party, the subject party shall promptly notify the other parties in writing, and COMPANY, at its option and upon written notice to DFCI, shall have the right, but shall not be obligated, within [**] days after commencement of such action to take over the sole defense of the action at its own expense. If COMPANY does not exercise this right, DFCI may take over the sole defense of the action at DFCIs sole expense, but shall not be obligated to do so, subject to Sections 7.4 and 7.5.

7.4 <u>Offsets</u>. COMPANY may offset a total of [**] percent ([**]%) of any expenses incurred under Sections 7.2 and 7.3 against any payments due to DFCI under Section 4, provided that in no event shall such payments under Section 4, when aggregated with

any other offsets and credits allowed under this Agreement, be reduced by more than [**] percent ([**]%) in any REPORTING PERIOD.

7.5 <u>Recovery</u>. In the event that any party exercises the rights conferred in this Section 7 and recovers any damages or other sums in such action, such damages or other sums recovered shall first be applied to all out-of-pocket costs and expenses incurred by the parties in connection therewith (including, without limitation, attorney's fees). If such recovery is

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insufficient to cover all such costs and expenses of the parties, the controlling party's costs shall be paid in full first before any of the other party's costs. If after such reimbursement any funds shall remain from such damages or other sums recovered, such funds shall be retained by the party that controlled the action or proceeding under this Section 7; provided, however, that (a) if COMPANY is the party that controlled such action or proceeding. DFCI shall receive out of any such remaining recovery received by COMPANY an amount equal to royalties payable hereunder by treating such remaining recovery as "Net Sales" hereunder and (b) if DFCI is the party that controlled such action or proceeding, the remaining recovery received by DFCI shall be shared equally between COMPANY and DFCI.

7.6 <u>Cooperation</u>. Each party agrees to cooperate in any action under this Section 7 which is controlled by any other party, provided that the controlling party reimburses the cooperating parties promptly for any reasonable costs and expenses incurred by the cooperating parties in connection with providing such assistance.

7.7 <u>Right to Sublicense</u>. So long as COMPANY remains the exclusive licensee of the PATENT RIGHTS in the FIELD in the TERRITORY, COMPANY shall have the sole right to sublicense any alleged infringer in the FIELD in the TERRITORY for future use of the PATENT RIGHTS in accordance with the terms and conditions of this Agreement relating to sublicenses as set forth in Section 2.3.

7.8 <u>Patent Certifications</u>. DFCI shall notify and provide COMPANY with copies of any allegations of alleged patent invalidity, unenforceability or non-infringement of any PATENT RIGHT pursuant to a Paragraph IV Patent Certification by a Third party filing an Abbreviated New Drug Application, an application under §505(b)(2) or any other similar patent certification by a third party, and any foreign equivalent thereof. Such notification and copies shall be provided to COMPANY within [**] business days after DFCI receives such certification.

8. INDEMNIFICATION AND INSURANCE

8.1 <u>Indemnification</u>.

(a) <u>Indemnity</u>. COMPANY shall indemnify, defend, and hold harmless DFCI and their trustees, officers, faculty, students, medical and professional staff, employees, and agents and their respective successors, heirs

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and assigns (the "Indemnitees"), against any liability, damage, loss, or expense (including reasonable attorneys' fees and expenses) incurred by or imposed upon the Indemnitees or any one of them, in connection with any claims, suits, investigations, actions, demands or judgments (i) arising out of the design, production, manufacture, sale, use in commerce, lease, or promotion by COMPANY or by a SUBLICENSEE, AFFILIATE or agent of COMPANY, or any product, process or service relating to, or developed pursuant to, this Agreement or (ii) arising out of any other activities to be carried out pursuant to this Agreement or (iii) related to the exercise of any rights granted to COMPANY under this Agreement or (iv) any breach of this Agreement by COMPANY.

COMPANY'S indemnification under Section 8.1 (a)(i) applies to any liability, damage, loss or expense whether or not it is attributable to the negligent activities of the Indemnitees. COMPANY'S indemnification under Sections 8.1 (a)(ii) through 8.1 (a)(iv) does not apply to any liability, damage, loss or expense to the extent that it is attributable to the negligent activities of the Indemnitees, or the intentional wrongdoing or intentional misconduct of the Indemnitees.

(b) <u>Procedures</u>. If any such action is commenced or claim made or threatened against DFCI or other Indemnitees as to which COMPANY is obligated to indemnify it (them) or hold it (them) harmless, DFCI or the other Indemnitees agree to provide COMPANY with prompt written notice of any commenced or threatened claim, suit, action, demand, or judgment for which indemnification is sought under this Agreement. COMPANY agrees, at its own expense, to provide attorneys reasonably acceptable to DFCI to defend against any actions brought or filed against any party indemnified hereunder with respect to the subject of the indemnity contained herein, whether or not such actions arc rightfully brought. The Indemnitees shall cooperate with COMPANY in such defense and will permit COMPANY to conduct and control such defense and the disposition of such claim, suit, or action (including all decisions relative lo litigation, appeal, and settlement); provided, however, that any Indemnitee shall have the right to retain its own counsel, at the expense of COMPANY, if representation of such Indemnitee by the counsel retained by COMPANY would be inappropriate because of actual or potential differences in the interests of such Indemnitee and any other party represented by such counsel. COMPANY agrees to keep DFCI informed of the progress in the defense and disposition of such claim and to consult with DFCI with regard to any proposed settlement.

The right of COMPANY to assume the defense of any action is limited to that part of the action commenced against DFCI and/or Indemnitees that relates to COMPANY'S obligation of indemnification and holding harmless.

COMPANY shall require any AFFILIATE(S) or SUBLICENSEE(S) to indemnify, hold harmless and defend DFCI under the same terms set forth in this Section 8.1.

8.2 Insurance. At such time as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by COMPANY or by a SUBLICENSEE(S), AFFILATE(S) or agent of COMPANY, COMPANY shall obtain and carry in full force and effect commercial general liability insurance, including product liability insurance which shall protect COMPANY and Indemnitees with respect to events covered by Section 8.1. Such insurance (i) shall be issued by an insurer licensed to practice in the Commonwealth of Massachusetts or an insurer pre-approved by DFCI, such approval not to be unreasonably withheld, (ii) shall list DFCI as additional insured thereunder, (iii) shall be endorsed to include product liability coverage, and (iv) shall require [**] days written notice to be given to DFCI prior to any cancellation or material change thereof. The limits of such insurance shall not be less than [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) for bodily injury including death; [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) for errors and omissions.

In the alternative, if COMPANY elects to self insure all or part of the limits described above (including deductibles or retentions which are in excess of \$[**] annual aggregate), such self-insurance program must be acceptable to and receive prior approval from DFCI, and the DFCIs associated Risk Management Foundation. COMPANY shall provide DFCI with Certificates of Insurance evidencing compliance with this Section upon request of DFCI.

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COMPANY shall provide DFCI with written notice at least [**] days prior to the cancellation, non renewal or material change in such insurance; if COMPANY does not obtain replacement insurance providing comparable coverage within such [**]day period, DFCI has the right to terminate this Agreement effective at the end of such [**]day period without any notice or additional waiting periods.

The minimum amounts of insurance coverage required under these provisions may not be construed to create a limit of COMPANY'S liability with respect to its indemnification obligation under Section 8.1.

COMPANY shall maintain such comprehensive general liability insurance beyond the expiration or termination of this Agreement during (a) the period that any product, process, or service, relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by COMPANY or by a SUBLICENSEE, AFFILIATE or agent of COMPANY and (b) a reasonable period alter such lime as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by COMPANY or by a SUBLICENSEE, AFFILIATE or agent of COMPANY and (b) a reasonable period alter such lime as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals), which in no event shall be less than [**] years.

9. REPRESENTATIONS OR WARRANTIES

9.1 <u>Representations and Warranties</u>. To its knowledge, as of the Effective Date, DFCI represents and warrants that: (a) it solely and exclusively owns the patents and applications included within the PATENT RIGHTS; (b) it has the power and authority to grant the licenses provided for herein to COMPANY, and that it has not earlier granted, or assumed any obligation to grant, any rights in the PATENT RIGHTS to any third party that would conflict with the rights granted to COMPANY herein; (c) this Agreement constitutes the legal, valid and binding obligation of DFCI, enforceable against such DFCI in accordance with its terms; and (d) there is no infringement of the PATENT RIGHTS by any third party.

9.2 <u>Limitation on Representations and Warranties</u>. EXCEPT AS MAY OTHERWISE BE EXPRESSLY SET FORTH IN THIS AGREEMENT, DFCI MAKE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE PATENT RIGHTS, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES

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OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, VALIDITY OF PATENT RIGHTS CLAIMS, WHETHER ISSUED OR PENDING AND THE ABSENCE OF LATENT OR OTHER DEFECTS, WHETHER OR NOT DISCOVERABLE. Specifically, and not to limit the foregoing, DFCI make no warranty or representation (i) regarding the validity or scope of the PATENT RIGHTS, and (ii) that the exploitation of the PATENT RIGHTS or any PRODUCT or LICENSED PROCESS will not infringe any patents or other intellectual property rights of DFCI or of a third party.

EXCEPT FOR COMPANY'S INDEMNITY OBLIGATIONS UNDER SECTION 8.1. IN NO EVENT SHALL EITHER PARTY, THEIR TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES FACULTY, STUDENTS, MEDICAL AND PROFESSIONAL STAFF, AGENTS AND AFFILIATES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING ECONOMIC DAMAGES OR INJURY TO PROPERTY AND LOST PROFITS, REGARDLESS OF WHETHER DFCI SHALL BE ADVISED, SHALL HAVE OTHER REASON TO KNOW, OR IN FACT SHALL KNOW OF THE POSSIBILITY OF THE FOREGOING.

10. ASSIGNMENT

This Agreement is personal to COMPANY and no rights or obligations may be assigned by COMPANY without the prior written consent of DFCI. Any such assignment shall be void. The foregoing notwithstanding, COMPANY may assign its rights and obligations under this Agreement to a successor in connection with the merger, consolidation, or sale of all or substantially all of its assets or that portion of its business to which this Agreement relates (however such transaction is structured); provided, however, that if this Agreement is assigned upon such merger, consolidation, or sale, (a) COMPANY shall pay to DFCI an Assignment Fee of [**] Dollars (\$[**]), due within [**] days of the closing date of such transaction and (ii) this Agreement will immediately terminate if the proposed assignee has not agreed in writing to be bound by the terms and conditions of this Agreement within [**] days after the effective date of the assignment.

11. GENERAL COMPLIANCE WITH LAWS

11.1 <u>Compliance with Laws</u>. COMPANY shall use reasonable commercial efforts to comply with all commercially material local, state, federal, and international laws and regulations relating to the development, manufacture, use, and sale of PRODUCTS and LICENSED PROCESSES.

11.2 Export Control. COMPANY and its AFFILIATES and SUBLICENSEES shall comply with all United States laws and regulations controlling the export of certain commodities and technical data, including without limitation all Export Administration Regulations of the United States Department of Commerce. Among other things, these laws and regulations prohibit or require a license for the export of certain types of commodities and technical data to specified countries. COMPANY hereby gives written assurance that it will comply with, and will cause its AFFILIATES and SUBLICENSEES to comply with, all United States export control laws and regulations, that it bears sole responsibility for any violation of such laws and regulations by itself or its AFFILIATES or SUBLICENSEES, and that it will indemnify, defend, and hold DFCI harmless (in accordance with Section 8.1) for the consequences of any such violation.

11.3 <u>Non-Use of Name</u>. COMPANY and its AFFILIATES and SUBLICENSEES shall not use the name of "Dana-Farber Cancer Institute," or any variation, adaptation, or abbreviation thereof, or of any of their trustees, officers, faculty, students, employees, or agents, or any trademark owned by DFCI, or any terms of this Agreement in any promotional material or other public announcement or disclosure without the prior written consent of the relevant party, which consent such party may withhold in its sole discretion. DFCI shall not use the name of "Syros Pharmaceuticals, Inc.," or any variation, adaptation, or abbreviation thereof, or of any of their directors, officers, employees, or agents, or any trademark owned by COMPANY, or any terms of this Agreement in any promotional material or other public announcement or disclosure without the prior written consent of the COMPANY, which consent such party may withhold in its sole discretion. The foregoing notwithstanding, without the consent of DFCI, COMPANY may make factual statements during the term of this Agreement that COMPANY has a license from DFCI under one or more of the patents and/or patent applications comprising the PATENT RIGHTS and to use the DFCI MATERIALS.

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11.4 <u>Marking of PRODUCTS</u>. To the extent commercially feasible and consistent with prevailing business practices, COMPANY shall mark, and shall cause its AFFILIATES and shall use commercially reasonable efforts to cause its SUBLICENSEES to mark, all PRODUCTS that are manufactured or sold under this Agreement with the number of each issued patent under the PATENT RIGHTS that applies to such PRODUCT.

12. TERMINATION

12.1 <u>Voluntary Termination by COMPANY</u>. COMPANY will have the right to terminate this Agreement, for any reason, (i) upon at least three (3) months prior written notice to DFCI, such notice to state die date at least three (3) months in the future upon which termination is to be effective, and (ii) upon payment of all undisputed amounts due to DFCI through such termination effective date.

12.2 <u>Cessation of Business</u>. If COMPANY ceases to carry on its business, DFCI will have the right to terminate this Agreement immediately upon written notice to COMPANY.

12.3 <u>Termination for Default</u>.

(a) <u>Nonpayment</u>. In the event COMPANY fails to pay any amounts due and payable to DFCI hereunder, and fails to make such payments within [**] days after receiving written notice of such failure, DFCI may terminate this Agreement immediately upon written notice to COMPANY.

(b) <u>Material Breach</u>. In the event COMPANY commits a material breach of its obligations under this Agreement, except for breach as described in Section 12.3(a) and fails to cure that breach within [**] days after receiving written notice thereof, DFCI may terminate this Agreement immediately upon written notice to COMPANY subject to completion of the dispute resolution process set forth in Section 13 and the subsequent opportunity to cure.

12.4 Effect of Termination.

(a) <u>Survival</u>. The following provisions shall survive the expiration or termination of this Agreement: Sections 1, the second sentence of Section 2.3, 5.2 (only for obligation to provide final report and payment), 8, 9, 10,12.4,13,14 and 15.

(b) <u>Inventor</u>. Upon the early termination of this Agreement, COMPANY and its AFFILIATES and SUBLICENSEES may complete and sell any work-in-progress and inventory of PRODUCTS that exist as of the effective date of termination, provided that:

- (i) COMPANY pays DFCI the applicable running royalty or other amounts due on such sales of PRODUCTS in accordance with the terms and conditions of this Agreement; and
- (ii) COMPANY and its AFFILIATES and SUBLICENSEES shall complete and sell all work-inprogress and inventory of PRODUCTS within [**] months after the effective date of termination.

(c) <u>Pre-termination Obligations</u>. In no event shall termination of this Agreement release COMPANY, AFFILIATES, or SUBLICENSEES from the obligation to pay any amounts that became due on or before the effective date of termination.

13. DISPUTE RESOLUTION

13.1 <u>Mandatory Procedures</u>. The parties agree that any dispute arising out of or relating to this Agreement shall be resolved solely by means of the procedures set forth in this Section 13, and that such procedures constitute legally binding obligations that are an essential provision of this Agreement. If any party fails to observe the procedures of this Section 13, as may be modified by their written agreement, the other parties may bring an action for specific performance of these procedures in any court of competent jurisdiction.

13.2 <u>Equitable Remedies</u>. Although the procedures specified in this Section 13 are the sole and exclusive procedures for the resolution of disputes arising out of or relating to this Agreement, any party may seek a preliminary injunction or other provisional equitable relief if, in its reasonable judgment, such action is necessary to avoid irreparable harm to itself or to preserve its rights under this Agreement.

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13.3 <u>Dispute Resolution Procedures</u>.

(a) <u>Mediation</u>. In the event any dispute arising out of or relating to this Agreement remains unresolved within [**] days from the dale the affected party informed the other parties of such dispute, any party may initiate mediation upon written notice to the other party ("Notice Date"), whereupon all parties shall be obligated to engage in a mediation proceeding under the then current Center for Public Resources ("CPR") Model Procedure for Mediation of Business Disputes (http://www.cpradr.org) except that specific provisions of this Section 13 shall override inconsistent provisions of the CPR Model Procedure. The mediator will be selected from the CPR Panels of Neutrals. If the parties cannot agree upon the selection of a mediator. The parties shall attempt to resolve the dispute through mediation until the first of the following occurs:

- (i) the parties reach a written settlement;
- (ii) the mediator notifies the parties in writing that they have reached an impasse;
- (iii) the parties agree in writing that they have reached an impasse; or
- (iv) the parties have not reached a settlement within [**] days after the Notice Date.

(b) <u>Other Remedies</u>. If the parties fail to resolve the dispute through mediation, or if no party elects to initiate mediation, each party shall have the right to pursue any other remedies legally available to resolve the dispute.

13.4 <u>Performance to Continue</u>. Each party shall continue to perform its undisputed obligations under this Agreement pending final resolution of any dispute arising out of or relating to this Agreement; provided, however, that a party may suspend performance of its undisputed obligations during any period in which any other party fails or refuses to perform its undisputed obligations. Nothing in this Section 13 is intended to relieve COMPANY from its obligation to make undisputed payments pursuant to Sections 4 and 6.

13.5 <u>Statute of Limitations</u>. The parties agree that all applicable statutes of limitation and time-based defenses (such as estoppel and laches) shall be tolled while the procedures set

forth in Section 13.3(a) are pending. The parties shall cooperate in taking any actions necessary to achieve this result.

14. CONFIDENTIALITY

14.1 <u>Non-disclosure and Non-use</u>.

(a) All information disclosed by one party to the other party hereunder shall be maintained in confidence by the receiving party and shall not be disclosed to any third party or used for any purpose except as set forth herein without the prior written consent of the disclosing party, for a period of [**] years from disclosure of such information, except to the extent that such information:

- (i) is known by receiving party at the time of its receipt, and not through a prior disclosure by the disclosing party, as documented by the receiving party's business records;
- (ii) is or becomes part of the public domain through no fault of the receiving party;
- (iii) is subsequently disclosed to the receiving party by a third party who may lawfully do so and is not under an obligation of confidentiality to the disclosing party;
- (iv) is developed by the receiving party independently of Information received from the disclosing party, as documented by the receiving party's business records;
- (b) Notwithstanding the foregoing, a party may disclose Information:
 - to governmental or other regulatory agencies in order to obtain patents or to gain or maintain approval to conduct clinical trials or to market PRODUCTS or LICENSED PROCESSES, provided however that such disclosure may be only to the extent reasonably necessary to obtain patents or authorizations.
 - (ii) deemed necessary by COMPANY to be disclosed to SUBLICENSEES, agents, consultants, and/or other third parties for the development and/or commercialization of

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PRODUCTS, LICENSED PROCESSES and/or in connection with a licensing/sublicensing transaction and/or a permitted assignment under this Agreement, and/or loan, financing or investment and/or acquisition, merger, consolidation or similar transaction (or for such entities to determine their interest in performing such activities) in each case on the condition that any third party to whom such disclosures are made agree to be bound by a confidentiality agreement.

Information that is disclosed under 14.1 (b)(i) or 14.1(b)(ii) shall remain otherwise subject to the confidentiality and non-use provisions hereof.

14.2 <u>Judicial or Administrative Process</u>. If a party is required by judicial or administrative process to disclose Information that is subject to the non-disclosure provisions of this Section 14, such party shall promptly inform the other party of the disclosure that is being sought in order to provide the other party an opportunity to challenge or limit the disclosure obligations.

Information that is disclosed by judicial or administrative process shall remain otherwise subject to the confidentiality and nonuse provisions hereof, and the disclosing party, pursuant to law or court order, shall take all steps reasonably necessary, including without limitation obtaining an order of confidentiality, to ensure the continued confidential treatment of such Information.

14.3 <u>SEC Filings</u>. Either party may publicly disclose the terms of this Agreement to the extent required, in the reasonable opinion of such party's legal counsel, to comply with applicable laws, including without limitation the rules and regulations promulgated by the United States Securities and Exchange Commission (the "SEC"). Notwithstanding the foregoing, before disclosing this Agreement or any of the terms hereof pursuant to this Section 14.3, the parties will consult with one another on the terms of this Agreement to be redacted in making any such disclosure. If a party discloses this Agreement or any of the terms hereof in accordance with this Section 14.3, such party agrees, at its own expense, to seek confidential treatment of portions of this Agreement or such terms, as may be reasonably requested by the other party.

15. MISCELLANEOUS

15.1 <u>Notice</u>. Any notices required or permitted under this Agreement shall be in writing, shall specifically refer to this Agreement, and shall be sent by hand, recognized national overnight courier, confirmed facsimile transmission, confirmed electronic mail, or registered or certified mail, postage prepaid, return receipt requested, to the following addresses or facsimile numbers of the parties:

If to DFCI:	Chief Research Business Development Officer Dana-Farber Cancer Institute, Inc. 450 Brookline Avenue, BP304E Boston, MA 02215
If to COMPANY:	Syros Pharmaceuticals, Inc. 480 Arsenal Street, Suite 130 Watertown, MA 02472 ATTN: CEO 617-744-1340 617-744-1377

All notices under this Agreement shall be deemed effective upon receipt. A party may change its contact information immediately upon written notice to the other parties in the manner provided in this Section 15.1.

15.2 <u>Governing Law</u>. This Agreement and all disputes arising out of or related to this Agreement, or the performance, enforcement, breach or termination hereof, and any remedies relating thereto, shall be construed, governed, interpreted and applied in accordance with the laws of the Commonwealth of Massachusetts, U.S.A., without regard to conflict of laws principles, except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent shall have been granted. The state and federal courts having jurisdiction over Boston, MA, USA, provide the exclusive forum for any court action between the parties relating to this Agreement. COMPANY and DFCI submit to the jurisdiction of such courts and waive any claim that such court lacks jurisdiction over DFCI, COMPANY or its AFFILIATES or constitutes an inconvenient or improper forum.

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15.3 <u>Force Majeure</u>. No party will be responsible for delays resulting from causes beyond the reasonable control of such party, including without limitation fire, explosion, flood, war, strike, or riot, provided that the nonperforming party uses commercially reasonable efforts to avoid or remove such causes of nonperformance and continues performance under this Agreement with reasonable dispatch whenever such causes are removed.

15.4 <u>Amendment and Waiver</u>. This Agreement may be amended, supplemented, or otherwise modified only by means of a written instrument signed by all parties. Any waiver of any rights or failure to act in a specific instance shall relate only to such instance and shall not be construed as an agreement to waive any rights or fail to act in any other instance, whether or not similar.

15.5 <u>Severability</u>. In the event that any provision of this Agreement shall be held invalid or unenforceable for any reason, such invalidity or unenforceability shall not affect any other provision of this Agreement, and the parties shall negotiate in good faith to modify the Agreement to preserve (to the extent possible) their original intent. If the parties fail to reach a modified agreement within [**] days after the relevant provision is held invalid or unenforceable, then the dispute shall be resolved in accordance with the procedures set forth in Section 13. While the dispute is pending resolution, this Agreement shall be construed as if such provision were deleted by agreement of the parties.

15.6 <u>Binding Effect</u>. This Agreement shall be binding upon and inure to the benefit of the parties and their respective permitted successors and assigns.

15.7 <u>Headings</u>. All headings are for convenience only and shall not affect the meaning of any provision of this Agreement.

15.8 <u>Entire Agreement</u>. This Agreement constitutes the entire agreement between the parties with respect to its subject matter and supersedes all prior agreements or understandings between the parties relating to its subject matter.

Signatures follow on the next page.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

For DFCI:

For COMPANY:

By: /s/ O. Prem Das, Ph.D.

By: /s/ Nancy Simonian

Name: O. Prem Das, Ph.D.	Name: Nancy Simonian
Title: Chief Research Busines	
Development Officer, Dana-F	
Cancer Institute	Title: CEO
Date: 2-22-2013	Date: 4/9/2013
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	<u>APPENDIX A</u>
	List of Patent Applications and Patents
[**]	
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	APPENDIX B
	List of Countries (excluding United States) for which
	PATENT RIGHTS Applications Will Be Filed, Prosecuted and Maintained
[**].	
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	APPENDIX C
LIST OF MATERIALS	
[**]	
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	<u>APPENDIX D</u>
	(Compounds in DFCI #[**] related to cyclin dependent kinases)
[**]	(compounds in Dr Ci #[] related to cyclin dependent kindses)
[**]	

Confidential Materials omitted and filed separately with the Securities and Exchange Commission. Double asterisks denote omissions.

WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH

and

DANA-FARBER CANCER INSTITUTE, INC.

and

SYROS PHARMACEUTICALS, INC. LICENSE AGREEMENT

EXECUTION COPY

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WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH DANA-FARBER CANCER INSTITUTE EXCLUSIVE PATENT LICENSE AGREEMENT

This Agreement, effective as of April 1, 2013 (the "EFFECTIVE DATE"), is among the Whitehead Institute for Biomedical

Research ("WHITEHEAD"), a Delaware corporation, having a principal office at Nine Cambridge Center, Cambridge, MA 02142; the Dana-Farber Cancer Institute, Inc. ("DFCI"), a Massachusetts non-profit organization having a principal place of business at 450 Brookline Ave., Boston, MA 02215; and Syros Pharmaceuticals, Inc. ("COMPANY"), a Delaware corporation, having a principal place of business at 480 Arsenal Street, Suite 130, Watertown, MA 02472.

RECITALS

WHEREAS, WHITEHEAD and DFCI are the owner of certain PATENT RIGHTS (as later defined herein) (WHITEHEAD and DFCI Case Nos.: [**]), and WHITEHEAD and DFCI have the right to grant licenses under said PATENT RIGHTS;

WHEREAS, WHITEHEAD is the owner of certain PATENT RIGHTS (as later defined herein) (WHITEHEAD Case Nos. [**]), and WHITEHEAD has the right to grant licenses under said PATENT RIGHTS;

WHEREAS, WHITEHEAD and DFCI have the exclusive right to grant licenses under said PATENT RIGHTS, subject only to a royalty-free, nonexclusive, non-transferable license to practice the PATENT RIGHTS granted to the United States Government for government purposes;

WHEREAS, WHITEHEAD and DFCI desire to have the PATENT RIGHTS developed and commercialized to benefit the public by granting a license;

COMPANY has represented to WHITEHEAD and DFCI that it has the financial capacity and the strategic commitment to facilitate the transfer of the technology for the public interest using commercially reasonable efforts; and

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COMPANY desires to obtain a license to WHITEHEAD'S rights and DFCI's rights under the PATENT RIGHTS and to use the COMPOUNDS and MATERIALS, and WHITEHEAD and DFCI are willing to grant a license upon the terms and conditions of this Agreement.

NOW, THEREFORE, WHITEHEAD, DFCI, and COMPANY hereby agree as follows:

1. <u>DEFINITIONS</u>

1.1 "<u>AFFILIATE</u>" will mean any legal entity (such as a corporation, partnership, or limited liability company) that directly or indirectly controls, or is controlled by, or is under common control with, COMPANY. For the purposes of this definition, the term "control" means (i) beneficial ownership of at least fifty percent (50%) of the voting securities of a corporation or other business organization with voting securities or (ii) a fifty percent (50%) or greater interest in the net assets or profits of a partnership or other business organization without voting securities, or (iii) the power to direct the management and policies of such entities.

1.2 "<u>CHEM-SEQ</u>" will mean the technology described in [**] of the PATENT RIGHTS, including those patent application(s) and all other PATENT RIGHTS claiming priority to those patent application(s).

1.3 "<u>COMBINATION PRODUCT</u>" will mean any PRODUCT or LICENSED PROCESS sold or used in combination with one or more other products or processes which are not PRODUCTS or LICENSED PROCESSES but which perform a useful function independent of the PRODUCTS or LICENSED PROCESSES. For example, a COMBINATION PRODUCT is a pharmaceutical product that includes two active pharmaceutical ingredients.

1.4 "<u>COMPOUNDS</u>" will mean those tangible materials set forth on Appendix D as of the EFFECTIVE DATE and documentation relating thereto.

1.5 "<u>CORPORATE PARTNER</u>" will mean a non-AFFILIATE third party that has entered into an agreement with COMPANY under which a sublicense under the PATENT RIGHTS is not granted by COMPANY to such third party, and under which COMPANY performs a LICENSED PROCESS for the third party.

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1.6 "<u>CORPORATE PARTNERSHIP</u>" will mean an agreement between COMPANY and a CORPORATE PARTNER under which the CORPORATE PARTNER is granted certain rights (e.g., a license or option) to the outcome of COMPANY'S performance of the LICENSED PROCESS.

1.7 "<u>CORPORATE PARTNERSHIP INCOME</u>" will mean any payments that COMPANY receives from a CORPORATE PARTNER in consideration for the performance of a LICENSED PROCESS by COMPANY, including without limitation upfront fees, license fees, milestone payments, annual license maintenance fees, distribution or joint marketing fees, and premiums above the fair market value on bona fide equity investments, debt or other types of investments in the COMPANY. Notwithstanding the foregoing, CORPORATE PARTNERSHIP INCOME shall not include: (i) payments received from a CORPORATE PARTNER or any of its affiliates for bona fide security investments, debt or other types of investments in the COMPANY, including the right to acquire COMPANY securities in the future, such as warrants, convertible debt and the like (other than premiums above the fair market value of such investments, debt or other types of investments), (ii) amounts received by COMPANY from a CORPORATE PARTNER for royalties or other amounts based on sales of IDENTIFIED PRODUCTS; (iii) reimbursements for out-of-pocket patent prosecution, maintenance, defense and enforcement costs for the PATENT RIGHTS; and (iv) reimbursement of bona fide research, development and commercialization costs actually incurred (including, without limitation, payments for FTEs). CORPORATE PARTNERSHIP INCOME is not LICENSED SERVICES INCOME.

1.8 "FIELD" will mean the fields as described in Appendix A with respect to each patent case of the PATENT RIGHTS.

1.9 "<u>HUMAN THERAPEUTIC CORE</u>" will mean the field of human health and therapeutics, including, without limitation, drug discovery, research, development and commercialization (including, without limitation, pharmaceuticals and methods of making and using the same); for clarity, HUMAN THERAPEUTIC CORE will not include diagnostics.

1.10 "<u>IDENTIFIED PRODUCT</u>" will mean any product first identified, selected or determined by COMPANY or an AFFILIATE or SUBLICENSEE to have biological activity or

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utility by the use of LICENSED PRODUCTS or LICENSED PROCESSES that, at the time of such use, are licensed exclusively to the COMPANY, other than any LICENSED PRODUCT.

1.11 "<u>IMPROVEMENTS</u>" will mean any new inventions created after the EFFECTIVE DATE and until thirty six months (36) from the EFFECTIVE DATE and no longer; (i) which WHITEHEAD or DFCI own or have sufficient rights to license hereunder; that are (ii) from the activities of Dr. James Bradner at DFCI, and/or Dr. Richard Young at WHITEHEAD, and/or others working under their supervision; (iii) not included in the PATENT RIGHTS; and (iv) is dominated by one or more claims of the PATENT RIGHTS and whose practice infringes one or more claims of the PATENT RIGHTS.

1.12 "<u>IND</u>" will mean, with respect to a particular PRODUCT, an Investigational New Drug application submitted to the FDA, or a corresponding application filed with any other regulatory agency, seeking approval to begin tests of a new drug in human subjects.

1.13 "<u>LICENSED PRODUCT</u>" will mean any product that, in whole or in part:

(i) absent the license granted hereunder, would infringe one or more claims of the PATENT RIGHTS; or

(ii) is manufactured by using a LICENSED PROCESS or that, when used, practices a LICENSED PROCESS.

1.14 "<u>LICENSED PROCESS</u>" will mean any process that, absent the license granted hereunder, would infringe one or more claims of the PATENT RIGHTS.

1.15 "<u>LICENSED SERVICES</u>" will mean a service generally made available to third parties (other than an AFFILIATE or a SUBLICENSEE) and provided by COMPANY or an AFFILIATE or SUBLICENSEE to such a third party on a "fee-for-service" basis, wherein the provision of such service would constitute, but for the license granted to COMPANY and its AFFILIATES pursuant to this AGREEMENT, an infringement of one or more claims of the PATENT RIGHTS.

1.16 "<u>LICENSED SERVICES INCOME</u>" will mean any payments that COMPANY or AFFILIATES receive from a third party in consideration of the performance of a LICENSED SERVICE by COMPANY or AFFILIATES for the third party, in those countries where the performance of such LICENSED SERVICE infringes one or more VALID CLAIMS, but in the case of cost-plus contracts, LICENSED SERVICES INCOME will be all payments other than costs.

1.17 "<u>MATERIALS</u>" will mean those tangible materials set forth on Appendix E as of the EFFECTIVE DATE and documentation relating thereto.

1.18 "<u>MYC/MAX SCREEN</u>" will mean the technology described in [**] of the PATENT RIGHTS for identifying modulators of myc and/or max only, including those patent application(s) and all other PATENT RIGHTS claiming priority to those patent application(s).

1.19 "<u>MYC MODULATORS</u>" will mean chemical compounds described in [**] of the PATENT RIGHTS and all other PATENT RIGHTS claiming priority to those patent application(s).

1.20 "<u>NDA</u>" will mean a New Drug Application submitted to the FDA seeking approval to market and sell a PRODUCT in the United States of America, or a corresponding application filed with any other regulatory agency seeking approval to market and sell a PRODUCT in a country in the TERRITORY.

1.21 "<u>NET SALES</u>" will mean the gross amount invoiced by COMPANY and its AFFILIATES and SUBLICENSEES for PRODUCTS to a final customer who shall be an end user of the PRODUCT, less the following:

(i) customary trade, quantity, or cash discounts to the extent actually allowed and taken;

- (ii) amounts repaid or credited by reason of rejection or return;
- (iii) to the extent separately stated on purchase orders, invoices, or other documents of sale, any taxes or other governmental charges levied on the

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production, sale, transportation, delivery, or use of a PRODUCT which is paid by or on behalf of COMPANY or AFFILIATES or SUBLICENSEES;

- (iv) outbound fulfillment and transportation costs prepaid or allowed and costs of insurance in transit, and documented customs duties actually paid;
- (v) amounts written off for bad debts, provided that any such amounts subsequently paid shall be counted as NET SALES;
- (vi) charge back payments and rebates granted to (1) managed healthcare organizations, (2) federal, state and/or provincial and/or local governments or other agencies, (3) purchasers and reimbursers, or (4) trade customers, including wholesalers and chain and pharmacy buying groups, all only to the extent permitted by applicable law and regulations; and
- (vii) PRODUCTS provided at or below cost for (i) indigent care or patient assistance programs and/or humanitarian purposes, (ii) provided for promotional activities without payment, or (iii) provided to be administered in clinical trials.

No deductions will be made for commissions paid to individuals whether they are with independent sales agencies or regularly employed by COMPANY and on its payroll or for costs of collections. NET SALES will occur on the date of invoicing for a PRODUCT.

Non-monetary consideration may be accepted by COMPANY, any AFFILIATE, or any SUBLICENSEE for any PRODUCT subsequent to written notification to WHITEHEAD and DFCI describing such non-monetary consideration. NET SALES includes the fair market value of any non-cash consideration from sale of PRODUCTS received by COMPANY, AFFILIATES or SUBLICENSEES.

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COMPANY'S, AFFILIATE'S or SUBLICENSEE'S transfer of PRODUCT between each other will not result in any NET SALES.

In the event that a PRODUCT or LICENSED PROCESS is sold as a COMBINATION PRODUCT, NET SALES, for the purposes of determining royalty payments on the COMBINATION PRODUCT, will mean the gross amount collected for the COMBINATION PRODUCT less the deductions set forth above, multiplied by a proration factor that is determined as follows:

- (1) If all components of the COMBINATION PRODUCT were sold separately during the same or immediately preceding year, the proration factor shall be determined by the formula [A / (A+B)], where A is the average gross sales price of all PRODUCT or LICENSED PROCESS components (as applicable) during such period when sold separately from the other component(s), and B is the average gross sales price of the other component(s) during such period when sold separately from the PRODUCT or LICENSED PROCESS components (as applicable); or
- (2) If all components of the COMBINATION PRODUCT were not sold or provided separately during the same or immediately preceding year, the proration factor shall be determined by the Parties in good faith negotiations based on the relative value contributed by each component.

1.22 "<u>OTHER LICENSE AGREEMENTS</u>" will mean the two (2) other license agreements entered into on the EFFECTIVE DATE by two or more of the parties hereto, as such license agreements are amended or restated.

1.23 "<u>PATENT CHALLENGE</u>" will mean a challenge to the validity or enforceability of any of the PATENT RIGHTS, and includes acts that institute, or cause counsel to institute, any interference, opposition, re-examination or similar proceeding with respect to any of the PATENT RIGHTS with the U.S. Patent and Trademark Office or any foreign patent office.

- 1.24 "<u>PATENT RIGHTS</u>" will mean:
 - (i) the United States and international patents listed on <u>Appendix A</u>;

- (ii) the United States and international patent applications and/or provisional applications listed on <u>Appendix A</u>, and any provisional applications that disclose substantially similar subject matter to the provisional applications listed on <u>Appendix A</u> and name Dr. James Bradner at DFCI and/or Dr. Richard Young at WHITEHEAD as an inventor(s), and the resulting patents;
- (iii) any patent applications resulting from the provisional applications listed on <u>Appendix A</u>, and any divisionals, continuations, continuation-in-part applications, and continued prosecution applications (and their relevant international equivalents) of the patent applications listed on Appendix A and of such patent applications that claim priority from or result from the provisional applications listed on Appendix A (including, without limitation, any related provisional patent applications filed during the one-year pendency of such provisional applications listed on Appendix A, provided it names Dr. James Bradner at DFCI and/or Dr. Richard Young at WHITEHEAD as an inventor(s)), to the extent the claims are directed to subject matter specifically described in the patent applications listed on <u>Appendix A</u>, and the resulting patents;
- (iv) any patents resulting from reissues, reexaminations, or extensions (and their relevant international equivalents) of the patents described in (i), (ii), and (iii) above; and
- (v) international (non-United States) patent applications and provisional applications filed after the EFFECTIVE DATE and the relevant international equivalents to divisionals, continuations, continuation-in-part applications and continued prosecution applications of the patent applications to the extent the claims are directed to subject matter specifically described in the patents or patent applications referred to in (i), (ii), (iii), and (iv) above, and the resulting patents.

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COMPANY may remove, at its sole discretion, any patent or patent application or claim thereof from Appendix A in accord with Section 6.1(h).

1.25 "<u>PHASE I TRIAL</u>" will mean a clinical study of the first introduction of a PRODUCT into a human subject. In the United States, "PHASE I TRIAL" will mean a human clinical study that satisfies the requirements of 21 C.F.R. § 312.21(a).

1.26 "<u>PHASE II TRIAL</u>" will mean a clinical study of a PRODUCT conducted to obtain preliminary data on its effectiveness for a particular indication(s) in human subjects with the disease or condition and its possible short-term side effects and risks. In the United States, "PHASE II TRIAL" will mean a human clinical study that satisfies the requirements of 21 C.F.R. § 312.21 (b).

1.27 "<u>PHASE III TRIAL</u>" will mean a clinical study of a PRODUCT in human subjects for the purpose of gathering the definitive information about efficacy, dosage, and safety in the proposed therapeutic indication to demonstrate that the PRODUCT is safe and effective in order for the FDA or other appropriate regulatory agency to approve an NDA to market the PRODUCT for the proposed indication. In the United States, "PHASE III TRIAL" will mean a human clinical study that satisfies the requirements of 21 C.F.R. § 312.21 (c).

1.28 "<u>PRODUCT</u>" will mean either a LICENSED PRODUCT or an IDENTIFIED PRODUCT.

1.29 "<u>REAGENT FIELD</u>" will mean the sale and/or distribution of research reagents for research use only. "Research use" will not include any drug discovery, development or commercialization (including, without limitation, pharmaceuticals and methods of making and using the same).

1.30 "<u>REPORTING PERIOD</u>" will begin on the first day of each calendar quarter and end on the last day of such calendar quarter.

1.31 "<u>SUBLICENSE INCOME</u>" will mean any payments that COMPANY receives from a SUBLICENSEE in consideration of the sublicense of rights granted COMPANY under Section 2.1, including without limitation upfront fees, license fees, milestone payments, annual

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license maintenance fees, distribution or joint marketing fees, and premiums above the fair market value on bona fide equity investments, debt or other types of investments in the COMPANY. Notwithstanding the foregoing, SUBLICENSE INCOME shall not include: (i) payments received from a SUBLICENSEE or any of its affiliates for bona fide security investments, debt or other types of investments in the COMPANY including the right to acquire COMPANY securities in the future, such as warrants, convertible debt and the like (other than premiums above the fair market value of such investments, debt or other types of investments as of the date of receipt of such payments), (ii) amounts received by COMPANY from a SUBLICENSEE for royalties on NET SALES or other amounts received by COMPANY from a SUBLICENSEE based on sales of PRODUCTS (not including milestone payments for sales milestones); (iii) reimbursements for out-of-pocket patent prosecution, maintenance, defense and enforcement costs for the PATENT RIGHTS; or (iv) reimbursement of bona fide research, development and commercialization costs actually incurred (including, without limitation, payments for FTEs).

1.32 "SUBLICENSEE" will mean any non-AFFILIATE sublicensee of the rights granted COMPANY under Section 2.1.

1.33 "<u>SUBLICENSE AGREEMENT</u>" will mean a written contractual agreement between COMPANY and a SUBLICENSEE granting a sublicense of the rights granted COMPANY under Section 2.1.

1.34 "<u>TERM</u>" will mean the term of this Agreement, which shall commence on the EFFECTIVE DATE and shall remain in effect until the expiration or abandonment of the PATENT RIGHTS, unless earlier terminated in accordance with the provisions of this Agreement.

1.35 '<u>TERRITORY</u>" will mean worldwide.

1.36 "<u>VALID CLAIM</u>" will mean (i) any claim of an issued and unexpired PATENT RIGHT that (a) has not been held permanently revoked, unenforceable or invalid by a decision of a court or governmental agency of competent jurisdiction, which decision is unappealable or unappealed within the time allowed for appeal and (b) has not been abandoned, disclaimed, denied or admitted to be invalid or unenforceable through reissue or disclaimer or otherwise, or (ii) a claim of a pending PATENT RIGHT application that has not been pending for more than [**]

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years from the date of first action on the merits, which claim has not been abandoned or finally disallowed without the possibility of appeal or re-filing of the application.

2. <u>GRANT OF RIGHTS</u>

2.1 License Grants. Subject to the terms of this Agreement, each of WHITEHEAD and DFCI hereby grants to COMPANY and its AFFILIATES for the TERM a royalty-bearing license under the PATENT RIGHTS to make, have made, use, sell, offer to sell, and import PRODUCTS in the FIELD in the TERRITORY and to perform and have performed LICENSED PROCESSES in the FIELD in the TERRITORY. Further, each of WHITEHEAD and DFCI hereby grants to COMPANY and its AFFILIATES for the TERM a nonexclusive license under the MATERIALS for the practice of the PATENT RIGHTS in the FIELD in the TERRITORY, provided that such nonexclusive grant shall not limit the exclusive license set forth above.

2.2 <u>Exclusivity</u>.

In order to establish an exclusive period for COMPANY, each of WHITEHEAD and DFCI shall not grant any other license or other rights under the PATENT RIGHTS to make, have made, use, sell, offer for sale or import LICENSED PRODUCTS in the FIELD in the TERRITORY or to perform of have performed LICENSED PROCESSES in the FIELD in the TERRITORY, nor shall WHITEHEAD or DFCI practice the PATENT RIGHTS except as provided under Section 2.6, in each case during the periods specified below for certain portions of the FIELD, so that the license in Section 2.1 shall be exclusive for those portions for the specified periods:

(i) such exclusive period shall be the TERM for the portions of the PATENT RIGHTS listed in APPENDIX A except as provided in clause (ii) below;

(ii) for CHEM-SEQ, such exclusive period shall be three (3) years from the EFFECTIVE DATE, such exclusive period to be automatically extended an additional two (2) years upon payment by COMPANY to WHITEHEAD of an extension fee of [**] Dollars (\$[**]US) prior to the end of such three-year period, provided that:

(x) exclusive period shall be the TERM for use of CHEM-SEQ in the HUMAN THERAPEUTIC CORE;

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(y) at the end of such exclusive period as applied to CHEM-SEQ as provided above, COMPANY shall have the exclusive first right to extend such exclusive period for fields other than the HUMAN THERAPEUTIC CORE for a period of [**] days based on good faith negotiation with WHITEHEAD and DFCI.

(iii) COMPANY may elect to waive the exclusivity under this section 2.2 for any patent or patent application or claim thereof from Appendix A effective upon written notice to DFCI and WHITEHEAD.

2.3 <u>Sublicenses</u>. COMPANY will have the right to grant sublicenses of the license and other rights under Section 2.1 and this Agreement and through multiple tiers, provided however that any such grant of a sublicense in a field to which COMPANY has a nonexclusive license must be accompanied by a grant of either (1) a sublicense in a field to which COMPANY has an exclusive license on the effective date of such SUBLICENSE AGREEMENT, (2) a grant of material COMPANY intellectual property rights including license rights under the OTHER AGREEMENTS or (3) a combination of (I) and (2), and further provided however that such multiple tier sublicenses shall be consistent with the provisions herein with respect to SUBLICENSES and limited to sublicenses where COMPANY has granted material COMPANY intellectual property rights and a SUBLICENSE under this AGREEMENT. For the purpose of clarity, SUBLICENSEES do not have the right to grant further sublicenses except as provided under this Section 2.3. COMPANY shall incorporate terms and conditions into its sublicense agreements sufficient to enable COMPANY to comply with this Agreement. Upon termination of this Agreement for any reason, any SUBLICENSEE not then in default shall have the right to take a direct license from WHITEHEAD and DFCI under rights and terms substantially identical to the sublicense rights and terms which COMPANY previously granted to such SUBLICENSEE, and SUBLICENSEE will pay WHITEHEAD as if it were COMPANY under the terms of this Agreement. WHITEHEAD and DFCI each agrees to execute such direct license and any non-identical terms will be negotiated between SUBLICENSEE and WHITEHEAD and DFCI in good faith under reasonable terms and conditions.

2.3.1 Form and Content of Sublicenses. COMPANY shall issue any sublicense(s) granted by it under this Agreement in writing and COMPANY shall

include the equivalent of at least the following provisions with COMPANY in all sublicenses.

- a) SUBLICENSEES shall report [**] to COMPANY on its operations under the sublicense.
- b) SUBLICENSEES shall make payments due to COMPANY in relation to NET SALES of PRODUCTS in a timely manner, so that COMPANY may comply with its obligations to make payments to WHITEHEAD and DFCI as set forth in Section 4.
- c) The terms and conditions of Section 2.5 (U.S. Manufacturing), Section 2.6 (Retained Rights), Section 5.3 (Record keeping), Section 11.2 (Export Control), Section 11.3 (Non-Use of Name), and Section 11.4 (Marking of LICENSED PRODUCTS) are binding on the sublicensee through the applicable SUBLICENSE AGREEMENT.
- d) A section substantially the same as Section 8 (Indemnification and Insurance) shall be included which also will state that the Indemnitees (as defined in Section 8) are intended third party beneficiaries of such SUBLICENSE AGREEMENT solely for the purpose of enforcing such indemnification and insurance provisions.

2.3.2 <u>Copies of Sublicenses</u>. COMPANY shall forward to WHITEHEAD and DFCI copies of any and all fully executed sublicenses promptly after execution, which copies may be reasonably redacted except for matters relevant to COMPANY'S obligations and/or DFCI's and/or WHITEHEAD's rights under this Agreement, provided that sufficient information remains unredacted to allow DFCI and WHITEHEAD to reasonably assess whether COMPANY is in compliance with its obligations under this Agreement and to verify amounts payable hereunder in connection with such sublicense agreement. WHITEHEAD and DFCI shall

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keep any such copies of sublicense agreements in their confidential files, shall treat as confidential information in accord with Article 14 of this Agreement and shall use them solely for the purpose of monitoring COMPANY'S and SUBLICENSEES' compliance with their obligations hereunder and enforcing WHITEHEAD's and DFCI's rights under this Agreement. Such copy shall be postmarked within [**] days of the execution of the sublicense.

2.4 <u>Mandatory Sublicensing</u>.

Beginning five (5) years from the EFFECTIVE DATE, if WHITEHEAD, DFCI, or COMPANY receives a bona (a) fide request from a third party for a sublicense to the PATENT RIGHTS outside of the HUMAN THERAPEUTIC CORE to make, have made, use, sell, offer to sell, and import a LICENSED PRODUCT or LICENSED PROCESS, which proposed product or process ("Proposed Product") is not directly competitive with any LICENSED PRODUCT or LICENSED PROCESS then offered for sale or in bona fide research or development as evidenced by the performance of any of the diligence obligations set forth in Sections 3.1 or 3.2 by or on behalf of COMPANY or any of its AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS, then COMPANY shall enter into good-faith negotiations toward granting at least a non-exclusive sublicense, limited to the proposed field only, to such third party for such third party's Proposed Product. As an alternative to negotiating a sublicense to a third party, COMPANY (or one of its AFFILIATES or actual or potential SUBLICENSEES or CORPORATE PARTNERS) may submit to WHITEHEAD and DFCI, within [**] months after such third party's request for a sublicense, a plan for prompt and diligent development of the Proposed Product, including a commitment to commercially reasonable development milestones. If WHITEHEAD and DFCI approve this plan, such approval not to be unreasonably withheld, no third-party sublicense shall be required for each such Proposed Product pursuant to this Section 2.4(a), and Section 2.4(b) below shall not apply. If WHITEHEAD and DFCI do not approve this plan, the parties shall meet within [**] days of COMPANY'S submission to resolve in good faith any differences in the plan. For purposes of this paragraph, "directly competitive" includes, for example and without limitation, that (i) the Proposed Product is or could be for the same or similar indication or

otherwise is in the same therapeutic space as any such LICENSED PRODUCT or LICENSED PROCESS, (ii) the Proposed Product could reduce the sales of any such LICENSED PRODUCT or LICENSED PROCESS, (iii) the Proposed Product is a derivative, homolog, analog or other chemically-related species/compound to such LICENSED PRODUCT or LICENSED PRODUCT or LICENSED PROCESS, or (iv) the development or commercialization of the Proposed Product could harm the development or

commercialization of any such LICENSED PRODUCT or LICENSED PROCESS (where, for example, an adverse regulatory event for the Proposed Produce could include any such LICENSED PRODUCT or LICENSED PROCESS).

(b) If COMPANY has not granted a sublicense to the third party under Section 2.4(a) above, within [**] months after receiving the request in writing, and if WHITEHEAD and DFCI has not granted COMPANY a waiver of this requirement as provided for in Section 2.4(a) above, then WHITEHEAD and DFCI shall have the right to require that COMPANY grant a non-exclusive sublicense to the third party, limited to the proposed field only, for such third party's Proposed Product. The [**]-month period during which COMPANY may grant a sublicense, prior to WHITEHEAD and DFCI requiring such sublicense grant, shall be extended an additional [**] months if, at the end of the initial [**]-month period, both COMPANY and the prospective third-party sublicense assert to WHITEHEAD and DFCI that they are engaged in good-faith negotiations toward the completion of a sublicense agreement.

2.5 <u>U.S. Manufacturing</u>. COMPANY agrees that any LICENSED PRODUCTS used or sold in the United States will be manufactured substantially in the United States as required by 35 U.S.C. 204 and 37 C.F.R. 401 et. seq., as amended.

2.6 <u>Retained Rights</u>.

(a) <u>DFCI and WHITEHEAD</u>. DFCI and WHITEHEAD each retains the right on behalf of itself, the right to practice the PATENT RIGHTS and MYC MODULATORS for internal research, teaching and other educational purposes only, such internal research not to include any commercial third-party sponsored research or any industry sponsored clinical trials, and not for the purpose of commercial development, production,

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manufacture, distribution or sale of products or provision of services for a fee. In fields that are nonexclusively licensed by COMPANY, DFCI and WHITEHEAD each retains the right on behalf of itself to practice the PATENT RIGHTS for any purpose.

(b) <u>Academic and Not-For-Profit Research Institutes</u>. DFCI and WHITEHEAD each retains the right to grant nonexclusive licenses to other nonprofit or academic institutions to practice the PATENT RIGHTS and use the MYC MODULATORS in performing internal research or for education purposes (but in no case when sponsored or otherwise funded in any way by any for-profit entity); provided, however, that in no event shall any license permit the practice or use of any PATENT RIGHTS or MYC MODULATORS for commercial activities (meaning commercial development, production, manufacture, distribution or sale of products or provision of services for a fee). WHITEHEAD and/or DFCI may distribute MYC MODULATORS to other nonprofit or academic institutions for the uses expressly permitted above (and not others), but only on the basis of a Material Transfer Agreement with such institution, substantially in the form attached hereto as Appendix F (an "MTA"). WHITEHEAD and/or DFCI shall notify COMPANY when it enters into an MTA or distributes or otherwise provides any MYC MODULATORS to any for-profit third party and DFCI and WHITEHEAD shall refer any request, for MYC MODULATORS from a for-profit third party to COMPANY.

(c) <u>Federal Government</u>. COMPANY acknowledges that the U.S. federal government retains a royalty-free, nonexclusive, non-transferable license to practice any government-funded invention claimed in any PATENT RIGHTS as set forth in 35 U.S.C. §§ 201-211, and the regulations promulgated thereunder, as amended, or any successor statutes or regulations.

2.7 <u>IMPROVEMENTS</u>. Provided that COMPANY is not then in default or breach of this Agreement, and subject to WHITEHEAD's and DFCI's obligations under conflict of interest regulations or guidelines from the federal government or policies of WHITEHEAD and DFCI or subject to WHITEHEAD's and DFCI's obligations under third party corporate sponsorship or any

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obligations existing as of the EFFECTIVE DATE associated with third party materials, which determination shall be made in WHITEHEAD's and DFCI's reasonable discretion, WHITEHEAD and DFCI hereby grant to COMPANY an exclusive option to negotiate a commercial license to all IMPROVEMENTS ("OPTION"). The OPTION must be exercised within [**] days from the date of disclosure of any such IMPROVEMENT to COMPANY and the resulting license shall be incorporated into this Agreement as an amendment to the PATENT RIGHTS definition, COMPANY shall agree with WHITEHEAD and DFCI on the field(s) for such IMPROVEMENT and terms which are reasonable and appropriate in licenses between industry and academic institutions to be negotiated in good faith within [**] days of exercising the OPTION, which will be added to the COMPANY's diligence obligations under Section 3 with respect to such IMPROVEMENTS, and COMPANY, DFCI and WHITEHEAD shall timely amend APPENDIX A to include all relevant information for such IMPROVEMENT. Should no license result from this process, WHITEHEAD and DFCI shall be free to license IMPROVEMENTS to any third party but DFCI and WHITEHEAD, for a period of [**] months from the date of disclosure to COMPANY shall not offer the IMPROVEMENT to a third party on lesser terms than offered to COMPANY.

2.8 <u>No Additional Rights</u>. Nothing in this Agreement shall be construed to confer any rights upon COMPANY by implication, estoppel, or otherwise as to any technology or patent rights of WHITEHEAD or DFCI or any other entity other than the PATENT RIGHTS (save for patent rights on IMPROVEMENTS as provided in Section 2.7 above), regardless of whether such technology or patent rights shall be dominant or subordinate to any PATENT RIGHTS.

3. <u>COMPANY DILIGENCE OBLIGATIONS</u>

3.1 COMPANY shall use commercially reasonable efforts, or shall cause one or more of its AFFILIATES, SUBLICENSEES and CORPORATE PARTNERS to use commercially reasonable efforts, to develop one or more PRODUCTS or LICENSED PROCESSES and to introduce PRODUCTS or LICENSED PROCESSES into the commercial market; thereafter, COMPANY or its AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS shall make one or more PRODUCTS or LICENSED PROCESSES reasonably available to the public. Specifically, COMPANY or any of its AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS shall fulfill the following obligations:

- Within [**] months after the EFFECTIVE DATE, COMPANY shall furnish WHITEHEAD and DFCI with a written research and development plan describing the major tasks to be achieved in order to bring to market a PRODUCT, specifying the number of staff and other resources to be devoted to such development effort.
- (ii) Within [**] days after the end of each calendar year, COMPANY shall furnish WHITEHEAD and DFCI with a written report (consistent with Section 5.1(a)) on the progress of its efforts during the immediately preceding calendar year to develop and commercialize LICENSED PRODUCTS and/or IDENTIFIED PRODUCTS. The report shall also contain a discussion of intended efforts for the year in which the report is submitted.
- (iii) Within [**] months of the receipt by COMPANY of the MATERIALS, COMPANY shall [**].
- (iv) Within [**] months of the receipt by COMPANY of the MATERIALS, COMPANY shall [**].
- (v) Within [**] months of the receipt by COMPANY of the MATERIALS, COMPANY shall [**].
- (vi) Within [**] months, COMPANY shall [**]; if COMPANY believes it will not achieve this obligation it may notify WHITEHEAD and DFCI in writing in advance of the deadline and such notice shall include a reasonableexplanation of the reasons for such failure. If COMPANY so notifies WHITEHEAD and DFCI, the parties shall meet within [**] days thereof to discuss a reasonable plan for achieving the original obligation or an amended obligation, during which time COMPANY shall not be in breach of its obligations under this Section 3.1(vi).
- (vii) Within [**] years, COMPANY, its AFFILIATES, SUBLICENSEES, or CORPORATE PARTNERS shall [**].

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In the event that COMPANY or any of its AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS, alone or together, has not performed the above Sections 3.1(i), (ii), or (vi), then WHITEHEAD and DFCI may treat such failure as a material breach in accordance with Section 12.3(b).

In the event that COMPANY or any of its AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS, alone or together, has not performed the above Sections 3.1 (iii), (iv), (vii), then as the exclusive remedy, under Section 2.2, exclusivity as it pertains to MYC/MAX SCREEN will terminate without an opportunity to cure.

In the event that COMPANY or any of its AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS, alone or together, has not performed the above Section 3.1 (v), then as the exclusive remedy, under Section 2.2, exclusivity as it pertains to CHEM-SEQ will terminate without an opportunity to cure.

3.2 <u>Diligence Requirements</u>.

(a) <u>MYC MODULATORS and MYC/MAX SCREEN</u>:

If, in any full calendar year, COMPANY or any one or more AFFILIATES or SUBLICENSEES or CORPORATE PARTNERS, alone or together, has performed any one of the following with respect to a PRODUCT or LICENSED PROCESS, then COMPANY shall be deemed to have complied with COMPANY's obligations under this Section 3.2(a) for such calendar year:

- (i) is actively researching or developing one or more PRODUCTS from the MYC/MAX SCREEN or MYC MODULATORS as evidenced by the commitment to such work of [**] or more full-time equivalent staff;
- (ii) has expended a minimum of [**] dollars (\$[**]) annually for development of one or more PRODUCTS from the MYC/MAX SCREEN or MYC MODULATORS;

has not performed at least one of Sections 3.2(a)(i) through (x) during such full calendar year with respect to at least one PRODUCT from the MYC/MAX SCREEN or MYC MODULATORS, then WHITEHEAD and DFCI may treat such failure as a material breach in accordance with Section 12.3(b) (it being understood that performance of at least one of Sections 3.2(a)(i) through (x) during the cure period thereunder shall cure such breach).

(b) <u>CHEM-SEQ</u>:

If, in any full calendar year, COMPANY or any one or more AFFILIATES or SUBLICENSEES or CORPORATE PARTNERS, alone or together, has performed any one of the following with respect to a PRODUCT or LICENSED PROCESS, then COMPANY shall be deemed to have complied with COMPANY's obligations under this Section 3.2(b) for such calendar year:

- (i) is actively researching or developing one or more PRODUCTS or LICENSED PROCESS from CHEM-SEQ as evidenced by the commitment to such work of [**] or more full-time equivalent staff;
- (ii) has expended a minimum of [**] dollars (\$[**]) annually for development of one or more PRODUCTS or LICENSED PROCESS from CHEM-SEQ;

[**]

In the event that COMPANY or any of its AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS, alone or together, has not performed at least one of Sections 3.2(b)(i) through (x) during such full calendar year with respect to at least one PRODUCT or LICENSED PROCESS from CHEM-SEQ, then WHITEHEAD and DFCI may treat such failure as a material breach in accordance with Section 12.3(b) (it being understood that performance of at least one of Sections 3.2(b)(i) through (x) during the cure period thereunder shall cure such breach).

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4. <u>ROYALTIES AND PAYMENT TERMS</u>

4.1 <u>Consideration for Grant of Rights</u>.

(a) <u>License Issue Fee, Patent Cost Reimbursement and FUNDING MILESTONE PAYMENT</u>. COMPANY shall pay to WHITEHEAD on the EFFECTIVE DATE a license issue fee of fifty thousand Dollars (\$50,000), and, such amounts required as reimbursement in accordance with Section 6.3, relating to actual expenses incurred as of the EFFECTIVE DATE in connection with obtaining the PATENT RIGHTS. These payments are nonrefundable.

COMPANY shall pay to WHITEHEAD one (1) "FUNDING MILESTONE PAYMENT" as follows: fifty thousand dollars (\$50,000) upon the earlier of (1) [**] years after the EFFECTIVE DATE or (2) COMPANY raising [**] Dollars (\$[**]) in one or more rounds of equity financing. This payment is nonrefundable and is due within [**] months of closing under clause (2) above.

(b) <u>License Maintenance Fees</u>. COMPANY shall pay to WHITEHEAD the following license maintenance fees on January 1 of each year set forth below:

Year(s)	License Maintenance Fee
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

This license maintenance fee is nonrefundable; however, the license maintenance fee may be credited to all payments due under this Agreement during the same calendar year, if any, except patent cost reimbursements as provided in Section 6.3 and the FUNDING MILESTONE PAYMENT. License maintenance fees paid in excess of such payments due in such calendar year shall not be creditable to amounts due for future years.

(c) <u>Milestone Payments</u>. COMPANY shall pay to WHITEHEAD the following milestone payments upon first achievement of the following milestones whether by COMPANY, its AFFILIATE, or a SUBLICENSEE:

(i) for LICENSED PRODUCTS (in DOLLARS):

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A "MAJOR COUNTRY" will mean Germany, France, Italy, Spain or the United Kingdom. COMPANY shall provide WHITEHEAD with written notice and such milestone payment within [**] days after achieving each milestone. Each such milestone payment shall be payable only once. These milestone payments are nonrefundable. There shall be no milestones on any IDENTIFIED PRODUCTS.

- (d) <u>Running Royalties</u> on:
- (i) <u>LICENSED PRODUCTS</u>. COMPANY shall pay to WHITEHEAD a running royalty of [**] percent ([**]%) of NET SALES of LICENSED PRODUCTS of MYC MODULATORS by COMPANY, AFFILIATES and SUBLICENSEES in those countries where such sale infringes one or more VALID CLAIMS;
- (ii) <u>IDENTIFIED PRODUCTS</u>. COMPANY shall pay to WHITEHEAD a running royalty of [**] percent ([**]%) of NET SALES of IDENTIFIED PRODUCTS, only when used for approved human therapeutic purposes, by COMPANY, AFFILIATES, SUBLICENSEES, or CORPORATE PARTNERS for a period of [**] years from the date of first commercial sale of such IDENTIFIED PRODUCT, which may extend beyond (iii) the TERM, anywhere in the world, but only if the PATENT RIGHTS under which the IDENTIFIED PRODUCT was identified were exclusive as provided under Section 2.2 at the time of identification of the IDENTIFIED PRODUCT, but such royalty shall be increased by one quarter of a percent to a total of [**] percent ([**]%) of NET SALES of IDENTIFIED PRODUCTS, only when used for approved human therapeutic purposes, if the IDENTIFIED PRODUCT was initially identified using MYC/MAX SCREEN;
- (iii) <u>LICENSED SERVICES</u>. [**] percent ([**]%) of LICENSED SERVICES INCOME.
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Running royalties shall be payable for each REPORTING PERIOD and shall be due to WHITEHEAD within [**] days of the end of each REPORTING PERIOD.

No payments other than running royalties shall be paid on IDENTIFIED PRODUCTS.

The parties expressly agree that such a payment period for IDENTIFIED PRODUCTS is not an extension of the PATENT RIGHTS beyond their term, but rather is a period determined for the convenience of the parties in recognition of the value of the PATENT RIGHTS in discovering IDENTIFIED PRODUCTS and as appropriate compensation for the rights granted herein.

Except when terminated by a Party under Section 12, upon satisfaction of COMPANY's royalty obligations with respect to a PRODUCT, the license grants contained herein shall become fully paid-up, royalty-free, perpetual and irrevocable for such PRODUCT.

(e) <u>Sharing of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME</u>. COMPANY shall pay WHITEHEAD the following percentage of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME:

- (i) Percentage Tier 1. [**]% of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME payable during the period of Percentage Tier 1 from sublicense and corporate partnership agreements entered into from the EFFECTIVE DATE until the first anniversary of the EFFECTIVE DATE ("YEAR ONE", and each subsequent 12-month period thereafter, "YEAR TWO", "YEAR THREE", etc.) (the "FIRST STEPDOWN");
- (ii) Percentage Tier 2. From the FIRST STEPDOWN, [**]% of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME payable during the period of Percentage Tier 2 from sublicense and corporate partnership agreements entered into until the earlier of (1) the end of YEAR [**] or (2) [**] (the earlier of (1) and (2), the "SECOND STEPDOWN");
- (iii) Percentage Tier 3. From the SECOND STEPDOWN, [**]% of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME

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payable during the period of Percentage Tier 3 from sublicense and corporate partnership agreements entered into until the earlier of (1) the end of YEAR [**] or (2) [**] (the earlier of (1) and (2), the "THIRD STEPDOWN");

- (iv) Percentage Tier 4. From the THIRD STEPDOWN, [**]% of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME from sublicense and corporate partnership agreements payable during the period of Percentage Tier 4, but
- (v) Upon each instance when the aggregate payment to WHITEHEAD under this Section 4.1 (e) equals [**] dollars (\$[**]), the Percentage Tier will automatically step down to the next Percentage Tier, until Percentage Tier 4 is reached (after a total aggregate payment to WHITEHEAD of [**] Dollars (\$[**])). By this, for example and without limitation, [**].

For clarity, any of the foregoing three stepdowns specified above may apply to a single payment from a SUBLICENSEE or CORPORATE PARTNER if such payment triggers the payment thresholds specified above (so that such payment will be subject to different sharing percentages).

Such amounts shall be payable for each REPORTING PERIOD and shall be due to WHITEHEAD within [**] days of the end of each

REPORTING PERIOD. No payments shall be due from SUBLICENSING INCOME or CORPORATE PARTNERSHIP INCOME to the extent in consideration of any known or future IDENTIFIED PRODUCTS.

Further, any amount paid by COMPANY as a milestone payment under Section 4.1 (c) for achieving a milestone shall be fully creditable against any payment due under Section 4.1(e) for sharing SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME achieving the same milestone.

To the extent that patent rights, other intellectual property rights or other rights or obligations (i) other than PATENT RIGHTS for LICENSED PRODUCTS, are sublicensed hereunder by COMPANY or (ii) other than the LICENSED PROCESS, are the subject of a CORPORATE PARTNERSHIP, that portion of the consideration received by COMPANY and subject to this

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Section 4.1 (e) shall be equitably apportioned between those PATENT RIGHTS or that LICENSED PROCESS, as applicable, and those other rights and obligations, and such apportionment shall be reasonable and in accordance with customary standards in the industry. Deductions taken under SUBLICENSE INCOME (e.g., bona fide research, development and commercialization costs) also will be apportioned. For clarity, (A) those other rights and obligations include, without limitation, PATENT RIGHTS for any IDENTIFIED PRODUCTS sublicensed or performed by COMPANY hereunder, and other patent rights sublicensed or performed under any OTHER LICENSE AGREEMENTS, and (B) there shall not be sharing of any specific SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME among this Agreement and the OTHER LICENSE AGREEMENTS more than once, since this AGREEMENT and the OTHER LICENSE AGREEMENTS apply to different patent rights.

COMPANY shall promptly deliver to WHITEHEAD a written report setting forth such apportionment. In the event WHITEHEAD and/or DFCI disagrees with the determination made by COMPANY, WHITEHEAD and/or DFCI shall so notify COMPANY within [**] days of receipt of COMPANY's report and the parties shall meet to discuss and resolve such disagreement in good faith. If the parties are unable to agree in good faith as to such fair market values within [**] days, then the matter shall be submitted in accordance with the dispute resolution process set forth in Section 13.1, and if COMPANY owes additional monies to WHITEHEAD after the conclusion of such process to make such payment to WHITEHEAD.

(f) <u>Equity</u>.

<u>Initial Grant</u>. COMPANY shall issue a total of 290,155 shares of Common Stock of COMPANY, \$0.001 par value per share, (the "Shares") in the name of WHITEHEAD and of such persons as WHITEHEAD shall direct ("Whitehead Holders"), and each Whitehead Holder shall receive such number of shares as WHITEHEAD shall direct. <u>Appendix C</u> lists said Common Stock distribution. Such issuance shall be recorded on the Stock Transfer Ledger of COMPANY on the EFFECTIVE DATE and the Shares shall be delivered to WHITEHEAD and Whitehead Holders, if any, within [**] days of the EFFECTIVE DATE.

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COMPANY represents to WHITEHEAD that, as of the EFFECTIVE DATE, the aggregate number of Shares equals [**] percent ([**]%) of the COMPANY's issued and outstanding Common Stock calculated on a "Fully Diluted Basis." For purposes of this Section 4.1(f), "Fully Diluted Basis" shall mean that the total number of issued and outstanding shares of the COMPANY's Common Stock shall be calculated to include conversion of all issued and outstanding securities then convertible into common stock, the exercise of all then outstanding options and warrants to purchase shares of common stock, whether or not then exercisable, and shall include all securities reserved for issuance pursuant to any COMPANY stock or stock option plan in effect on the date of the calculation.

(2) <u>Anti-Dilution Protection</u>. COMPANY shall issue additional shares of Common Stock to WHITEHEAD and each Whitehead Holder pro rata, such that WHITEHEAD's and the Whitehead Holders' ownership of outstanding Common Stock shall not fall below [**] Percent ([**]%) on a Fully Diluted Basis, as calculated after giving effect to the anti-dilutive issuance. Such issuances shall continue until and including the date upon which a total of [**] Dollars (\$[**]) in cash in exchange for COMPANY's capital stock (the "Funding Threshold") shall be received by COMPANY (and for clarity if such Funding Threshold is exceeded as part of a single financing, only the portion of that financing up to but not above the Funding Threshold shall be included in such anti-dilution calculation specified above). Thereafter, no additional shares shall be due to any institution or any Whitehead Holder pursuant to this Section 4.1(f). With respect to any such issuances and the initial equity issuance identified above, each of the resulting stockholders will enter into such agreements with COMPANY and its other stockholders as is customary, including any such agreements required of COMPANY.

(g) <u>No Multiple Royalties</u>. If the manufacture, use, offer for sale, import, or sale of any LICENSED PRODUCT or the performance of any LICENSED PROCESS is covered by more than one of the PATENT RIGHTS, multiple royalties shall not be due.

(h) <u>OTHER LICENSE AGREEMENTS</u>. As provided above for running royalties under Section 4.1 (d) by reason of crediting, no more than one running royalty shall be payable under this Agreement and the OTHER LICENSE AGREEMENTS when taken together with respect to the same or substantially same PRODUCT, respectively, provided the higher amount will be due under any of those three (3) agreements with respect thereto. Likewise, as provided above for SUBLICENSE INCOME and CORPORATE PARTNERSHIP INCOME under Section 4.1(e), any SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME three (3) agreements so any portion of any SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME shall be shared only once under one (1) of those three (3) agreements.

4.2 <u>Payments</u>.

(a) <u>Method of Payment</u>. All payments under this Agreement should be made payable to "Whitehead Institute for Biomedical Research" and sent to WHITEHEAD's address identified in Section 15.1. Each payment should reference this Agreement (Ref: [**]) and identify the obligation under this Agreement that the payment satisfies.

(b) <u>Payments in U.S. Dollars</u>. All payments due under this Agreement shall be drawn on a United States bank and shall be payable in United States dollars. Conversion of foreign currency to U.S. dollars shall be made at the conversion rate existing in the United States (as reported in the Wall Street Journal) on the last working day of the calendar quarter of the applicable REPORTING PERIOD. Such payments shall be without deduction of exchange, collection, or other charges, and, specifically, without deduction of withholding or similar taxes or other government imposed fees or taxes, except as permitted in the definition of NET SALES. To the extent it has the legal right to do so and at the reasonable request of COMPANY, DFCI and WHITEHEAD will assist COMPANY in reclaiming or seeking reimbursement any amounts withheld under this Section 4.2(b) from the appropriate government, agency or taxing authority. For tax withholding purposes that arise with respect to such payments, COMPANY shall treat DFCI as a 501 (c)(3) tax-exempt charitable organization, to the extent DFCI remains a

tax-exempt charitable organization. For tax withholding purposes that arise with respect to such payments, COMPANY shall treat WHITEHEAD as a 501(c)(3) tax-exempt charitable organization, to the extent WHITEHEAD remains a tax-exempt charitable organization.

(c) <u>Late Payments</u>. Any payments by COMPANY that are not paid on or before the date such payments are due under this Agreement shall bear interest, to the extent permitted by law, at [**] percentage points above the Prime Rate of interest as reported in the Wall Street Journal on the date payment is due.

5. <u>REPORTS AND RECORD KEEPING</u>

5.1 Frequency of Reports.

(a) <u>Before First Commercial Sale</u>. Prior to the first commercial sale of any LICENSED PRODUCT or IDENTIFIED PRODUCT or first commercial performance of any LICENSED PROCESS, COMPANY shall deliver reports to WHITEHEAD [**], within [**] days of the end of [**], containing information concerning the immediately preceding [**], as further described in Section 5.2.

(b) <u>Upon First Commercial Sale of a LICENSED PRODUCT or IDENTIFIED PRODUCT or Commercial</u> <u>Performance of a LICENSED PROCESS</u>. COMPANY shall report to WHITEHEAD the date of first commercial sale of a LICENSED PRODUCT or IDENTIFIED PRODUCT and the date of first commercial performance of a LICENSED PROCESS within [**] days of occurrence in each country.

(c) <u>After First Commercial Sale</u>. After the first commercial sale of a LICENSED PRODUCT or first commercial performance of a LICENSED PROCESS, COMPANY shall deliver reports to WHITEHEAD within [**] days of the end of each REPORTING PERIOD, containing information concerning the immediately preceding REPORTING PERIOD, as further described in Section 5.2.

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5.2 <u>Content of Reports and Payments</u>. Each report delivered by COMPANY to WHITEHEAD shall contain at least the following information for the immediately preceding REPORTING PERIOD:

- the number of LICENSED PRODUCTS sold, leased or distributed by COMPANY, its AFFILIATES and SUBLICENSEES to independent third parties in each country, and, if applicable, the number of LICENSED PRODUCTS used by COMPANY, its AFFILIATES and SUBLICENSEES in the provision of services in each country;
- the number of IDENTIFIED PRODUCTS sold, leased or distributed by COMPANY, its AFFILIATES and SUBLICENSEES to independent third parties in each country, and, if applicable, the number of IDENTIFIED PRODUCTS used by COMPANY, its AFFILIATES and SUBLICENSEES in the provision of services in each country;

- (iii) a description of LICENSED PROCESSES performed by COMPANY, its AFFILIATES and SUBLICENSEES in each country as may be pertinent to a royalty accounting hereunder;
- (iv) the gross price charged by COMPANY, its AFFILIATES and SUBLICENSEES for each LICENSED PRODUCT and, if applicable, the gross price charged for each LICENSED PRODUCT used to provide services in each country; and the gross price charged for each LICENSED PROCESS performed by COMPANY, its AFFILIATES and SUBLICENSEES in each country;
- (v) the gross price charged by COMPANY, its AFFILIATES and SUBLICENSEES for each IDENTIFIED PRODUCT and, if applicable, the gross price charged for each IDENTIFIED PRODUCT used to provide services in each country;

- (vi) the gross price charged by COMPANY and its AFFILIATES for LICENSED SERVICES INCOME in each country as may be pertinent to a royalty accounting hereunder;
- (vii) calculation of NET SALES for the applicable REPORTING PERIOD in each country, including a listing of applicable deductions;
- (viii) total royalty payable on NET SALES in U.S. dollars, together with the exchange rates used for conversion;
- (ix) the amount of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME received by COMPANY from each SUBLICENSEE or CORPORATE PARTNER and the amount deliverable to WHITEHEAD from such SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME, including an itemized breakdown of the sources of income comprising the SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME; and
- (x) the number of sublicenses entered into for the PATENT RIGHTS, LICENSED PRODUCTS and/or LICENSED PROCESSES.
- (xi) the achievement of COMPANY Diligence Obligations under Article 3.

If no amounts are due for any REPORTING PERIOD, the report shall so state. COMPANY shall use commercially reasonable efforts to enter into a sublicense agreement whereby the applicable SUBLICENSEE provides the information necessary for the foregoing, but if despite using such commercially reasonable efforts, COMPANY is unable to obtain all such information from such SUBLICENSEE, then COMPANY shall be in compliance with this Section 5 by providing such relevant information as COMPANY is able to obtain from such SUBLICENSEE.

5.3 <u>Record keeping</u>. COMPANY shall maintain, and shall cause its AFFILIATES and SUBLICENSEES to maintain, complete and accurate records relating to the rights and obligations under this Agreement and any amounts payable to WHITEHEAD in relation to this

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Agreement, which records shall contain sufficient information to permit WHITEHEAD to confirm the accuracy of any reports delivered to WHITEHEAD and compliance in other respects with this Agreement. The relevant party shall retain such records for at least [**] years following the end of the calendar year to which they pertain, during which time WHITEHEAD or WHITEHEAD's appointed agents, shall have the right, at WHITEHEAD's expense, to inspect such records during normal business hours to verify any reports and payments made or compliance in other respects under this Agreement. In the event that any audit performed under this Section 5.3 reveals an underpayment in excess of [**] percent ([**]%), COMPANY shall bear the full out-of-pocket cost of such audit and shall remit any amounts due to WHITEHEAD within [**] days of receiving notice thereof from WHITEHEAD, and any over-payments may be taken as a credit under this Agreement.

6. <u>PATENT PROSECUTION</u>

6.1 <u>Responsibility for PATENT RIGHTS</u>. WHITEHEAD and/or DFCI, in its/their sole discretion, shall prepare, file, prosecute, and maintain all of the PATENT RIGHTS. For purposes of this Agreement, patent prosecution includes ex parte prosecution, interference proceedings, reissues, reexaminations and oppositions. As long as the license remains in whole or in part exclusive, WHITEHEAD and/or DFCI shall provide, or cause its agent to provide, on a timely basis copies of relevant correspondence between WHITEHEAD and/or DFCI and the United States Patent Office or the various foreign patent offices and give COMPANY reasonable opportunity to advise WHITEHEAD and/or DFCI or WHITEHEAD's and/or DFCI's counsel on such matters. COMPANY shall designate an individual or department for receiving the patent-related correspondence.

COMPANY shall have reasonable opportunities to consult with and advise WHITEHEAD and/or DFCI. WHITEHEAD and/or DFCI shall consider the legitimate interests of COMPANY in performing its responsibility under this Section 6.1 and consider all reasonable comments from COMPANY regarding same COMPANY shall cooperate with WHITEHEAD and/or DFCI in such filing, prosecution and maintenance. To the extent that WHITEHEAD and/or DFCI uses outside patent counsel for the foregoing activities,

the following individual or department, who will have primary responsibility for such requests by COMPANY.

WHITEHEAD Whitehead Institute for Biomedical Research 9 Cambridge Center Cambridge, MA 02142 Attn: Intellectual Property Office DFCI Attorney for Intellectual Property Office of General Counsel Dana-Farber Cancer Institute, Inc. 450 Brookline Ave. Boston, MA 02215

- (i) COMPANY shall cooperate with WHITEHEAD and/or DFCI in preparing, filing, prosecuting and maintaining the patent applications and patents within PATENT RIGHTS. COMPANY shall provide prompt notice to WHITEHEAD and/or DFCI of any non-privileged, public information that comes to its attention that may affect the patentability, validity or enforceability of any patent application or patent within PATENT RIGHTS.
- (ii) COMPANY may surrender its licenses under any of the patents or patent applications, or any claim(s) thereof within PATENT RIGHTS in any country of the licensed TERRITORY by giving [**] days advance written notice to WHITEHEAD and DFCI. If COMPANY so surrenders its rights, it will remain responsible for all patent-related expenses incurred by WHITEHEAD and/or DFCI and not reimbursed by a third party during the applicable notice period, but WHITEHEAD and/or DFCI shall take reasonable steps to minimize such expenses. Thereafter, COMPANY will have no further obligation to pay any patent expenses for the patents or patent applications that it surrendered. Notwithstanding the foregoing, if such surrender results in termination of all rights under this Agreement, then the termination notice provision in Section 12, below, shall apply.

6.2 <u>International (non-United States) Filings</u>. Appendix B is a list of countries in which patent applications corresponding to the United States patent applications listed in Appendix A shall be filed, prosecuted, and maintained. Appendix B may be amended by mutual agreement of WHITEHEAD, DFCI, and COMPANY.

6.3 Payment of Expenses. Payment of all reasonable out-of-pocket fees and costs, including reasonable attorneys' fees, relating to the filing, prosecution and maintenance of the PATENT RIGHTS, will be the responsibility of COMPANY, whether such amounts were incurred before or after the EFFECTIVE DATE. As of the EFFECTIVE DATE such amount is \$[**].) COMPANY shall reimburse [**] percent ([**]%) of such amount due pursuant to this Section 6.3 within [**] days of the EFFECTIVE DATE and make [**] additional payments in successive [**] month periods thereafter equal to [**] percent ([**]%) each, which will survive termination of this Agreement. As of the EFFECTIVE DATE COMPANY shall pay [**] percent ([**]%) of all such fees and costs accrued after the EFFECTIVE DATE, until such time as there is another one or more licensees under the PATENT RIGHTS, in which event COMPANY shall only be required to pay its pro rata share of all such fees and costs based on the number of licensees (including COMPANY) and the field of such license(s); late payments shall accrue interest pursuant to Section 4.2(c). In all instances, WHITEHEAD and/or DFCI shall pay the fees prescribed for large entities to the United States Patent and Trademark Office.

7. <u>INFRINGEMENT</u>

7.1 <u>Notification of Infringement</u>. Each party agrees to provide written notice to the other parties promptly after becoming aware of any infringement of the PATENT RIGHTS in the FIELD for which COMPANY has an exclusive license and rights under Section 2.2 (the "ENFORCEMENT FIELD").

7.2 <u>Right to Prosecute Infringements</u>.

(a) <u>COMPANY Right to Prosecute</u>. So long as COMPANY remains the exclusive licensee of the PATENT RIGHTS in the ENFORCEMENT FIELD in the TERRITORY, COMPANY, to the extent permitted by law, shall have the right, under its own control and at its own expense, to prosecute any third-party infringement of the PATENT RIGHTS in the ENFORCEMENT FIELD in the TERRITORY, subject to Sections 7,4 and 7.5. If required by law, WHITEHEAD and/or DFCI shall permit any action under this Section 7.2 to be brought in its name, including being joined as a party-plaintiff, provided that COMPANY shall hold WHITEHEAD and DFCI harmless

from, and indemnify WHITEHEAD and DFCI against, any costs, expenses, or liability that WHITEHEAD and DFCI incur in connection with such action.

Prior to commencing any such action, COMPANY shall consult with WHITEHEAD and DFCI and shall consider the views of WHITEHEAD and DFCI regarding the advisability of the proposed action and its effect on the public interest. COMPANY shall not enter into any settlement, consent judgment, or other voluntary final disposition of any infringement action under this Section 7.2 without the prior written consent of WHITEHEAD and DFCI, such consent not to be unreasonably withheld, delayed or conditioned.

(b) <u>WHITEHEAD and DFCI Right to Prosecute</u>. In the event that COMPANY is unsuccessful in persuading the alleged infringer to desist or fails to have initiated an infringement action within a reasonable time after COMPANY first becomes aware of the basis for such action, WHITEHEAD and/or DFCI shall have the right, at their sole discretion, to prosecute such infringement under its sole control and at its sole expense, and any recovery obtained shall belong to WHITEHEAD and/or DFCI, but WHITEHEAD and/or DFCI shall reimburse COMPANY for any costs or expenses incurred in assisting WHITEHEAD and/or DFCI in such action as reasonably requested by WHITEHEAD and/or DFCI.

7.3 Declaratory Judgment Actions. In the event that a PATENT CHALLENGE or any suit or action alleging that the PATENT RIGHTS are not infringed or unpatentable is brought against WHITEHEAD, DFCI or COMPANY or any AFFILIATES or SUBLICENSEES by a third party, the subject party shall promptly notify the other parties in writing, and COMPANY, at its option and upon written notice to WHITEHEAD and DFCI. shall have the right, but shall not be obligated, within [**] days after commencement of such action to take over the sole defense of the action at its own expense. If COMPANY does not exercise this right, WHITEHEAD and/or DFCI may take over the sole defense of the action at WHITEHEAD and/or DFCI's sole expense, but shall not be obligated to do so, subject to Sections 7.4 and 7.5.

7.4 <u>Offsets</u>. COMPANY may offset a total of [**] percent ([**]%) of any expenses incurred under Sections 7.2 and 7.3 against any payments due to WHITEHEAD under Section 4,

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provided that in no event shall such payments under Section 4, when aggregated with any other offsets and credits allowed under this Agreement, be reduced by more than [**] percent ([**]%) in any REPORTING PERIOD.

7.5 <u>Recovery</u>. Any recovery obtained in an action brought by COMPANY under Sections 7.2 or 7.3 shall be distributed as follows:

- (i) each party shall be first reimbursed pro rata for any expenses incurred in the action (including the amount of any royalty or other payments withheld from WHITEHEAD as described in Section 7.4);
- (ii) as to ordinary damages, if COMPANY shall receive an amount equal to its lost profits, COMPANY shall pay to WHITEHEAD based upon such amount a reasonable approximation of the royalties and other amounts (for example, but not limited to milestone payments) that COMPANY would have paid to WHITEHEAD if COMPANY had sold the infringing products, processes and services (and achieved such milestones) rather than the infringer;
- (iii) as to ordinary damages, if COMPANY shall receive an amount equal to a reasonably royalty on the infringing sales or whichever measure of damages the court shall have applied, COMPANY shall pay to WHITEHEAD
 [**] Percent ([**]%) of such amount for ordinary damages; and
- (iv) as to special or punitive damages, the named parties shall share equally in any award;
- (v) each of the payments under (ii)-(iv) above shall be made pro rata net of expense reimbursement made under 7.5(i) for expenses incurred by each party under Section 7.5(i).

7.6 <u>Cooperation</u>. Each party agrees to cooperate in any action under this Section 7 which is controlled by any other party, provided that the controlling party reimburses the

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cooperating parties promptly for any reasonable costs and expenses incurred by the cooperating parties in connection with providing such assistance.

7.7 <u>Right to Sublicense</u>. So long as COMPANY remains the exclusive licensee of the PATENT RIGHTS in the ENFORCEMENT FIELD in the TERRITORY, COMPANY shall have the sole right to sublicense any alleged infringer in the ENFORCEMENT FIELD in the TERRITORY for future use of the PATENT RIGHTS in accordance with the terms and conditions of this Agreement relating to sublicenses as set forth in Section 2.3 and payments due under Section 4.

7.8 <u>Patent Certifications</u>. WHITEHEAD and DFCI shall notify and provide COMPANY with copies of any allegations of alleged patent invalidity, unenforceability or non-infringement of any PATENT RIGHT pursuant to a Paragraph IV Patent Certification by a Third party filing an Abbreviated New Drug Application, an application under §505(b)(2) or any other similar patent certification by a third party, and any foreign equivalent thereof. Such notification and copies shall be provided to COMPANY within [**] business days

8. **INDEMNIFICATION AND INSURANCE**

8.1 <u>Indemnification</u>.

(a) <u>Indemnity</u>. COMPANY shall indemnify, defend, and hold harmless WHITEHEAD, DFCI and their trustees, officers, faculty, students, medical and professional staff, employees, and agents and their respective successors, heirs and assigns (the "Indemnitees"), against any liability, damage, loss, or expense (including reasonable attorneys' fees and expenses) incurred by or imposed upon the Indemnitees or any one of them, in connection with any claims, suits, investigations, actions, demands or judgments (i) arising out of the design, production, manufacture, sale, use in commerce, lease, or promotion by COMPANY or by a SUBLICENSEE, AFFILIATE or agent of COMPANY, or any product, process or service relating to, or developed pursuant to, this Agreement or (ii) arising out of any other activities to be carried out pursuant to this Agreement or (iii) related to the exercise of any rights granted to COMPANY under this Agreement or (iv) any breach of this Agreement by COMPANY.

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COMPANY's indemnification under Section 8.l(a)(i) applies to any liability, damage, loss or expense whether or not it is attributable to the negligent activities of the Indemnitees. COMPANY's indemnification under Sections 8.1(b)(ii) through 8.1(b) (iv) does not apply to any liability, damage, loss or expense to the extent that it is attributable to the grossly negligent activities of the Indemnitees, or the intentional wrongdoing or intentional misconduct of the Indemnitees.

(b) <u>Procedures</u>. The Indemnitees agree to provide COMPANY with prompt written notice of any commenced or threatened claim, suit, action, demand, or judgment for which indemnification is sought under this Agreement. COMPANY agrees, at its own expense, to provide attorneys reasonably acceptable to WHITEHEAD and DFCI to defend against any actions brought or filed against any party indemnified hereunder with respect to the subject of the indemnity contained herein, whether or not such actions are rightfully brought. The Indemnitees shall cooperate with COMPANY in such defense and will permit COMPANY to conduct and control such defense and the disposition of such claim, suit, or action (including all decisions relative to litigation, appeal, and settlement); provided, however, that any Indemnitee shall have the right to retain its own counsel, at the expense of COMPANY, if representation of such Indemnitee by the counsel retained by COMPANY would be inappropriate because of actual or potential differences in the interests of such Indemnitee and any other party represented by such counsel. COMPANY agrees to keep WHITEHEAD and DFCI informed of the progress in the defense and disposition of such claim and to consult with WHITEHEAD and DFCI with regard to any proposed settlement.

The right of COMPANY to assume the defense of any action is limited to that part of the action commenced against WHITEHEAD, DFCI, and/or Indemnitees that relates to COMPANY's obligation of indemnification and holding harmless.

COMPANY shall require any AFFILIATE(S) or SUBLICENSEE(S) to indemnify, hold harmless and defend WHITEHEAD and DFCI under the same terms set forth in this Section 8.1.

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8.2 Insurance. At such time as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by COMPANY or by a SUBLICENSEE(S), AFFILIATE(S) or agent of COMPANY, COMPANY shall obtain and carry in full force and effect commercial general liability insurance, including product liability insurance which shall protect COMPANY and Indemnitees with respect to events covered by Section 8.1. Such insurance (i) shall be issued by an insurer licensed to practice in the Commonwealth of Massachusetts or an insurer pre-approved by WHITEHEAD and DFCI, such approval not to be unreasonably withheld, (ii) shall list WHITEHEAD and DFCI as additional insureds thereunder, (iii) shall be endorsed to include product liability coverage, and (iv) shall require [**] days written notice to be given to WHITEHEAD and DFCI prior to any cancellation or material change thereof. The limits of such insurance shall not be less than [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) for bodily injury including death; [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) per occurrence w

In the alternative, if COMPANY elects to self insure all or part of the limits described above (including deductibles or retentions which are in excess of \$[**] annual aggregate), such self-insurance program must be acceptable to and receive prior approval from WHITEHEAD, DFCI, and the DFCI's associated Risk Management Foundation. COMPANY shall provide WHITEHEAD and DFCI with Certificates of Insurance evidencing compliance with this Section 8.2 upon request of WHITEHEAD or DFCI.

COMPANY shall provide WHITEHEAD and DFCI with written notice at least [**] days prior to the cancellation, non renewal or material change in such insurance; if COMPANY does not obtain replacement insurance providing comparable coverage within such [**]day period, WHITEHEAD and/or DFCI has the right to terminate this Agreement effective at the end of such [**]day period without any notice or additional waiting periods.

The minimum amounts of insurance coverage required under these provisions may not be construed to create a limit of COMPANY's liability with respect to its indemnification obligation under Section 8.1.

COMPANY shall maintain such comprehensive general liability insurance beyond the expiration or termination of this Agreement during (a) the period that any product, process, or service, relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by COMPANY or by a SUBLICENSEE, AFFILIATE or agent of COMPANY and (b) a reasonable period after such time as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by COMPANY or by a SUBLICENSEE, AFFILIATE or agent of COMPANY and (b) a reasonable period after such time as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals), which in no event shall be less than [**] years.

COMPANY shall require any AFFILIATE(S) or SUBLICENSEE(S) to maintain insurance in favor of WHITEHEAD, DFCI, and the Indemnitees under the same terms or on terms at least as favorable to WIBR and DFCI set forth in this Section 8.2.

9. <u>REPRESENTATIONS OR WARRANTIES</u>

9.1 <u>Representations and Warranties</u>. To each of its knowledge, as of the EFFECTIVE DATE, each of WHITEHEAD and DFCI represents and warrants that: (a) it solely and exclusively owns, or owns jointly with the other, the patents and applications included within the PATENT RIGHTS; (b) it has the power and authority to grant the licenses provided for herein to COMPANY, and that it has not earlier granted, or assumed any obligation to grant, any rights in the PATENT RIGHTS to any third party that would conflict with the rights granted to COMPANY herein; (c) this Agreement constitutes the legal, valid and binding obligation of WHITEHEAD and DFCI, enforceable against such WHITEHEAD and DFCI in accordance with its terms; and (d) there is no infringement of the PATENT RIGHTS by any third party.

9.2 Limitation on Representations and Warranties. EXCEPT AS MAY OTHERWISE BE EXPRESSLY SET FORTH IN THIS AGREEMENT, WHITEHEAD AND DFCI MAKE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE PATENT RIGHTS AND COMPOUNDS AND MATERIALS, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, VALIDITY OF PATENT RIGHTS CLAIMS, WHETHER ISSUED OR PENDING, AND THE ABSENCE OF LATENT OR OTHER DEFECTS, WHETHER OR NOT DISCOVERABLE. Specifically, and not to limit the

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foregoing, WHITEHEAD and DFCI make no warranty or representation (i) regarding the validity or scope of the PATENT RIGHTS, and (ii) that the exploitation of the PATENT RIGHTS or any LICENSED PRODUCT or LICENSED PROCESS or LICENSED SERVICE, or methods used in making or using COMPOUNDS or MATERIALS will not infringe any patents or other intellectual property rights of WHITEHEAD or DFCI or of a third party.

The COMPOUNDS and MATERIALS are experimental in nature and will be used with prudence and appropriate caution since not all of their characteristics are known.

EXCEPT FOR COMPANY'S INDEMNITY OBLIGATIONS UNDER SECTION 8.1, IN NO EVENT SHALL ANY PARTY, THEIR TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES FACULTY, STUDENTS, MEDICAL AND PROFESSIONAL STAFF, AGENTS AND AFFILIATES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING ECONOMIC DAMAGES OR INJURY TO PROPERTY AND LOST PROFITS, REGARDLESS OF WHETHER WHITEHEAD OR DFCI SHALL BE ADVISED, SHALL HAVE OTHER REASON TO KNOW, OR IN FACT SHALL KNOW OF THE POSSIBILITY OF THE FOREGOING.

10. ASSIGNMENT

This Agreement is personal to COMPANY and no rights or obligations may be assigned by COMPANY without the prior written consent of WHITEHEAD and DFCI. Any such assignment shall be void. The foregoing notwithstanding, COMPANY may assign its rights and obligations under this Agreement to a successor in connection with the merger, consolidation, or sale of all or substantially all of its assets or that portion of its business to which this Agreement relates (however such transaction is structured); provided, however, that if this Agreement is assigned upon such merger, consolidation, or sale, (a) COMPANY shall pay to WHITEHEAD an Assignment Fee of [**] Dollars (\$[**]], due within [**] days of the closing date of such transaction, and (ii) this Agreement will immediately terminate if the proposed assignee has not agreed in writing to be bound by the terms and conditions of this Agreement within [**] days after the effective date of the assignment.

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11. <u>GENERAL COMPLIANCE WITH LAWS</u>

11.1 <u>Compliance with Laws</u>. COMPANY shall use reasonable commercial efforts to comply with all commercially material local, state, federal, and international laws and regulations relating to the development, manufacture, use, and sale of LICENSED PRODUCTS and LICENSED PROCESSES.

11.2 <u>Export Control</u>. COMPANY and its AFFILIATES and SUBLICENSEES shall comply with all United States laws and regulations controlling the export of certain commodities and technical data, including without limitation all Export Administration Regulations of the United States Department of Commerce. Among other things, these laws and regulations prohibit or require a license

for the export of certain types of commodities and technical data to specified countries. COMPANY hereby gives written assurance that it will comply with, and will cause its AFFILIATES and SUBLICENSEES to comply with, all United States export control laws and regulations, that it bears sole responsibility for any violation of such laws and regulations by itself or its AFFILIATES or SUBLICENSEES, and that it will indemnify, defend, and hold WHITEHEAD harmless (in accordance with Section 8.1) for the consequences of any such violation.

11.3 <u>Non-Use of Name</u>. COMPANY and its AFFILIATES and SUBLICENSEES shall not use the name of "Whitehead Institute", "Dana-Farber Cancer Institute," or any variation, adaptation, or abbreviation thereof, or of any of their trustees, officers, faculty, students, employees, or agents, or any trademark owned by WHITEHEAD, DFCI, or any terms of this Agreement in any promotional material or other public announcement or disclosure without the prior written consent of the relevant party, which consent such party may withhold in its sole discretion. Each of WHITEHEAD DFCI shall not use the name of "Syros Pharmaceuticals, Inc.," or any variation, adaptation, or abbreviation thereof, or of any of their directors, officers, employees, or agents, or any trademark owned by COMPANY, or any terms of this Agreement in any promotional material or other public announcement or disclosure withhold in its sole discretion. Each of we provide the directors, officers, employees, or agents, or any trademark owned by COMPANY, or any terms of this Agreement in any promotional material or other public announcement or disclosure withhold in its sole discretion. The foregoing notwithstanding, without the consent of WHITEHEAD and DFCI, COMPANY may make factual statements during the term of this Agreement that COMPANY has a license from

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WHITEHEAD and DFCI under one or more of the patents and/or patent applications comprising the PATENT RIGHTS and to use the MATERIALS.

11.4 <u>Marking of LICENSED PRODUCTS</u>. To the extent commercially feasible and consistent with prevailing business practices, COMPANY shall mark, and shall cause its AFFILIATES and shall use commercially reasonable efforts to cause its SUBLICENSEES to mark, all LICENSED PRODUCTS that are manufactured or sold under this Agreement with the number of each issued patent under the PATENT RIGHTS that applies to such LICENSED PRODUCT.

12. <u>TERMINATION</u>

12.1 <u>Voluntary Termination by COMPANY</u>. COMPANY will have the right to terminate this Agreement, for any reason, (i) upon at least three (3) months prior written notice to WHITEHEAD and DFCI, such notice to state the date at least three (3) months in the future upon which termination is to be effective, and (ii) upon payment of all undisputed amounts due to WHITEHEAD through such termination effective date.

12.2 <u>Cessation of Business</u>. If COMPANY ceases to carry on its business related to HUMAN THERAPEUTIC CORE, WHITEHEAD and DFCI will have the right to terminate this Agreement immediately upon written notice to COMPANY.

12.3 <u>Termination for Default</u>.

(a) <u>Nonpayment</u>. In the event COMPANY fails to pay any amounts due and payable to WHITEHEAD hereunder, and fails to make such payments within [**] days after receiving written notice of such failure, WHITEHEAD and DFCI may terminate this Agreement immediately upon written notice to COMPANY.

(b) <u>Material Breach</u>. In the event COMPANY commits a material breach of its obligations under this Agreement, except for breach as described in Section 12.3(a), and fails to cure that breach within [**] days after receiving written notice thereof, WHITEHEAD and DFCI may terminate this Agreement immediately upon written notice

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to COMPANY subject to completion of the dispute resolution process set forth in Section 13 and the subsequent opportunity to cure.

12.4 Effect of Termination.

(a) <u>Survival</u>. The following provisions shall survive the expiration or termination of this Agreement: Sections 1, 4.1(d)(ii) (for obligation to pay royalty on IDENTIFIED PRODUCTS), 5.2 (only for obligation to provide final report and payment), 6.3 (for obligation to pay patent expenses incurred before the EFFECTIVE DATE), 8, 9, 10, 12.4, 13, 14, and 15.

(b) <u>Inventory</u>. Upon the early termination of this Agreement, COMPANY and its AFFILIATES and SUBLICENSEES may complete and sell any work-in-progress and inventory of LICENSED PRODUCTS that exist as of the effective date of termination, provided that:

- (i) COMPANY pays WHITEHEAD the applicable running royalty or other amounts due on such sales of LICENSED PRODUCTS in accordance with the terms and conditions of this Agreement; and
- (ii) COMPANY and its AFFILIATES and SUBLICENSEES shall complete and sell all work-in-progress and inventory of LICENSED PRODUCTS within [**] months after the effective date of termination.

(c) <u>Pre-termination Obligations</u>. In no event shall termination of this Agreement release COMPANY, AFFILIATES, or SUBLICENSEES from the obligation to pay any amounts that became due on or before the effective date of termination.

13. <u>DISPUTE RESOLUTION</u>

13.1 <u>Mandatory Procedures</u>. The parties agree that any dispute arising out of or relating to this Agreement shall be resolved solely by means of the procedures set forth in this Section 13, and that such procedures constitute legally binding obligations that are an essential provision of this Agreement. If any party fails to observe the procedures of this Section 13, as

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may be modified by their written agreement, the other parties may bring an action for specific performance of these procedures in any court of competent jurisdiction.

13.2 <u>Equitable Remedies</u>. Although the procedures specified in this Section 13 are the sole and exclusive procedures for the resolution of disputes arising out of or relating to this Agreement, any party may seek a preliminary injunction or other provisional equitable relief if, in its reasonable judgment, such action is necessary to avoid irreparable harm to itself or to preserve its rights under this Agreement.

13.3 <u>Dispute Resolution Procedures</u>.

(a) <u>Mediation</u>. In the event any dispute arising out of or relating to this Agreement remains unresolved within [**] days from the date the affected party informed the other parties of such dispute, any party may initiate mediation upon written notice to the other party ("Notice Date"), whereupon all parties shall be obligated to engage in a mediation proceeding under the then current Center for Public Resources ("CPR") Model Procedure for Mediation of Business Disputes (http://www.cpradr.org), except that specific provisions of this Section 13 shall override inconsistent provisions of the CPR Model Procedure. The mediator will be selected from the CPR Panels of Neutrals. If the parties cannot agree upon the selection of a mediator within [**] business days after the Notice Date, then upon the request of any party, the CPR shall appoint the mediator. The parties shall attempt to resolve the dispute through mediation until the first of the following occurs:

- (i) the parties reach a written settlement;
- (ii) the mediator notifies the parties in writing that they have reached an impasse;
- (iii) the parties agree in writing that they have reached an impasse; or
- (iv) the parties have not reached a settlement within [**] days after the Notice Date.

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(b) <u>Trial Without Jury</u>. If the parties fail to resolve the dispute through mediation, or if no party elects to initiate mediation, each party shall have the right to pursue any other remedies legally available to resolve the dispute.

13.4 <u>Performance to Continue</u>. Each party shall continue to perform its undisputed obligations under this Agreement pending final resolution of any dispute arising out of or relating to this Agreement; provided, however, that a party may suspend performance of its undisputed obligations during any period in which any other party fails or refuses to perform its undisputed obligations. Nothing in this Section 13 is intended to relieve COMPANY from its obligation to make undisputed payments pursuant to Sections 4 and 6.

13.5 <u>Statute of Limitations</u>. The parties agree that all applicable statutes of limitation and time-based defenses (such as estoppel and laches) shall be tolled while the procedures set forth in Section 13.3(a) are pending. The parties shall cooperate in taking any actions necessary to achieve this result.

14. <u>CONFIDENTIALITY</u>

14.1 <u>Non-disclosure and Non-use</u>.

(a) All information disclosed by one party to the other party hereunder shall be maintained in confidence by the receiving party and shall not be disclosed to any third party or used for any purpose except as set forth herein without the prior written consent of the disclosing party, for a period of [**] years from disclosure of such information, except to the extent that such information:

- (i) is known by receiving party at the time of its receipt, and not through a prior disclosure by the disclosing party, as documented by the receiving party's business records;
- (ii) is or becomes part of the public domain through no fault of the receiving party;

- (iv) is developed by the receiving party independently of Information received from the disclosing party, as documented by the receiving party's business records;
- (b) Notwithstanding the foregoing, a party may disclose Information:
- to governmental or other regulatory agencies in order to obtain patents or to gain or maintain approval to conduct clinical trials or to market PRODUCTS or LICENSED PROCESSES, provided however that such disclosure may be only to the extent reasonably necessary to obtain patents or authorizations.
- (ii) deemed necessary by COMPANY to be disclosed to sublicensees, agents, consultants, and/or other third parties for the development and/or commercialization of PRODUCTS, LICENSED PROCESSES, and/or in connection with a licensing/sublicensing transaction and/or a permitted assignment under this Agreement, and/or loan, financing or investment and/or acquisition, merger, consolidation or similar transaction (or for such entities to determine their interest in performing such activities) in each case on the condition that any third party to whom such disclosures are made agree to be bound by a confidentiality agreement.

Information that is disclosed under 14.1(b)(i) or 14.1(b)(ii) shall remain otherwise subject to the confidentiality and non-use provisions hereof.

14.2 <u>Judicial or Administrative Process</u>. If a party is required by judicial or administrative process to disclose Information that is subject to the non-disclosure provisions of this Section 14, such party shall promptly inform the other party of the disclosure that is being sought in order to provide the other party an opportunity to challenge or limit the disclosure obligations.

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Information that is disclosed by judicial or administrative process shall remain otherwise subject to the confidentiality and nonuse provisions hereof, and the disclosing party, pursuant to law or court order, shall take all steps reasonably necessary, including without limitation obtaining an order of confidentiality, to ensure the continued confidential treatment of such Information.

14.3 <u>SEC Filings</u>. Either party may publicly disclose the terms of this Agreement to the extent required, in the reasonable opinion of such party's legal counsel, to comply with applicable laws, including without limitation the rules and regulations promulgated by the United States Securities and Exchange Commission (the "SEC"). Notwithstanding the foregoing, before disclosing this Agreement or any of the terms hereof pursuant to this Section 14.3, the parties will consult with one another on the terms of this Agreement to be redacted in making any such disclosure. If a party discloses this Agreement or any of the terms hereof in accordance with this Section 14.3, such party agrees, at its own expense, to seek confidential treatment of portions of this Agreement or such terms, as may be reasonably requested by the other party.

14.4 <u>Notices</u>. DFCI and/or WHITEHEAD will timely notify COMPANY if it receives any notices from third parties regarding this Agreement or the PATENT RIGHTS.

15. <u>MISCELLANEOUS</u>

15.1 <u>Notice</u>. Any notices required or permitted under this Agreement (Ref: [**]) shall be in writing, shall specifically refer to this Agreement, and shall be sent by hand, recognized national overnight courier, confirmed facsimile transmission, confirmed electronic mail, or registered or certified mail, postage prepaid, return receipt requested, to the following addresses or facsimile numbers of the parties:

If to WHITEHEAD:	 Whitehead Institute for Biomedical Research Nine Cambridge Center Cambridge, MA 02142 Attention: Intellectual Property Office Tel: 617-258-5104 Fax: 617-258-6294 	
If to DFCI:	Vice President, Research and Technology Ventures Dana-Farber Cancer Institute, Inc. 44 Binney Street, BP304E Boston, MA 02115	

Syros Therapeutics, Inc. 480 Arsenal Street, Suite 130 Watertown, MA 02472 ATTN: CEO 617-744-1340 (phone) 617-744-1377 (fax)

All notices under this Agreement shall be deemed effective upon receipt. A party may change its contact information immediately upon written notice to the other parties in the manner provided in this Section 15.1.

15.2 <u>Governing Law</u>. This Agreement and all disputes arising out of or related to this Agreement, or the performance, enforcement, breach or termination hereof, and any remedies relating thereto, shall be construed, governed, interpreted and applied in accordance with the laws of the Commonwealth of Massachusetts, U.S.A., without regard to conflict of laws principles, except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent shall have been granted. The state and federal courts having jurisdiction over Cambridge, MA, USA, provide the exclusive forum for any court action between the parties relating to this Agreement. COMPANY, WHITEHEAD and DFCI each submits to the jurisdiction of such courts and waives any claim that such court lacks jurisdiction over COMPANY or its AFFILIATES or constitutes an inconvenient or improper forum.

15.3 <u>Force Majeure</u>. No party will be responsible for delays resulting from causes beyond the reasonable control of such party, including without limitation fire, explosion, flood, war, strike, or riot, provided that the nonperforming party uses commercially reasonable efforts to avoid or remove such causes of nonperformance and continues performance under this Agreement with reasonable dispatch whenever such causes are removed.

15.4 <u>Amendment and Waiver</u>. This Agreement may be amended, supplemented, or otherwise modified only by means of a written instrument signed by all parties. Any waiver of any rights or failure to act in a specific instance shall relate only to such instance and shall not be construed as an agreement to waive any rights or fail to act in any other instance, whether or not similar.

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15.5 <u>Severability</u>. In the event that any provision of this Agreement shall be held invalid or unenforceable for any reason, such invalidity or unenforceability shall not affect any other provision of this Agreement, and the parties shall negotiate in good faith to modify the Agreement to preserve (to the extent possible) their original intent. If the parties fail to reach a modified agreement within [**] days after the relevant provision is held invalid or unenforceable, then the dispute shall be resolved in accordance with the procedures set forth in Section 13. While the dispute is pending resolution, this Agreement shall be construed as if such provision were deleted by agreement of the parties.

15.6 <u>Binding Effect</u>. This Agreement shall be binding upon and inure to the benefit of the parties and their respective permitted successors and assigns.

15.7 <u>Headings</u>. All headings are for convenience only and shall not affect the meaning of any provision of this Agreement.

15.8 <u>Entire Agreement</u>. This Agreement constitutes the entire agreement between the parties with respect to its subject matter and supersedes all prior agreements or understandings between the parties relating to its subject matter.

Signatures follow on the next page.

49 IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives. For WHITEHEAD For DFCI: By: /s/ Carla DeMaria By: /s/ O. Prem Das Name: Carla DeMaria Name: O. Prem Das, Ph.D Title: Director of IP & Sponsored Programs Title: Chief Research Business Development Officer, Dana-Farber Cancer Institute Date: 4/2/2013 Date: 4-3-2013

By: /s/ Nancy Simonian

For COMPANY

Name: Nancy Simonian

Title: CEO

Date: 4/9/2013

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APPENDIX A

List of Patent Applications and Patents and FIELD

Cases owned by DFCI and WHITEHEAD:

Confidential Materials omitted and filed separately with the Securities and Exchange Commission. A total of two pages were omitted. [**].

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APPENDIX B

List of Countries (excluding United States) for which <u>PATENT RIGHTS Applications Will Be Filed</u>, Prosecuted and Maintained

[**].

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APPENDIX C

Initial Common Stock Distribution to WHITEHEAD and Whitehead Holders

This Appendix C to be completed within [**] days of the EFFECTIVE DATE.

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APPENDIX D

List of COMPOUNDS

[**].

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APPENDIX E

List of MATERIALS

[**]

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APPENDIX F

MATERIAL TRANSFER AGREEMENT

[ATTACHED HERETO]

MATERIAL TRANSFER AGREEMENT Dana-Farber Cancer Institute, Inc., Boston, Massachusetts ("DFCI")

In order to expedite the transfer of research tools to the not-for-profit academic community, this Materials Transfer Agreement ("MTA") may not be changed or amended except by a written instrument executed by a duly authorized officer of DFCI. Any requests for changes should be sent by email to: ortv@dfci.harvard.edu. Unauthorized changes shall render this MTA null and void. All blank fields should be filled in, and may be corrected as needed by Recipient Institution.

Use of this MTA is expressly prohibited for transfer of:

- · material to a for-profit or commercial entity;
- a mouse expressing a recombinant activated oncogene or cells or biologicals derived from such a mouse; or
- material on the list of Select Agents from Appendix A of the 1996 Anti-Terrorist and Death Penalty Act
- human tissues or human specimens (e.g. blood, serum, urine, saliva, bone marrow or tissue sample or any tangible material isolated there from, such as DNA, RNA and other biological substances)

("Recipient Institution"), having an address at on behalf of ("Recipient Investigator") who, with Recipient Institution is hereinafter collectively referred to as 'Recipient'), in consideration of the receipt of biological materials from ("Providing Scientist") of the DFCI hereby agree to the following terms and conditions:

1. The biological materials to be provided to Recipient are: (write a brief description of materials)

(the "Material") Material shall mean the above-referenced biological material plus progeny, unmodified derivatives, any parts of the foregoing included in modifications and any accompanying know-how or data.

2. The Material shall be used exclusively for non-commercial laboratory research by Recipient to study: (write a brief description of planned research), the "Research Project".

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The Material shall be used solely by the Recipient Investigator and those under his or her direct supervision. Material will not be used for in vivo testing in human subjects. Use of Material will be in compliance with all applicable Federal, State and local laws and regulations, including, but not limited to, animal welfare laws and regulations.

- 3. The Material is the property of DFCI. The Recipient shall not reverse engineer the Material or undertake any additional analyses of the Material, including, without limitation, any attempt to determine the composition, formula, structure or properties of the Material, without the advance express written permission of DFCI. The Recipient shall not create modifications or derivatives of the Material.
- 4. Recipient shall not sell or otherwise distribute Material to a third party for any purpose. This MTA and the resulting transfer of Material constitute a non-exclusive license to use the Material solely for the research purposes described herein. Recipient shall not use Material for any products or processes for profit-making or for-profit purposes. No other right or license, to a patent or otherwise, is granted to Recipient.
- 5. Recipient acknowledges that the Material is or may be subject to patents and/or patent applications. Except as provided in this Agreement, no express or implied licenses or other rights are provided to Recipient under any patents, patent applications, or other proprietary rights of Provider.
- 6. This MTA is not assignable.
- 7. DFCI has made, or may make Material available to others, both profit and non-profit.
- 8. Recipient agrees to provide DFCI with a copy of any publications which contain experimental results obtained from the use of the Material. Recipient will acknowledge DFCI as the source of the Material in all publications containing any data or information about the Material unless DFCI indicates otherwise.
- 9. Recipient will arrange the return to DFCI or disposal of all unused Material whenever investigation for which it has been supplied discontinues or is terminated. In the event Recipient Investigator transfers to another institution, DFCI shall be notified and Recipient Investigator shall be informed that a new Material Transfer Agreement or other appropriate agreement must be executed for that institution.
- 10. The Material hereunder provided is experimental in nature, and it is provided WITHOUT ANY WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A

PARTICULAR USE. DFCI MAKES NO REPRESENTATION AND PROVIDES NO WARRANT THAT THE USE OF THE MATERIAL WILL NOT INFRINGE ANY PATENT OR OTHER PROPRIETARY RIGHT.

11. To the extent allowable under applicable laws, Recipient agrees to indemnify, defend and hold harmless DFCI and its trustees, officers, staff, representatives and agents against all damages, expenses (including without limitation reasonable legal expenses), claims, demands, suits or other actions ("Claims") arising from Recipient's acceptance, use and

disposal of the Materials and their progeny or derivatives, except Claims that directly arise from DFCl's negligence or willful misconduct.

- 12. This Agreement will be governed by, and construed in accordance with, the substantive laws of the Commonwealth of Massachusetts, without giving effect to any choice or conflict of law provision. Any dispute will be resolved by the state courts of the Commonwealth of Massachusetts or the federal courts of the District of Massachusetts, without restricting any right of appeal.
- 13. The term of this Agreement shall begin on the Effective Date, as defined below, and shall expire one (I) year after the Effective Date. Upon termination Recipient will immediately cease all use of the Material and will return or destroy all unused Material.

Signatures Required on Next Page 4

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SIGNATURE BY RECIPIENT'S INSTITUTIONAL OFFICER, BY ORIGINAL OR FACSIMILE, ACKNOWLEDGES THAT SUCH OFFICIAL IS AUTHORIZED TO BIND THE RECIPIENT INSTITUTION, HAS READ THIS MTA, UNDERSTANDS IT, AND THAT THE INSTITUTION AND ITS RECIPIENT INVESTIGATOR AGREE TO BE BOUND BY AND ACCEPT ALL THE TERMS AND CONDITIONS HEREIN.

THIS MTA IS EFFECTIVE UPON THE DATE OF THE LAST SIGNATURE BELOW ("EFFECTIVE DATE") BY RECIPIENT'S AUTHORIZED INSTITUTIONAL OFFICER AND RECIPIENT INVESTIGATOR. RECIPIENT HEREBY AGREES THAT DFCI NEED NOT SIGN THIS MTA IN ORDER FOR IT TO TAKE EFFECT.

Authorized for Recipient by Recipient's Authorized Institutional Officer:	Read and understood by Recipient Investigator:	
Name:	Name:	
Title:	Title:	
Signature:	Signature:	
Date:	Date:	
Email:	Email:	
Please return signed MTA to Providing Scientist by	email or fax with a copy to DFCI ORTV, if by email to orty@dfci.harvard.edu, or i	if

Please return signed MTA to Providing Scientist by email or fax with a copy to DFCI ORTV, if by email to ortv@dfci.harvard.edu, or if by fax to: DFCI ORTV

617-632-4012

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Confidential Materials omitted and filed separately with the Securities and Exchange Commission. Double asterisks denote omissions.

WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH

and

SYROS PHARMACEUTICALS, INC.

LICENSE AGREEMENT

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WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH EXCLUSIVE PATENT LICENSE AGREEMENT

This Agreement, effective as of April 4, 2013 (the "EFFECTIVE DATE"), is between the **Whitehead Institute for Biomedical Research** ("WHITEHEAD"), a Delaware corporation, having a principal office at Nine Cambridge Center, Cambridge, MA 02142 and Syros Pharmaceuticals, Inc. ("COMPANY"), a Delaware corporation, having a principal place of business at 480 Arsenal Street, Suite 130, Watertown, MA 02472.

RECITALS

WHEREAS, WHITEHEAD is the owner of certain PATENT RIGHTS (as later defined herein) relating to "[**];

WHEREAS, WHITEHEAD has the right to grant licenses under said PATENT RIGHTS, subject only to a royalty-free, nonexclusive, non-transferable license to practice the PATENT RIGHTS granted to the United States Government for government purposes;

WHEREAS, WHITEHEAD desires to have the PATENT RIGHTS developed and commercialized to benefit the public by granting a license;

COMPANY has represented to WHITEHEAD that it has the financial capacity and the strategic commitment to facilitate the transfer of the technology for the public interest using commercially reasonable efforts; and

COMPANY desires to obtain a license to WHITEHEAD's rights under the PATENT RIGHTS and to use the WHITEHEAD MATERIALS, and WHITEHEAD is willing to grant a license upon the terms and conditions of this Agreement.

NOW, THEREFORE, WHITEHEAD, and COMPANY hereby agree as follows:

1. **DEFINITIONS**

1.1 "<u>AFFILIATE</u>" will mean any legal entity (such as a corporation, partnership, or limited liability company) that directly or indirectly controls, or is

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controlled by, or is under common control with, COMPANY. For the purposes of this definition, the term "control" means (i) beneficial ownership of at least fifty percent (50%) of the voting securities of a corporation or other business organization with voting securities or (ii) a fifty percent (50%) or greater interest in the net assets or profits of a partnership or other business organization without voting securities, or (iii) the power to direct the management and policies of such entities.

1.2 "<u>COMBINATION PRODUCT</u>" will mean any PRODUCT or LICENSED PROCESS sold or used in combination with one or more other products or processes which are not PRODUCTS or LICENSED PROCESSES but which perform a useful function independent of the PRODUCTS or LICENSED PROCESSES. For example, a COMBINATION PRODUCT is a pharmaceutical product that includes two active pharmaceutical ingredients.

1.3 "<u>CORPORATE PARTNER</u>" will mean a non-AFFILIATE third party that has entered into an agreement with COMPANY under which a sublicense under the PATENT RIGHTS is not granted by COMPANY to such third party, and under which COMPANY performs a LICENSED PROCESS for the third party.

1.4 "<u>CORPORATE PARTNERSHIP</u>" will mean an agreement between COMPANY and a CORPORATE PARTNER under which the CORPORATE PARTNER is granted certain rights (e.g., a license or option) to the outcome of COMPANY's performance of the LICENSED PROCESS.

1.5 "<u>CORPORATE PARTNERSHIP INCOME</u>" will mean any payments that COMPANY receives from a CORPORATE PARTNER in consideration for the performance of a LICENSED PROCESS by COMPANY, including without limitation upfront fees, license fees, milestone payments, annual license maintenance fees, distribution or joint marketing fees, and premiums above the fair market value on bona fide equity investments, debt or other types of investments in the COMPANY. Notwithstanding the foregoing, CORPORATE PARTNERSHIP INCOME shall not include: (i) payments received from a CORPORATE PARTNER or any of its affiliates for bona fide security investments, debt or other types of investments in the COMPANY, including the right to

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acquire COMPANY securities in the future, such as warrants, convertible debt and the like (other than premiums above the fair market value of such investments, debt or other types of investments as of the date of receipt of such payments), (ii) amounts received by COMPANY from a CORPORATE PARTNER for royalties or other amounts based on sales of IDENTIFIED PRODUCTS; (iii) reimbursements for out-of-pocket patent prosecution, maintenance, defense and enforcement costs for the PATENT RIGHTS; and (iv) reimbursement of bona fide research, development and commercialization costs actually incurred (including, without limitation, payments for FTEs). CORPORATE PARTNERSHIP INCOME is not LICENSED SERVICES INCOME.

1.6 "<u>FIELD</u>" will mean all fields, including the following SUB-FIELDS: (i) INDUSTRIAL PRODUCTS SUB-FIELD, (ii) VETERINARY SUB-FIELD, (iii) AGRICULTURE SUB-FIELD, (iv) HUMAN HEALTH AND RESEARCH SUB-FIELD, and (v) OTHER SUB-FIELD, as such terms are defined in Section 2.2.

1.7 "<u>IMPROVEMENTS</u>" will mean any new inventions created after the EFFECTIVE DATE and until thirty six months (36) from the EFFECTIVE DATE and no longer: (i) which WHITEHEAD owns or has sufficient rights to license hereunder; that are (ii) from the activities of Dr. Richard Young at WHITEHEAD, and/or others working under his supervision; (iii) not included in the PATENT RIGHTS; and (iv) is dominated by one or more claims of the PATENT RIGHTS and whose practice infringes one or more claims of the PATENT RIGHTS.

1.8 "<u>IDENTIFIED PRODUCT</u>" will mean any product first identified, selected or determined by COMPANY or an AFFILIATE or SUBLICENSEE to have biological activity or utility by the use of LICENSED PRODUCTS or LICENSED PROCESSES that, at the time of such use, are licensed exclusively to the COMPANY, other than any LICENSED PRODUCT.

1.9 "<u>IND</u>" will mean, with respect to a particular PRODUCT, an Investigational New Drug application submitted to the FDA, or a corresponding application filed with any other regulatory agency, seeking approval to begin tests of a new drug in human subjects.

1.10 "<u>LICENSED PROCESS</u>" will mean any process that, absent the license granted hereunder, would infringe one or more claims of the PATENT RIGHTS.

- 1.11 "LICENSED PRODUCT" will mean any product that, in whole or in part:
 - (i) absent the license granted hereunder, would infringe one or more claims of the PATENT RIGHTS; or
 - (ii) is manufactured by using a LICENSED PROCESS or that, when used, practices a LICENSED PROCESS.

1.12 "<u>LICENSED SERVICES</u>" will mean a service generally made available to third parties (other than an AFFILIATE or a SUBLICENSEE) and provided by COMPANY or an AFFILIATE or SUBLICENSEE to such a third party on a "fee-for-service" basis, wherein the provision of such service would constitute, but for the license granted to COMPANY and its AFFILIATES pursuant to this AGREEMENT, an infringement of one or more claims of the PATENT RIGHTS.

1.13 "<u>LICENSED SERVICES INCOME</u>" will mean any payments that COMPANY or AFFILIATES receive from a third party in consideration of the performance of a LICENSED SERVICE by COMPANY or AFFILIATES for the third party, in those countries where the performance of such LICENSED SERVICE infringes one or more VALID CLAIMS, but in the case of cost-plus contracts, LICENSED SERVICES INCOME will be all payments other than costs.

1.14 "<u>NDA</u>" will mean a New Drug Application submitted to the FDA seeking approval to market and sell a PRODUCT in the United States of America, or a corresponding application filed with any other regulatory agency seeking approval to market and sell a PRODUCT in a country in the TERRITORY.

1.15 "<u>NET SALES</u>" will mean the gross amount invoiced by COMPANY and its AFFILIATES for PRODUCTS to a final customer who shall be an end user of the PRODUCT, less the following:

- (i) customary trade, quantity, or cash discounts to the extent actually allowed and taken;
- (ii) amounts repaid or credited by reason of rejection or return;
- (iii) to the extent separately stated on purchase orders, invoices, or other documents of sale, any taxes or other governmental charges levied on the production, sale, transportation, delivery, or use of a PRODUCT which is paid by or on behalf of COMPANY or AFFILIATES;
- (iv) outbound fulfillment and transportation costs prepaid or allowed and costs of insurance in transit, and documented customs duties actually paid;
- (v) amounts written off for bad debts, provided that any such amounts subsequently paid shall be counted as NET SALES;
- (vi) charge back payments and rebates granted to (1) managed healthcare organizations, (2) federal, state and/or provincial and/or local governments or other agencies, (3) purchasers and reimbursers, or (4) trade customers, including wholesalers and chain and pharmacy buying groups, all only to the extent permitted by applicable law and regulations; and
- (vii) PRODUCTS provided at or below cost for (i) indigent care or patient assistance programs and/or humanitarian purposes, (ii) provided for promotional activities without payment, or (iii) provided to be administered in clinical trials.

No deductions will be made for commissions paid to individuals whether they are with independent sales agencies or regularly employed by COMPANY and on its payroll or for costs of collections. NET SALES will occur on the date of invoicing for a PRODUCT.

Non-monetary consideration may be accepted by COMPANY or any AFFILIATE for any PRODUCT subsequent to written notification to WHITEHEAD describing such non-monetary consideration. NET SALES includes the fair market value of any non-cash consideration from sale of PRODUCTS received by COMPANY or AFFILIATES.

COMPANY's or AFFILIATE's transfer of PRODUCT between each other will not result in any NET SALES.

In the event that a PRODUCT or LICENSED PROCESS is sold as a COMBINATION PRODUCT, NET SALES, for the purposes of determining royalty payments on the COMBINATION PRODUCT, will mean the gross amount collected for the COMBINATION PRODUCT less the deductions set forth above, multiplied by a proration factor that is determined as follows:

(1) If all components of the COMBINATION PRODUCT were sold separately during the same or immediately preceding year, the proration factor shall be determined by the formula [A / (A+B)], where A is the average gross sales price of all PRODUCT or LICENSED PROCESS components (as applicable) during such period when sold separately from the other component(s), and B is the average gross sales price of the other component(s) during such period when sold separately from the PRODUCT or LICENSED PROCESS components (as applicable); or

If all components of the COMBINATION PRODUCT were not sold or provided separately during the same or immediately preceding year, the proration factor shall be determined by the Parties in good faith negotiations based on the relative value contributed by each component.

1.16 "<u>OTHER LICENSE AGREEMENTS</u>" will mean the one (1) other license agreement entered into on the EFFECTIVE DATE by the parties hereto and the Dana-Farber Cancer Institute, Inc., and the one (1) license agreement entered into on the

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EFFECTIVE DATE by the COMPANY and the Dana-Farber Cancer Institute, Inc., as such license agreements are amended or restated.

1.17 "<u>PATENT CHALLENGE</u>" will mean a challenge to the validity or enforceability of any of the PATENT RIGHTS, and includes acts that institute, or cause counsel to institute, any interference, opposition, re-examination or similar proceeding with respect to any of the PATENT RIGHTS with the U.S. Patent and Trademark Office or any foreign patent office.

- 1.18 "<u>PATENT RIGHTS</u>" will mean:
 - (i) the United States and international patents listed on Appendix A;
 - the United States and international patent applications and/or provisional applications listed on Appendix A, and any provisional applications that disclose substantially similar subject matter to the provisional applications listed on Appendix A and name Dr. Richard Young at WHITEHEAD as an inventor, and the resulting patents;
 - (iii) any patent applications resulting from the provisional applications listed on Appendix A, and any divisionals, continuations, continuation-in-part applications, and continued prosecution applications (and their relevant international equivalents) of the patent applications listed on Appendix A and of such patent applications that claim priority from or result from the provisional applications listed on Appendix A (including, without limitation, any related provisional patent applications filed during the one-year pendency of such provisional applications listed on Appendix A, provided it names Dr. Richard Young at WHITEHEAD as an inventor), to the extent the claims are directed to subject matter specifically described in the patent applications listed on Appendix A, and the resulting patents;

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- (iv) any patents resulting from reissues, reexaminations, or extensions (and their relevant international equivalents) of the patents described in (i), (ii), and (iii) above; and
- (v) international (non-United States) patent applications and provisional applications filed after the EFFECTIVE DATE and the relevant international equivalents to divisionals, continuations, continuation-in-part applications and continued prosecution applications of the patent applications to the extent the claims are directed to subject matter specifically described in the patents or patent applications referred to in (i), (ii), (iii), and (iv) above, and the resulting patents.

COMPANY may remove, at its sole discretion, any patent or patent application or claim thereof from Appendix A in accord with Section 6.1(ii).

1.19 "<u>PHASE I TRIAL</u>" will mean a clinical study of the first introduction of a PRODUCT into a human subject. In the United States, "PHASE I TRIAL" will mean a human clinical study that satisfies the requirements of 21 C.F.R. § 312.21(a).

1.20 "<u>PHASE II TRIAL</u>" will mean a clinical study of a PRODUCT conducted to obtain preliminary data on its effectiveness for a particular indication(s) in human subjects with the disease or condition and its possible short-term side effects and risks. In the United States, "PHASE II TRIAL" will mean a human clinical study that satisfies the requirements of 21 C.F.R. § 312.21 (b).

1.21 "<u>PHASE III TRIAL</u>" will mean a clinical study of a PRODUCT in human subjects for the purpose of gathering the definitive information about efficacy, dosage, and safety in the proposed therapeutic indication to demonstrate that the PRODUCT is safe and effective in order for the FDA or other appropriate regulatory agency to approve an NDA to market the PRODUCT for the proposed indication. In the United States, "PHASE III TRIAL" will mean a human clinical study that satisfies the requirements of 21 C.F.R. § 312.21 (c).

1.22 "<u>PRODUCT</u>" will mean either a LICENSED PRODUCT or an IDENTIFIED PRODUCT.

1.23 "<u>REPORTING PERIOD</u>" will begin on the first day of each calendar quarter and end on the last day of such calendar quarter.

1.24 "<u>SUB-FIELD</u>" will mean a part of the FIELD. SUB-FIELD comprises (i) INDUSTRIAL PRODUCTS SUB-FIELD, (ii) VETERINARY SUB-FIELD, (iii) AGRICULTURE SUB-FIELD, (iv) HUMAN HEALTH AND RESEARCH SUB-FIELD, and (v) OTHER SUB-FIELD, as such terms are defined in Section 2.2.

1.25 "<u>SUBLICENSE INCOME</u>" will mean any payments that COMPANY receives from a SUBLICENSEE in consideration of the sublicense of rights granted COMPANY under Section 2.1, including without limitation upfront fees, license fees, milestone payments, earned royalties, annual license maintenance fees, distribution or joint marketing fees, and premiums above the fair market value on bona fide equity investments, debt or other types of investments in the COMPANY. Notwithstanding the foregoing, SUBLICENSE INCOME shall not include: (i) payments received from a SUBLICENSEE or any of its affiliates for bona fide security investments, debt or other types of investments in the COMPANY, including the right to acquire COMPANY securities in the future, such as warrants, convertible debt and the like (other than premiums above the fair market value of such investments, debt or other types of investments for out-of-pocket patent prosecution, maintenance, defense and enforcement costs for the PATENT RIGHTS; or (iii) reimbursement of bona fide research, development and commercialization costs actually incurred (including, without limitation, payments for FTEs).

1.26 "SUBLICENSEE" will mean any non-AFFILIATE sublicensee of the rights granted COMPANY under Section 2.1.

1.27 "<u>SUBLICENSE AGREEMENT</u>" will mean a written contractual agreement between COMPANY and a SUBLICENSEE granting a sublicense of the rights granted COMPANY under Section 2.1.

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1.28 "<u>TERM</u>" will mean the term of this Agreement, which shall commence on the EFFECTIVE DATE and shall remain in effect until the expiration or abandonment of the PATENT RIGHTS, unless earlier terminated in accordance with the provisions of this Agreement.

1.29 "TERRITORY" will mean worldwide

1.30 "<u>VALID CLAIM</u>" will mean (i) any claim of an issued and unexpired PATENT RIGHT that (a) has not been held permanently revoked, unenforceable or invalid by a decision of a court or governmental agency of competent jurisdiction, which decision is unappealable or unappealed within the time allowed for appeal and (b) has not been abandoned, disclaimed, denied or admitted to be invalid or unenforceable through reissue or disclaimer or otherwise, or (ii) a claim of a pending PATENT RIGHT application that has not been pending for more than [**] years from the date of first action on the merits, which claim has not been abandoned or finally disallowed without the possibility of appeal or re-filing of the application.

1.31 "<u>WHITEHEAD MATERIAL</u>" will mean those tangible materials set forth on Appendix D as of the EFFECTIVE DATE, and documentation relating thereto.

2. GRANT OF RIGHTS

2.1 License Grants. Subject to the terms of this Agreement, WHITEHEAD hereby grants to COMPANY and its AFFILIATES for the TERM a royalty-bearing license under the PATENT RIGHTS to make, have made, use, sell, offer to sell, and import PRODUCTS in the FIELD in the TERRITORY and to perform and have performed LICENSED PROCESSES in the FIELD in the TERRITORY. Further, WHITEHEAD hereby grants to COMPANY and its AFFILIATES for the TERM a nonexclusive license under the WHITEHEAD MATERIALS for the practice of the PATENT RIGHTS in the FIELD in the TERRITORY, provided that such nonexclusive grant shall not limit the exclusive license set forth above.

2.2 <u>Exclusivity</u>. Subject to the terms of this Agreement, WHITEHEAD agrees that for a period ending on the third anniversary of the EFFECTIVE DATE it shall not

grant any other license or other rights under the PATENT RIGHTS to make, have made, use, sell, offer for sale or import LICENSED PRODUCTS in the FIELD in the TERRITORY or to perform or have performed LICENSED PROCESSES in the FIELD in the TERRITORY, nor shall WHITEHEAD practice the PATENT RIGHTS, except as expressly permitted in Section 2.5, in each case during the periods specified below for certain SUB-FIELDS and portions of the FIELD, so that the license in Section 2.1 shall be exclusive for those SUB-FIELDS and portions for the specified periods:

After the third anniversary of the EFFECTIVE DATE, the foregoing license shall become non-exclusive except in these following five SUB-FIELDS (defined below), subject to the following:

(1) After three (3) years from the EFFECTIVE DATE, the INDUSTRIAL PRODUCTS SUB-FIELD shall become non-exclusive to the extent COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is not pursuing with commercially reasonable efforts, such efforts to be met at least by demonstration by COMPANY that (i) COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) can reasonably demonstrate on-going R&D activity in such INDUSTRIAL PRODUCTS SUB-FIELD of at least \$[**] ("MM") per year, (ii) COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) has a commercially-reasonable business plan to reasonably pursue such INDUSTRIAL PRODUCTS SUB-FIELD as part of a separate entity, or (iii) COMPANY has granted a sublicense or established a CORPORATE PARTNERSHIP in the INDUSTRIAL PRODUCTS SUB-FIELD.

(2) After five (5) years from the EFFECTIVE DATE, the license in VETERINARY SUB-FIELD shall become non-exclusive to the extent COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is not pursuing with commercially reasonable efforts, such efforts to be met at least by demonstration by COMPANY that (i) COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) can reasonably demonstrate on-going R&D activity in such VETERINARY SUB-FIELD of at least \$[**] per year, (ii) COMPANY (or any of its

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AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) has a commercially-reasonable business plan to reasonably pursue such VETERINARY SUB-FIELD as part of a separate entity, or (iii) COMPANY has granted a sublicense or established a CORPORATE PARTNERSHIP in such VETERINARY SUB-FIELD.

(3) After five (5) years from the EFFECTIVE DATE, the license in AGRICULTURE SUB-FIELD shall become non-exclusive to the extent COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is not pursuing with commercially reasonable efforts, such efforts to be met at least by demonstration by COMPANY that (i) COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) can reasonably demonstrate on-going R&D activity in such AGRICULTURE SUB-FIELD of at least \$[**] per year, (ii) COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) has a commercially-reasonable business plan to reasonably pursue such AGRICULTURE SUB-FIELD as part of a separate entity, or (iii) COMPANY has granted a sublicense or established a CORPORATE PARTNERSHIP in such AGRICULTURE SUB-FIELD.

(4) After six (6) years from the EFFECTIVE DATE, the license in HUMAN HEALTH AND RESEARCH SUB-FIELD shall become non-exclusive, but COMPANY shall retain for the TERM exclusive rights in any therapeutic portion within such HUMAN HEALTH AND RESEARCH SUB-FIELD (by way of non-limiting example, oncology and autoimmunity) as described in reasonable detail in writing to WHITEHEAD, for which COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is pursuing with commercially reasonable efforts, such efforts to be met at least by demonstration by COMPANY that (i) COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS, CORPORATE PARTNERS or SUBLICENSEES) can reasonably demonstrate on-going R&D activity in such field of at least \$[**], (ii) COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) has a commercially-reasonable business plan to reasonably pursue such portion(s) of the HUMAN HEALTH AND RESEARCH SUB-FIELD as part of a separate entity, or (iii) COMPANY has granted a sublicense or established a CORPORATE PARTNERSHIP in such HUMAN HEALTH AND RESEARCH SUB-FIELD.

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(5) After three (3) years from the EFFECTIVE DATE, the OTHER SUB-FIELD shall become non-exclusive to the extent COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is not pursuing with commercially reasonable efforts, such efforts to be met at least by demonstration by COMPANY that (i) COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) can reasonably demonstrate on-going R&D activity in such OTHER SUB-FIELD of at least \$[**] per year, (ii) COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) has a commercially-reasonable business plan to reasonably pursue such OTHER SUB-FIELD as part of a separate entity, or (iii) COMPANY has granted a sublicense or established a CORPORATE PARTNERSHIP in such OTHER SUB-FIELD.

Consistent with Section 3, the exclusivity for the above SUB-FIELDS will be maintained if the diligence obligations are satisfied as provided in Section 3 with respect to such SUB-FIELD or portion(s) thereof.

"HUMAN HEALTH AND RESEARCH SUB-FIELD" will mean (i) human health, including without limitation, human therapeutics, diagnostics, prophylactics and supplements, and research, testing, development, commercialization and manufacture thereof, and (ii) all

human research.

"VETERINARY SUB-FIELD" will mean non-human animal health, including without limitation, non-human companion animal and agricultural animal therapeutics, diagnostics, prophylactics and supplements, and research, testing, development, commercialization and manufacture thereof, other than AGRICULTURE SUB-FIELD.

"AGRICULTURE SUB-FIELD" will mean non-animal agriculture applications, including (i) plants and plant cultivation (including without limitation crop plants), and research, testing, development, commercialization and manufacture thereof, (ii) production of food for human or other consumption, (iii) plant/crop biotechnology (including without limitation genetic engineering), including without limitation any of its application to the foregoing.

"INDUSTRIAL PRODUCTS SUB-FIELD" will mean products and services for other than general consumption by consumers, and research, testing, development, commercialization and manufacture thereof, other than HUMAN HEALTH AND RESEARCH SUB-FIELD, VETERINARY SUB-FIELD and AGRICULTURE SUB-FIELD.

"OTHER SUB-FIELD" will mean all fields other than HUMAN HEALTH AND RESEARCH SUB-FIELD, VETERINARY SUB-FIELD, AGRICULTURE SUB-FIELD, and INDUSTRIAL PRODUCTS SUB-FIELD. The parties agree that the OTHER SUB-FIELD may include more than one distinct sub-fields.

2.3 <u>Sublicenses</u>. COMPANY will have the right to grant sublicenses of the license and other rights under Section 2.1 and this Agreement and through multiple tiers, provided however that any such grant of a sublicense in a field to which COMPANY has a nonexclusive license must be accompanied by a grant of either (1) a sublicense in a field to which COMPANY has an exclusive license on the effective date of such SUBLICENSE AGREEMENT, (2) a grant of material COMPANY intellectual property rights including license rights under the OTHER AGREEMENTS or (3) a combination of (1) and (2), and further provided however that such multiple tier sublicenses shall be consistent with the provisions herein with respect to SUBLICENSES and limited to sublicenses where COMPANY has granted material COMPANY intellectual property rights and a SUBLICENSE under this AGREEMENT. For the purpose of clarity, SUBLICENSEES do not have the right to grant further sublicenses except as provided under this Section 2.3. COMPANY shall incorporate terms and conditions into its sublicense agreements sufficient to enable COMPANY to comply with this Agreement. Upon termination of this Agreement for any reason, any SUBLICENSEE not then in default shall have the right to take a direct license from WHITEHEAD under rights and terms substantially identical to the sublicense rights and terms which COMPANY previously granted to such SUBLICENSEE, and SUBLICENSEE will pay WHITEHEAD as if it were COMPANY under the terms of this Agreement. WHITEHEAD agrees to execute such direct license and any non-identical terms will be negotiated between SUBLICENSEE and WHITEHEAD in good faith under reasonable terms and conditions.

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2.3.1 Form and Content of Sublicenses. COMPANY shall issue any sublicense(s) granted by it under this Agreement in writing and COMPANY shall include the equivalent of at least the following provisions with COMPANY in all sublicenses.SUBLICENSEES shall report [**] to COMPANY on its operations under the sublicense.

- a) SUBLICENSEES shall make payments due to COMPANY in relation to NET SALES of PRODUCTS in a timely manner, so that COMPANY may comply with its obligations to make payments to WHITEHEAD as set forth in Section 4.
- b) The terms and conditions of Section 2.4 (U.S. Manufacturing), Section 2.5 (Retained Rights), Section 5.3 (Record keeping), Section 11.2 (Export Control), Section 11.3 (Non-Use of Name), and Section 11.4 (Marking of PRODUCTS) are binding on the sublicensee through the applicable SUBLICENSE AGREEMENT.
- c) A section substantially the same as Section 8 (Indemnification and Insurance) shall be included which also will state that the Indemnitees (as defined in Section 8) are intended third party beneficiaries of such SUBLICENSE AGREEMENT solely for the purpose of enforcing such indemnification and insurance provisions.

2.3.2 Copies of Sublicenses. COMPANY shall forward to WHITEHEAD copies of any and all fully executed sublicenses promptly after execution, which copies may be reasonably redacted except for matters relevant to COMPANY's obligations and/or WHITEHEAD's rights under this Agreement, provided that sufficient information remains unredacted to allow WHITEHEAD to reasonably assess whether COMPANY is in compliance with its obligations under this Agreement and to verify amounts payable hereunder in connection with such sublicense agreement. WHITEHEAD shall keep any

Agreement and shall use them solely for the purpose of monitoring COMPANY's and SUBLICENSEES' compliance with their obligations hereunder and enforcing WHITEHEAD's rights under this Agreement. Such copy shall be postmarked within thirty days of the execution of the sublicense.

2.4 <u>U.S. Manufacturing</u>. COMPANY agrees that any LICENSED PRODUCTS used or sold in the United States will be manufactured substantially in the United States as required by 35 U.S.C. 204 and 37 C.F.R. 401 et. seq., as amended.

2.5 <u>Retained Rights</u>.

(a) <u>WHITEHEAD</u>. WHITEHEAD retains the right on behalf of itself, to practice the PATENT RIGHTS for internal research, teaching and other educational purposes only, such internal research not to include any commercial third-party sponsored research or any industry sponsored clinical trials, and not for the purpose of commercial development, production, manufacture, distribution or sale of products or provision of services for a fee. In fields that are nonexclusively licensed by COMPANY, WHITEHEAD retains the right on behalf of itself to practice the PATENT RIGHTS for any purpose.

(b) <u>Academic and Not-For-Profit Research Institutes</u>. WHITEHEAD retains the right to grant non-exclusive licenses to other nonprofit or academic institutions to practice the PATENT RIGHTS in performing internal research or for education purposes (but in no case when sponsored or otherwise funded in any way by any for-profit entity); provided, however, that in no event shall any license permit the practice or use of any PATENT RIGHTS for commercial activities (meaning commercial development, production, manufacture, distribution or sale of products or provision of services for a fee).

(c) <u>Federal Government</u>. COMPANY acknowledges that the U.S. federal government retains a royalty-free, non-exclusive, non-transferable license to practice any government-funded invention claimed in any PATENT

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RIGHTS as set forth in 35 U.S.C. §§ 201-211, and the regulations promulgated thereunder, as amended, or any successor statutes or regulations.

2.6 <u>IMPROVEMENTS</u>. Provided that COMPANY is not then in default or breach of this Agreement, and subject to WHITEHEAD's obligations under conflict of interest regulations or guidelines from the federal government or policies of WHITEHEAD or subject to WHITEHEAD's obligations under third party corporate sponsorship or any obligations existing as of the EFFECTIVE DATE associated with third party materials, which determination shall be made in WHITEHEAD's reasonable discretion, WHITEHEAD hereby grant to COMPANY an exclusive option to negotiate a commercial license to all IMPROVEMENTS ("OPTION"). The OPTION must be exercised within [**] days from the date of disclosure of any such IMPROVEMENT to COMPANY and the resulting license shall be incorporated into this Agreement as an amendment to the PATENT RIGHTS definition. COMPANY shall agree with WHITEHEAD on the field(s) for such IMPROVEMENT and terms which are reasonable and appropriate in licenses between industry and academic institutions to be negotiated in good faith within [**] days of exercising the OPTION, which will be added to the COMPANY's diligence obligations under Section 3 with respect to such IMPROVEMENTS, and COMPANY, and WHITEHEAD shall timely amend APPENDIX A to include all relevant information for such IMPROVEMENT. Should no license result from this process, WHITEHEAD shall be free to license IMPROVEMENTS to any third party but WHITEHEAD, for a period of [**] months from the date of disclosure to COMPANY shall not offer the IMPROVEMENT to a third party on lesser terms than offered to COMPANY.

2.7 <u>No Additional Rights</u>. Nothing in this Agreement shall be construed to confer any rights upon COMPANY by implication, estoppel, or otherwise as to any technology or patent rights of WHITEHEAD or any other entity other than the PATENT RIGHTS (save for patent rights on IMPROVEMENTS as provided in Section 2.7 above and in Section 2.8 below), regardless of whether such technology or patent rights shall be dominant or subordinate to any PATENT RIGHTS.

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2.8 <u>Software Terms and Conditions</u>. The parties hereby agree to the terms and condition set forth on Exhibit 2.8 for the grant of non-exclusive rights to the Software.

3. COMPANY DILIGENCE OBLIGATIONS

3.1 COMPANY shall use commercially reasonable efforts, or shall cause one or more of its AFFILIATES, SUBLICENSEES and CORPORATE PARTNERS to use commercially reasonable efforts, to develop one or more PRODUCTS or LICENSED PROCESSES and to introduce PRODUCTS or LICENSED PROCESSES into the commercial market; thereafter, COMPANY or its AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS shall make one or more PRODUCTS or LICENSED PROCESSES reasonably available to the public. Specifically, COMPANY or any of its AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS shall fulfill the following obligations:

1.) Within [**] months after the EFFECTIVE DATE, COMPANY shall furnish WHITEHEAD with a written list of scientific issues concerning the super-enhancers and other related technologies based on its analysis and input from scientific and industry experts.

2.) Within [**] months after the EFFECTIVE DATE, COMPANY will provide to WHITEHEAD a written summary of any work done to address scientific issues up to this point and a plan and timeline that will include activities (including research, development and/or business, as appropriate) to address critical issues identified above over a minimum period of [**] months and an aggregate, cumulative

utilization of at least [**] full-time equivalent personnel ("FTEs" by or on behalf of COMPANY, AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS) (including FTEs utilized up to this point). It is agreed by the parties that 1) it may be impractical to attribute specific line-items to specific technologies, given the integrated and complementary nature of the technologies with each other and with programs focused on specific targets, but that the intent will be that one result of the activities will be to clarify critical scientific issues related to the technologies under this Agreement; and 2) the longer term (later than [**]

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months from the EFFECTIVE DATE) aspects of the plan may depend on results obtained in the shorter term and therefore lack detail pending those results.

3.) Within [**] days after the anniversary from the EFFECTIVE DATE, until the [**] anniversary of the EFFECTIVE DATE, COMPANY shall furnish WHITEHEAD with a written report on the progress of activities the immediately preceding calendar year to develop and commercialize super-enhancer technology by the COMPANY and its AFFILIATES, SUBLICENSEES and CORPORATE PARTNERS as it pertains to HUMAN HEALTH AND RESEARCH SUB-FIELD, VETERINARY SUB-FIELD, AGRICULTURE SUB-FIELD, INDUSTRIAL PRODUCTS SUB-FIELD, and OTHER SUB-FIELD. The report shall also contain a plan of intended efforts and a budget for the year in which the report is submitted. In no event will the budget for research, development, use, and commercialization develop super-enhancer technology be less than [**] dollars (\$[**]) annually (including but not limited to direct costs).

4.) After the [**] anniversary of the EFFECTIVE DATE, conversion of exclusive license in INDUSTRIAL PRODUCTS SUB-FIELD that COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is not pursuing to a non-exclusive license; term of exclusive license in INDUSTRIAL PRODUCTS SUB-FIELD that COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is pursuing convert to perpetuity, subject to customary due diligence provisions. The exclusive license in INDUSTRIAL PRODUCTS SUB-FIELD will be limited to products or processes in research, development, use, or commercialization (as reported to WHITEHEAD in prior annual reports) or for which there is a commercially reasonable plan for research, development, use, or commercialization at COMPANY, AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES at the time of conversion, and improvements thereto.

5.) After the [**] anniversary of the EFFECTIVE DATE, conversion of exclusive license in VETERINARY SUB-FIELD that COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is not pursuing to a non-exclusive license; term of exclusive license in VETERINARY SUB-FIELD that COMPANY (or any

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of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is pursuing converts to perpetuity, subject to Section 3.2. The exclusive license in the VETERINARY SUB-FIELD will be limited to products or processes in research, development, use, or commercialization (as reported to WHITEHEAD in prior annual reports) or for which there is a commercially reasonable plan for research, development, use, or commercialization at COMPANY, AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES at the time of conversion, and improvements thereto.

6.) After the [**] anniversary of the EFFECTIVE DATE, conversion of exclusive license in AGRICULTURE SUB-FIELD that COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is not pursuing to a non-exclusive license; term of exclusive license in AGRICULTURE SUB-FIELD that COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is pursuing converts to perpetuity, subject to Section 3.2. The exclusive license in AGRICULTURE SUB-FIELD will be limited to products or processes in research, development, use, or commercialization (as reported to WHITEHEAD in prior annual reports) or for which there is a commercially reasonable plan for research, development, use, or commercialization at COMPANY, AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES at the time of conversion, and improvements thereto.

7.) After the [**] anniversary of the EFFECTIVE DATE, conversion of exclusive license in HUMAN HEALTH AND RESEARCH SUB-FIELD that COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is not pursuing to a non-exclusive license except that COMPANY (and its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) retains exclusive rights to (i) the applicable portion of the HUMAN HEALTH AND RESEARCH SUB-FIELD or (ii) diagnostics that COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is pursuing or for which there is a commercially reasonable plan (and improvements thereto); term of exclusive license in HUMAN HEALTH AND RESEARCH SUB-FIELD that COMPANY (or any of its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES) is pursuing converts to perpetuity, subject to Section 3.2.

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3.2 <u>Diligence Requirements for the FIELD and SUB-FIELDS.</u>

(a) If, during the TERM, COMPANY or any one or more AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS, alone or together, has performed any one of the following with respect to a PRODUCT in a FIELD or SUB-FIELD, then COMPANY shall be deemed to have complied with COMPANY's obligations under this Section 3.2 in order to maintain exclusivity of the PATENT RIGHTS in a FIELD or SUB-FIELD:

(i) is actively researching or developing one or more PRODUCTS that is/are marketed and sold generating total sales of at

least [**] dollars (\$[**]) per year;

- (ii) total payments made to WHITEHEAD under this AGREEMENT are equal to or exceed [**] dollars (\$[**]) annually,
- (iii) execution of at least [**] bona fide SUBLICENSES or CORPORATE PARTNERSHIPS, or

(iv) COMPANY (and its AFFILIATES, SUBLICENSEES and CORPORATE PARTNERS) aggregate expenditure on research, development, use, or commercialization reasonably attributable to the PATENT RIGHTS (such expenditure to include but not be limited to direct costs):

- (1) \$[**] annually up to an aggregate of [**] dollars (\$[**]) in the FIELD and up to an aggregate of [**] dollars (\$[**]) in a SUB-FIELD;
- (2) [**] annually up to an aggregate of [**] dollars ([**]) in a SUB-FIELD; then
- (3) [**] per year thereafter.

(b) WHITEHEAD shall notify COMPANY in writing if in WHITEHEAD'S reasonable judgment none of these criteria in Section 3.2(a) are met. COMPANY shall respond in writing within [**] days that: (1) COMPANY shall meet one of the criteria within [**] days of the writing; (2) demonstrate that COMPANY has met at least one of the

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criteria; (3) explain, to WHITEHEAD'S reasonable satisfaction, which such criteria have been met; or (4) pay to WHITEHEAD a diligence extension fee of [**] dollars ([**]) to extend the diligence period for up to [**].

Beginning [**] years from the EFFECTIVE DATE, if WHITEHEAD or COMPANY receives a bona fide request from a third (c)party for a sublicense to the PATENT RIGHTS outside of the HUMAN HEALTH AND RESEARCH SUB-FIELD to make, have made, use, sell, offer to sell, and import a LICENSED PRODUCT or LICENSED PROCESS, which proposed product or process ("Proposed Product") is not directly competitive with any LICENSED PRODUCT or LICENSED PROCESS then offered for sale or in bona fide research or development as evidenced by the performance of any of the diligence obligations set forth in Sections 3.1 or 3.2 by or on behalf of COMPANY or any of its AFFILIATES, SUBLICENSEES or CORPORATE PARTNERS, then COMPANY shall enter into good-faith negotiations toward granting at least a non-exclusive sublicense, limited to the proposed field only, to such third party for such third party's Proposed Product. As an alternative to negotiating a sublicense to a third party, COMPANY (or one of its AFFILIATES or actual or potential SUBLICENSEES or CORPORATE PARTNERS) may submit to WHITEHEAD, within [**] months after such third party's request for a sublicense, a plan for prompt and diligent development of the Proposed Product, including a commitment to commercially reasonable development milestones. If WHITEHEAD approves this plan, such approval not to be unreasonably withheld, no third-party sublicense shall be required for each such Proposed Product pursuant to this Section 2.4(a), and Section 2.4(b) below shall not apply. If WHITEHEAD does not approve this plan, the parties shall meet within [**] days of COMPANY'S submission to resolve in good faith any differences in the plan. For purposes of this paragraph, "directly competitive" includes, for example and without limitation, that (i) the Proposed Product is or could be for the same or similar indication or otherwise is in the same therapeutic space as any such LICENSED PRODUCT or LICENSED PROCESS, (ii) the Proposed Product could reduce the sales of any such LICENSED PRODUCT or LICENSED PROCESS, (iii) the Proposed Product is a derivative, homolog, analog or other chemically-related species/compound to such LICENSED PRODUCT or LICENSED PROCESS, or (iv) the development or commercialization of the Proposed

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Product could harm the development or commercialization of any such LICENSED PRODUCT or LICENSED PROCESS (where, for example, an adverse regulatory event for the Proposed Produce could include any such LICENSED PRODUCT or LICENSED PROCESS).

(d) If COMPANY has not granted a sublicense to the third party under Section 3.2(c) above, within [**] months after receiving the request in writing, and if WHITEHEAD has not granted COMPANY a waiver of this requirement as provided for in Section 3.2(c) above, then WHITEHEAD shall have the right to require that COMPANY grant a non-exclusive sublicense to the third party, limited to the proposed field only, for such third party's Proposed Product. The [**]-month period during which COMPANY may grant a sublicense, prior to WHITEHEAD requiring such sublicense grant, shall be extended an additional [**] months if, at the end of the initial [**]-month period, both COMPANY and the prospective third-party sublicense assert to WHITEHEAD that they are engaged in good-faith negotiations toward the completion of a sublicense agreement.

(d) In the event that COMPANY or its AFFILIATES, CORPORATE PARTNERS or SUBLICENSEES, alone or together, has not performed at least one of Sections 3.2(i) through (iv) during such full calendar year with respect to at least one PRODUCT or the PATENT RIGHTS, then WHITEHEAD may treat such failure as a material breach in accordance with Section 12.3(b), subject to Section 3.2(b).

4. ROYALTIES AND PAYMENT TERMS

(a) <u>License Issue Fee, Patent Cost Reimbursement and Milestone Payments</u>. COMPANY shall pay to WHITEHEAD on the EFFECTIVE DATE a license issue fee of thirty thousand Dollars (\$30,000), and, such amounts required as reimbursement in accordance with Section 6.3, relating to actual expenses incurred as of the EFFECTIVE DATE in connection with obtaining the PATENT RIGHTS.

COMPANY shall pay to WHITEHEAD one or more additional MILESTONE PAYMENTS as follows: (X) MILESTONE PAYMENT of one hundred thousand

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Dollars (\$100,000) within [**] days of first issuance of a patent under the PATENT RIGHTS in the United States with claims directed to (i) a PRODUCT or LICENSED SERVICE in commercial development (i.e., undergoing clinical testing, field testing or pilot scale testing, etc.) or being sold by COMPANY, an AFFILIATE or a SUBLICENSEE or (ii) [**], and (Y) MILESTONE PAYMENT of one hundred thousand Dollars (\$100,000) within [**] days of receipt by COMPANY of at least one million Dollars (\$1,000,000) from a CORPORATE PARTNER or SUBLICENSEE. MILESTONE PAYMENTS shall only be payable if any of the license rights granted under Section 2.1 are exclusive on the date of such milestone in this Section 4.1(a).

The License Issue Fee and MILESTONE PAYMENTS in this Section 4.1(a) are not refundable and not creditable.

(b) <u>License Maintenance Fees</u>. COMPANY shall pay to WHITEHEAD the following license maintenance fees on January 1 of each year set forth below:

Year(s)	License Maintenance Fee	
[**]	[**]	
[**]	[**]	
[**]	[**]	
[**] and every year thereafter	[**]	

This license maintenance fee is nonrefundable; however, the license maintenance fee may be credited to all payments due under this Agreement during the same calendar year, if any, except the MILESTONE PAYMENT for patent issuance as provided in Section 4.1(a)(X) and patent cost reimbursements as provided in Section 6.3.

License maintenance fees paid in excess of such payments due in such calendar year shall not be creditable to amounts due for future years.

(c)

Running Royalties on PRODUCTS. COMPANY shall pay to WHITEHEAD:

 a running royalty of [**] percent ([**]%) of NET SALES of IDENTIFIED PRODUCTS by COMPANY and/or AFFILIATES (but not SUBLICENSEES) shall be due for a period of seven
 (7) years from the date of first commercial sale of the first IDENTIFIED PRODUCT anywhere in the world; and

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- (ii) a running royalty of [**] percent ([**]%) of NET SALES by COMPANY and/or AFFILIATES (but not SUBLICENSEES) of LICENSED PRODUCTS when such LICENSED PRODUCTS are used for diagnostic/prognostic purposes, in those countries where such sale infringes one or more VALID CLAIMS.
- (iii) a running royalty of [**] percent ([**]%) of NET SALES by COMPANY and/or AFFILIATES (but not SUBLICENSEES) of LICENSED PRODUCTS when such LICENSED PRODUCTS are used for therapeutic purposes.
- (iv) For LICENSED PRODUCTS sold by COMPANY and/or AFFILIATES (but not SUBLICENSEES) in the INDUSTRIAL PRODUCTS SUB-FIELD, or VETERINARY SUB-FIELD, or AGRICULTURE SUB-FIELD, or OTHER SUB-FIELD, COMPANY shall notify WHITEHEAD, and the parties shall discuss in good faith a running royalty of NET SALES based on customary industry standards that shall be fair and reasonable. COMPANY and WHITEHEAD will enter into a written amendment to this Agreement with respect to running royalties of NET SALES for such LICENSED PRODUCTS.
- (v) a running royalty of [**] percent ([**]%) of LICENSED SERVICES INCOME to COMPANY and/or AFFILIATES.

Running royalties shall be payable for each REPORTING PERIOD and shall be due to WHITEHEAD within [**] days of the end of each REPORTING PERIOD.

contained herein shall become fully paid-up, royalty-free, perpetual and irrevocable for such PRODUCT.

The parties expressly agree that such a payment period for IDENTIFIED PRODUCTS is not an extension of the PATENT RIGHTS beyond their term, but rather is a period determined for the convenience of the parties in recognition of the value of the PATENT RIGHTS in discovering IDENTIFIED PRODUCTS and as appropriate compensation for the rights granted herein.

(d) <u>Sharing of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME.</u> COMPANY shall pay WHITEHEAD the following percentage of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME:

(i) Percentage Tier 1. [**]% of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME payable during the period of Percentage Tier 1 from sublicense and corporate partnership agreements entered into from the EFFECTIVE DATE until the first anniversary of the EFFECTIVE DATE ("YEAR ONE", and each subsequent 12-month period thereafter, "YEAR TWO", "YEAR THREE", etc.) (the "FIRST STEPDOWN");

(ii) Percentage Tier 2. From the FIRST STEPDOWN, [**]% of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME payable during the period of Percentage Tier 2 from sublicense and corporate partnership agreements entered into until the earlier of (1) the end of YEAR [**] or (2) [**] (the earlier of (1) and (2), the "SECOND STEPDOWN");

(iii) Percentage Tier 3. From the SECOND STEPDOWN, [**]% of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME payable during the period of Percentage Tier 3 from sublicense and corporate partnership agreements entered into until the earlier of (1) the end of YEAR [**] or (2) [**] (the earlier of (1) and (2), the "THIRD STEPDOWN");

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(iv) Percentage Tier 4. From the THIRD STEPDOWN, [**]% of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME from sublicense and corporate partnership agreements payable during the period of Percentage Tier 4, but

(v) Upon each instance when the aggregate payment to WHITEHEAD under this Section 4.1(e) equals [**] dollars ([**]), the Percentage Tier will automatically step down to the next Percentage Tier, until Percentage Tier 4 is reached (after a total aggregate payment to WHITEHEAD of [**] Dollars ([**]). By this, for example and without limitation, [**].

For clarity, any of the foregoing three stepdowns specified above may apply to a single payment from a SUBLICENSEE or CORPORATE PARTNER if such payment triggers the payment thresholds specified above (so that such payment will be subject to different sharing percentages).

Such amounts shall be payable for each REPORTING PERIOD and shall be due to WHITEHEAD within [**] days of the end of each REPORTING PERIOD. No payments shall be due from SUBLICENSING INCOME or CORPORATE PARTNERSHIP INCOME to the extent in consideration of any known or future IDENTIFIED PRODUCTS.

Further, any amount paid by COMPANY as a milestone payment under Section 4.1(c) for achieving a milestone shall be fully creditable against any payment due under Section 4.1(e) for sharing SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME achieving the same milestone.

To the extent that patent rights, other intellectual property rights or other rights or obligations (i) other than PATENT RIGHTS for LICENSED PRODUCTS, are sublicensed hereunder by COMPANY or (ii) other than the LICENSED PROCESS, are the subject of a CORPORATE PARTNERSHIP, that portion of the consideration received by COMPANY and subject to this Section 4.1(e) shall be equitably apportioned between those PATENT RIGHTS or that LICENSED PROCESS, as applicable, and those other rights and obligations, and such apportionment shall be reasonable and in accordance with customary standards in the industry. Deductions taken under SUBLICENSE INCOME

(e.g., bona fide research, development and commercialization costs) also will be apportioned. For clarity, (A) those other rights and obligations include, without limitation, PATENT RIGHTS for any IDENTIFIED PRODUCTS sublicensed or performed by COMPANY hereunder, and other patent rights sublicensed or performed under any OTHER LICENSE AGREEMENTS, and (B) there shall not be sharing of any specific SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME among this Agreement and the OTHER LICENSE AGREEMENTS more than once, since this AGREEMENT and the OTHER LICENSE AGREEMENTS apply to different patent rights.

COMPANY shall promptly deliver to WHITEHEAD a written report setting forth such apportionment. In the event WHITEHEAD disagrees with the determination made by COMPANY, WHITEHEAD shall so notify COMPANY within [**] days of receipt of COMPANY's report and the parties shall meet to discuss and resolve such disagreement in good faith. If the parties are unable to agree in good faith as to such fair market values within [**] days, then the matter shall be submitted in accordance with the dispute resolution process set forth in Section 13.1, and if COMPANY owes additional monies to WHITEHEAD after the conclusion of such process COMPANY shall have [**] days after the completion of such process to make such payment to WHITEHEAD.

(e) <u>Equity.</u>

Initial Grant. COMPANY shall issue a total of 217,617 shares of Common Stock of COMPANY, \$0.001 par value per share, (the "Shares") in the name of WHITEHEAD and of such persons as WHITEHEAD shall direct ("Whitehead Holders"), and each Whitehead Holder shall receive such number of shares as WHITEHEAD shall direct. Appendix C lists said Common Stock distribution. Such issuance shall be recorded on the Stock Transfer Ledger of COMPANY on the EFFECTIVE DATE and the Shares shall be delivered to WHITEHEAD and Whitehead Holders, if any, within [**] days of the EFFECTIVE DATE.

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COMPANY represents to WHITEHEAD that, as of the EFFECTIVE DATE, the aggregate number of Shares equals [**] Percent ([**]%) of the COMPANY's issued and outstanding Common Stock calculated on a "Fully Diluted Basis." For purposes of this Section 4.1(e), "Fully Diluted Basis" shall mean that the total number of issued and outstanding shares of the COMPANY's Common Stock shall be calculated to include conversion of all issued and outstanding securities then convertible into common stock, the exercise of all then outstanding options and warrants to purchase shares of common stock, whether or not then exercisable, and shall include all securities reserved for issuance pursuant to any COMPANY stock or stock option plan in effect on the date of the calculation.

(2) <u>Anti-Dilution Protection</u>. COMPANY shall issue additional shares of Common Stock to WHITEHEAD and each Whitehead Holder pro rata, such that WHITEHEAD's and the Whitehead Holders' ownership of outstanding Common Stock shall not fall below [**] Percent ([**]%) on a Fully Diluted Basis, as calculated after giving effect to the anti-dilutive issuance. Such issuances shall continue until and including the date upon which a total of [**] Dollars (\$[**]) in cash in exchange for COMPANY's capital stock (the "Funding Threshold") shall be received by COMPANY (and for clarity if such Funding Threshold is exceeded as part of a single financing, only the portion of that financing up to but not above the Funding Threshold shall be included in such anti-dilution calculation specified above). Thereafter, no additional shares shall be due to any institution or any Whitehead Holder pursuant to this Section 4.1(d). With respect to any such issuances and the initial equity issuance identified above, each of the resulting stockholders will enter into such agreements with COMPANY and its other stockholders as is customary, including any such agreements required of COMPANY

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(e) <u>No Multiple Royalties</u>. If the manufacture, use, offer for sale, import, or sale of any PRODUCT or the performance of any LICENSED PROCESS is covered by more than one of the PATENT RIGHTS, multiple royalties shall not be due.

(f) <u>OTHER LICENSE AGREEMENTS</u>. As provided above for SUBLICENSE INCOME and CORPORATE PARTNERSHIP INCOME under Section 4.1(d), any SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME shall be apportioned among those three (3) agreements so any portion of any SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME shall be shared only once under one (1) of those three (3) agreements.

4.2 <u>Payments</u>.

(a) <u>Method of Payment</u>. All payments under this Agreement should be made payable to "Whitehead Institute for Biomedical Research" and sent to WHITEHEAD's address identified in Section 14.1. Each payment should reference this Agreement (Ref: [**]) and identify the obligation under this Agreement that the payment satisfies.

(b) <u>Payments in U.S. Dollars</u>. All payments due under this Agreement shall be drawn on a United States bank and shall be payable in United States dollars. Conversion of foreign currency to U.S. dollars shall be made at the conversion rate existing in the United States (as reported in the *Wall Street Journal*) on the last working day of the calendar quarter of the applicable REPORTING PERIOD. Such payments shall be without deduction of exchange, collection, or other charges, and, specifically, without deduction of withholding or similar taxes or other government imposed fees or taxes, except as permitted in the definition of NET SALES. To the extent it has the legal right to do so and at the request of COMPANY, WHITEHEAD will assist COMPANY in reclaiming or seeking reimbursement any amounts withheld under this Section 4.2(b) from the appropriate government, agency or taxing authority

(c) <u>Late Payments</u>. Any payments by COMPANY that are not paid on or before the date such payments are due under this Agreement shall bear interest, to the extent permitted by law, at [**] percentage points above the Prime Rate of interest as reported in the *Wall Street Journal* on the date payment is due.

5. REPORTS AND RECORD KEEPING

5.1 Frequency of Reports.

(a) <u>Before First Commercial Sale</u>. Prior to the first commercial sale of any PRODUCT or first commercial performance of any LICENSED PROCESS, COMPANY shall deliver reports to WHITEHEAD [**], within [**] days of the end of [**], containing information concerning the immediately preceding [**], as further described in Section 5.2.

(b) <u>Upon First Commercial Sale of a PRODUCT or Commercial Performance of a LICENSED PROCESS</u>. COMPANY shall report to WHITEHEAD the date of first commercial sale of a PRODUCT and the date of first commercial performance of a LICENSED PROCESS within [**] days of occurrence in each country and indicate, if applicable, the SUB-FIELD or SUB-FIELDS encompassing the commercially sold PRODUCT.

(c) <u>After First Commercial Sale</u>. After the first commercial sale of a PRODUCT or first commercial performance of a LICENSED PROCESS, COMPANY shall deliver reports to WHITEHEAD within [**] days of the end of each REPORTING PERIOD, containing information concerning the immediately preceding REPORTING PERIOD, as further described in Section 5.2.

5.2 <u>Content of Reports and Payments</u>. Each report delivered by COMPANY to WHITEHEAD shall contain at least the following information for the immediately preceding REPORTING PERIOD:

(i) the number of PRODUCTS sold, leased or distributed by COMPANY, its AFFILIATES and SUBLICENSEES to

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independent third parties in each country, and, if applicable, the number of PRODUCTS used by COMPANY, its AFFILIATES and SUBLICENSEES in the provision of services in each country and indicate, if applicable, the SUB-FIELD or SUB-FIELDS encompassing such PRODUCTS;

- a description of LICENSED PROCESSES performed by COMPANY, its AFFILIATES and SUBLICENSEES in each country as may be pertinent to a royalty accounting hereunder and indicate, if applicable, the SUB-FIELD or SUB-FIELDS encompassing such LICENSED PROCESSES;
- (iii) the gross price charged by COMPANY, its AFFILIATES and SUBLICENSEES for each PRODUCT and, if applicable, the gross price charged for each PRODUCT used to provide services in each country; and the gross price charged for each LICENSED PROCESS performed by COMPANY, its AFFILIATES and SUBLICENSEES in each country;
- (iv) the gross price charged by COMPANY and its AFFILIATES for LICENSED SERVICES INCOME in each country as may be pertinent to a royalty accounting hereunder;
- (v) calculation of NET SALES for the applicable REPORTING PERIOD in each country, including a listing of applicable deductions;
- (vi) total royalty payable on NET SALES in U.S. dollars, together with the exchange rates used for conversion;
- (vii) the amount of SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME received by COMPANY from each SUBLICENSEE or CORPORATE PARTNER and the amount deliverable to WHITEHEAD from such SUBLICENSE INCOME or CORPORATE PARTNERSHIP INCOME, including an

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itemized breakdown of the sources of income comprising the SUBLICENSE INCOME; or CORPORATE PARTNERSHIP INCOME; and

- (viii) the number of sublicenses entered into for the PATENT RIGHTS, PRODUCTS and/or LICENSED PROCESSES and indicate, if applicable, the SUB-FIELD or SUB-FIELDS encompassing such SUBLICENSES; and
- (ix) the achievement of COMPANY Diligence Obligations under Article 3.

If no amounts are due for any REPORTING PERIOD, the report shall so state.

COMPANY shall use commercially reasonable efforts to enter into a sublicense agreement whereby the applicable SUBLICENSEE provides the information necessary for the foregoing, but if despite using such commercially reasonable efforts, COMPANY is unable to obtain all such information from such SUBLICENSEE, then COMPANY shall be in compliance with this Section 5 by providing such relevant information as COMPANY is able to obtain from such SUBLICENSEE.

5.3 <u>Record keeping</u>. COMPANY shall maintain, and shall cause its AFFILIATES and SUBLICENSEES to maintain, complete and accurate records relating to the rights and obligations under this Agreement and any amounts payable to WHITEHEAD in relation to this Agreement, which records shall contain sufficient information to permit WHITEHEAD to confirm the accuracy of any reports delivered to WHITEHEAD and compliance in other respects with this Agreement. The relevant party shall retain such records for at least [**] years following the end of the calendar year to which they pertain, during which time WHITEHEAD or WHITEHEAD's appointed agents, shall have the right, at WHITEHEAD's expense, to inspect such records during normal business hours to verify any reports and payments made or compliance in other respects under this Agreement. In the event that any audit performed under this Section 5.3 reveals an underpayment in excess of [**] percent ([**]%), COMPANY shall bear the full out-of-pocket cost of such audit and shall remit any amounts due to WHITEHEAD within

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[**] days of receiving notice thereof from WHITEHEAD, and any over-payments may be taken as a credit under this Agreement.

6. PATENT PROSECUTION

6.1 <u>Responsibility for PATENT RIGHTS</u>. WHITEHEAD in its sole discretion, shall prepare, file, prosecute, and maintain all of the PATENT RIGHTS. For purposes of this Agreement, patent prosecution includes ex parte prosecution, interference proceedings, reissues, reexaminations and oppositions. As long as the license remains in whole or in part exclusive, WHITEHEAD shall provide, or cause its agent to provide, on a timely basis copies of relevant correspondence between WHITEHEAD and the United States Patent Office or the various foreign patent offices and give COMPANY reasonable opportunity to advise WHITEHEAD or WHITEHEAD's counsel on such matters. COMPANY shall designate an individual or department for receiving the patent-related correspondence.

COMPANY shall have reasonable opportunities to consult with and advise WHITEHEAD. WHITEHEAD shall consider the legitimate interests of COMPANY in performing its responsibility under this Section 6.1 and consider all reasonable comments from COMPANY regarding same COMPANY shall cooperate with WHITEHEAD in such filing, prosecution and maintenance. To the extent that WHITEHEAD uses outside patent counsel for the foregoing activities, COMPANY (and its outside patent counsel) will have direct access to such patent counsel for WHITEHEAD in coordination with the following individual or department, who will have primary responsibility for such requests by COMPANY.

WHITEHEAD Whitehead Institute for Biomedical Research 9 Cambridge Center Cambridge, MA 02142 Attn: Intellectual Property Office

(i) COMPANY shall cooperate with WHITEHEAD in preparing, filing, prosecuting and maintaining the patent applications and patents within

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PATENT RIGHTS. COMPANY shall provide prompt notice to WHITEHEAD of any non-privileged, public information that comes to its attention that may affect the patentability, validity or enforceability of any patent application or patent within PATENT RIGHTS.

(ii) COMPANY may surrender its licenses under any of the patents or patent applications, or any claim(s) thereof within PATENT RIGHTS in any country of the licensed TERRITORY by giving [**] days advance written notice to WHITEHEAD. If COMPANY so surrenders its rights, it will remain responsible for all patent-related expenses incurred by WHITEHEAD and not reimbursed by a third party during the applicable notice period, but WHITEHEAD shall take reasonable steps to minimize such expenses. Thereafter, COMPANY will have no further obligation to pay any patent expenses for the patents or patent applications that it surrendered. Notwithstanding the foregoing, if such surrender results in termination of all rights under this Agreement, then the termination notice provision in Section 12, below, shall apply

6.2 <u>International (non-United States) Filings</u>. Appendix B is a list of countries in which patent applications corresponding to the United States patent applications listed in Appendix A shall be filed, prosecuted, and maintained. <u>Appendix B</u> may be amended by mutual agreement of WHITEHEAD and COMPANY.

6.3 <u>Payment of Expenses</u>. Payment of all reasonable out-of-pocket fees and costs, including reasonable attorneys' fees, relating to the filing, prosecution and maintenance of the PATENT RIGHTS will be the responsibility of COMPANY, whether such amounts were incurred before or after the EFFECTIVE DATE. COMPANY shall reimburse [**] percent ([**]%) of such amount due pursuant to this Section 6.3 within [**] days of the EFFECTIVE DATE. As of the EFFECTIVE DATE COMPANY shall pay [**] percent ([**]%) of all such fees and costs accrued after the EFFECTIVE DATE, until such time as there is another one or more licensees

under the PATENT RIGHTS, in which event COMPANY shall only be required to pay its pro rata share of all such fees and costs based on the number of licensees (including COMPANY) and the scope of such licenses; late payments shall accrue interest pursuant to Section 4.2(c). In all instances, WHITEHEAD

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shall pay the fees prescribed for large entities to the United States Patent and Trademark Office.

7. INFRINGEMENT

7.1 <u>Notification of Infringement</u>. Notification of Infringement. Each party agrees to provide written notice to the other parties promptly after becoming aware of any infringement of the PATENT RIGHTS in the FIELD or SUB-FIELDS for which COMPANY has an exclusive license and rights under Section 2.2 (the "ENFORCEMENT FIELD").

7.2 <u>Right to Prosecute Infringements</u>.

(a) <u>COMPANY Right to Prosecute</u>. So long as COMPANY remains the exclusive licensee of the PATENT RIGHTS in the ENFORCEMENT FIELD in the TERRITORY, COMPANY, to the extent permitted by law, shall have the right, under its own control and at its own expense, to prosecute any third-party infringement of the PATENT RIGHTS in the ENFORCEMENT FIELD in the TERRITORY, subject to Sections 7.4 and 7.5. If required by law, WHITEHEAD shall permit any action under this Section 7.2 to be brought in its name, including being joined as a party-plaintiff, provided that COMPANY shall hold WHITEHEAD harmless from, and indemnify WHITEHEAD against, any costs, expenses, or liability that WHITEHEAD incur in connection with such action.

Prior to commencing any such action, COMPANY shall consult with WHITEHEAD and shall consider the views of WHITEHEAD regarding the advisability of the proposed action and its effect on the public interest. COMPANY shall not enter into any settlement, consent judgment, or other voluntary final disposition of any infringement action under this Section 7.2 without the prior written consent of WHITEHEAD, such consent not to be unreasonably withheld, delayed or conditioned.

(b) <u>WHITEHEAD Right to Prosecute</u>. In the event that COMPANY is unsuccessful in persuading the alleged infringer to desist or fails to have initiated an

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infringement action within a reasonable time after COMPANY first becomes aware of the basis for such action, WHITEHEAD shall have the right, at its sole discretion, to prosecute such infringement under its sole control and at its sole expense, and any recovery obtained shall belong to WHITEHEAD, but WHITEHEAD shall reimburse COMPANY for any costs or expenses incurred in assisting WHITEHEAD in such action as reasonably requested by WHITEHEAD.

7.3 <u>Declaratory Judgment Actions</u>. In the event that a PATENT CHALLENGE or any suit or action alleging that the PATENT RIGHTS are not infringed or unpatentable is brought against WHITEHEAD or COMPANY or any AFFILIATES or SUBLICENSEES by a third party, the subject party shall promptly notify the other parties in writing, and COMPANY, at its option and upon written notice to WHITEHEAD, shall have the right, but shall not be obligated, within [**] days after commencement of such action to take over the sole defense of the action at its own expense. If COMPANY does not exercise this right, WHITEHEAD may take over the sole defense of the action at WHITEHEAD's sole expense, but shall not be obligated to do so, subject to Sections 7.4 and 7.5.

7.4 <u>Offsets</u>. COMPANY may offset a total of [**] percent ([**]%) of any expenses incurred under Sections 7.2 and 7.3 against any payments due to WHITEHEAD under Section 4, provided that in no event shall such payments under Section 4, when aggregated with any other offsets and credits allowed under this Agreement, be reduced by more than [**] percent ([**]%) in any REPORTING PERIOD.

7.5 <u>Recovery</u>. Any recovery obtained in an action brought by COMPANY under Sections 7.2 or 7.3 shall be distributed as follows:

(i) each party shall be first reimbursed pro rata for any expenses incurred in the action (including the amount of any royalty or other payments withheld from WHITEHEAD as described in Section 7.4);

(ii) as to ordinary damages, if COMPANY shall receive an amount equal to its lost profits, COMPANY shall pay to WHITEHEAD based upon such amount a reasonable approximation of the royalties and other amounts (for example, but not limited to

milestone payments) that COMPANY would have paid to WHITEHEAD if COMPANY had sold the infringing products, processes and services (and achieved such milestones) rather than the infringer;

(iii) as to ordinary damages, if COMPANY shall receive an amount equal to a reasonably royalty on the infringing sales or whichever measure of damages the court shall have applied, COMPANY shall pay to WHITEHEAD [**] Percent ([**]%) of such amount for ordinary damages; and

(iv) as to special or punitive damages, the parties shall share equally in any award;

(v) each of the payments under (ii)-(iv) above shall be made pro rata net of expense reimbursement made under 7.5(i) for expenses incurred by each party under Section 7.5(i).

7.6 <u>Cooperation</u>. Each party agrees to cooperate in any action under this Section 7 which is controlled by any other party, provided that the controlling party reimburses the cooperating parties promptly for any reasonable costs and expenses incurred by the cooperating parties in connection with providing such assistance.

7.7 <u>Right to Sublicense</u>. So long as COMPANY remains the exclusive licensee of the PATENT RIGHTS in the ENFORCEMENT FIELD in the TERRITORY, COMPANY shall have the sole right to sublicense any alleged infringer in the ENFORCEMENT FIELD in the TERRITORY for future use of the PATENT RIGHTS in accordance with the terms and conditions of this Agreement relating to sublicenses as set forth in Section 2.3 and payments due under Section 4.

7.8. <u>Patent Certifications.</u> WHITEHEAD shall notify and provide COMPANY with copies of any allegations of alleged patent invalidity, unenforceability or non-infringement of any PATENT RIGHT pursuant to a Paragraph IV Patent Certification by a Third party filing an Abbreviated New Drug Application, an application under §505(b)(2) or any other similar patent certification by a third party, and any foreign equivalent thereof. Such notification and copies shall be provided to COMPANY within [**] business days after WHITEHEAD receive such certification.

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8. INDEMNIFICATION AND INSURANCE

8.1 <u>Indemnification</u>.

Indemnity. COMPANY shall indemnify, defend, and hold harmless WHITEHEAD and its trustees, officers, faculty, students, medical and professional staff, employees, and agents and its respective successors, heirs and assigns (the "Indemnitees"), against any liability, damage, loss, or expense (including reasonable attorneys' fees and expenses) incurred by or imposed upon the Indemnitees or any one of them, in connection with any claims, suits, investigations, actions, demands or judgments (i) arising out of the design, production, manufacture, sale, use in commerce, lease, or promotion by COMPANY or by a SUBLICENSEE, AFFILIATE or agent of COMPANY, or any product, process or service relating to, or developed pursuant to, this Agreement or (ii) arising out of any other activities to be carried out pursuant to this Agreement or (iii) related to the exercise of any rights granted to COMPANY under this Agreement or (iv) any breach of this Agreement by COMPANY.

COMPANY's indemnification under Section 8.1(a)(i) applies to any liability, damage, loss or expense whether or not it is attributable to the negligent activities of the Indemnitees. COMPANY's indemnification under Sections 8.1(b)(ii) through 8.1(b) (iv) does not apply to any liability, damage, loss or expense to the extent that it is attributable to the grossly negligent activities of the Indemnitees, or the intentional wrongdoing or intentional misconduct of the Indemnitees.

(b) <u>Procedures</u>. The Indemnitees agree to provide COMPANY with prompt written notice of any commenced or threatened claim, suit, action, demand, or judgment for which indemnification is sought under this Agreement. COMPANY agrees, at its own expense, to provide attorneys reasonably acceptable to WHITEHEAD to defend against any actions brought or filed against any party indemnified hereunder with respect to the subject of the indemnity contained herein, whether or not such actions are rightfully brought. The Indemnitees shall

cooperate with COMPANY in such defense and will permit COMPANY to conduct and control such defense and the disposition of such claim, suit, or action (including all decisions relative to litigation, appeal, and settlement); provided, however, that any Indemnitee shall have the right to retain its own counsel, at the expense of COMPANY, if representation of such Indemnitee by the counsel retained by COMPANY would be inappropriate because of actual or potential differences in the interests of such Indemnitee and any other party represented by such counsel. COMPANY agrees to keep WHITEHEAD informed of the progress in the defense and disposition of such claim and to consult with WHITEHEAD with regard to any proposed settlement.

The right of COMPANY to assume the defense of any action is limited to that part of the action commenced against WHITEHEAD and/or Indemnitees that relates to COMPANY's obligation of indemnification and holding harmless.

COMPANY shall require any AFFILIATE(S) or SUBLICENSEE(S) to indemnify, hold harmless and defend WHITEHEAD under the same terms set forth in this Section 8.1.

8.2 <u>Insurance</u>. At such time as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by COMPANY or by a SUBLICENSEE(S), AFFILIATE(S) or agent of COMPANY, COMPANY shall obtain and carry in full force and effect commercial general liability insurance, including product liability insurance which shall protect COMPANY and Indemnitees with respect to events

covered by Section 8.1. Such insurance (i) shall be issued by an insurer licensed to practice in the Commonwealth of Massachusetts or an insurer pre-approved by WHITEHEAD, such approval not to be unreasonably withheld, (ii) shall list WHITEHEAD as additional insureds thereunder, (iii) shall be endorsed to include product liability coverage, and (iv) shall require [**] days written notice to be given to WHITEHEAD prior to any cancellation or material change thereof. The limits of such insurance shall not be less than [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) for bodily

injury including death; [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) for property damage; and [**] Dollars (\$[**]) per occurrence with an aggregate of [**] Dollars (\$[**]) for errors and omissions.

In the alternative, if COMPANY elects to self insure all or part of the limits described above (including deductibles or retentions which are in excess of \$[**] annual aggregate), such self-insurance program must be acceptable to and receive prior approval from WHITEHEAD. COMPANY shall provide WHITEHEAD with Certificates of Insurance evidencing compliance with this Section 8.2 upon request of WHITEHEAD.

COMPANY shall provide WHITEHEAD with written notice at least [**] days prior to the cancellation, non renewal or material change in such insurance; if COMPANY does not obtain replacement insurance providing comparable coverage within such [**]day period, WHITEHEAD has the right to terminate this Agreement effective at the end of such [**]day period without any notice or additional waiting periods.

The minimum amounts of insurance coverage required under these provisions may not be construed to create a limit of COMPANY's liability with respect to its indemnification obligation under Section 8.1.

COMPANY shall maintain such comprehensive general liability insurance beyond the expiration or termination of this Agreement during (a) the period that any product, process, or service, relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by COMPANY or by a SUBLICENSEE, AFFILIATE or agent of COMPANY and (b) a reasonable period after such time as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals) by COMPANY or by a SUBLICENSEE, AFFILIATE or agent of COMPANY and (b) a reasonable period after such time as any product, process or service relating to, or developed pursuant to, this Agreement is being commercially distributed or sold (other than for the purpose of obtaining regulatory approvals), which in no event shall be less than [**] years.

COMPANY shall require any AFFILIATE(S) or SUBLICENSEE(S) to maintain insurance in favor of WHITEHEAD and the Indemnitees under the same

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terms or on terms at least as favorable to WHITEHEAD set forth in this Section 8.2.

9. REPRESENTATIONS OR WARRANTIES

<u>9.1. Representations and Warranties</u>. To its knowledge, as of the EFFECTIVE DATE, WHITEHEAD represents and warrants that: (a) it solely and exclusively owns the patents and applications included within the PATENT RIGHTS; (b) it has the power and authority to grant the licenses provided for herein to COMPANY, and that it has not earlier granted, or assumed any obligation to grant, any rights in the PATENT RIGHTS to any third party that would conflict with the rights granted to COMPANY herein; (c) this Agreement constitutes the legal, valid and binding obligation of WHITEHEAD, enforceable against such WHITEHEAD in accordance with its terms; and (d) there is no infringement of the PATENT RIGHTS by any third party.

9.2 Limitation on Representations and Warranties. EXCEPT AS MAY OTHERWISE BE EXPRESSLY SET FORTH IN THIS AGREEMENT, WHITEHEAD MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE PATENT RIGHTS AND WHITEHEAD MATERIALS, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, VALIDITY OF PATENT RIGHTS CLAIMS, WHETHER ISSUED OR PENDING, AND THE ABSENCE OF LATENT OR OTHER DEFECTS, WHETHER OR NOT DISCOVERABLE. Specifically, and not to limit the foregoing, WHITEHEAD makes no warranty or representation (i) regarding the validity or scope of the PATENT RIGHTS, and (ii) that the exploitation of the PATENT RIGHTS or any LICENSED PRODUCT or LICENSED PROCESS or LICENSED SERVICE, or methods used in making or using MATERIALS will not infringe any patents or other intellectual property rights of WHITEHEAD or of a third party.

The WHITEHEAD MATERIALS are experimental in nature and will be used with prudence and appropriate caution since not all of their characteristics are known.

EXCEPT FOR COMPANY'S INDEMNITY OBLIGATIONS UNDER SECTION 8.1, IN NO EVENT SHALL ANY PARTY, THEIR TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES FACULTY, STUDENTS, MEDICAL AND PROFESSIONAL STAFF, AGENTS AND AFFILIATES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING

ECONOMIC DAMAGES OR INJURY TO PROPERTY AND LOST PROFITS, REGARDLESS OF WHETHER WHITEHEAD OR COMPANY SHALL BE ADVISED, SHALL HAVE OTHER REASON TO KNOW, OR IN FACT SHALL KNOW OF THE POSSIBILITY OF THE FOREGOING.

10. ASSIGNMENT

This Agreement is personal to COMPANY and no rights or obligations may be assigned by COMPANY without the prior written consent of WHITEHEAD. Any such assignment shall be void. The foregoing notwithstanding, COMPANY may assign its rights and obligations under this Agreement to a successor in connection with the merger, consolidation, or sale of all or substantially all of its assets or that portion of its business to which this Agreement relates (however such transaction is structured); provided, however, that if this Agreement is assigned upon such merger, consolidation, or sale, (i) COMPANY shall pay to WHITEHEAD an Assignment Fee of [**] Dollars (\$[**]], due within [**] days of the closing date of such transaction and (ii) this Agreement will immediately terminate if the proposed assignee has not agreed in writing to be bound by the terms and conditions of this Agreement within [**] days after the effective date of the assignment.

11. GENERAL COMPLIANCE WITH LAWS

11.1 <u>Compliance with Laws</u>. COMPANY shall use reasonable commercial efforts to comply with all commercially material local, state, federal, and international laws and regulations relating to the development, manufacture, use, and sale of PRODUCTS and LICENSED PROCESSES.

11.2 <u>Export Control</u>. COMPANY and its AFFILIATES and SUBLICENSEES shall comply with all United States laws and regulations controlling the export of certain

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commodities and technical data, including without limitation all Export Administration Regulations of the United States Department of Commerce. Among other things, these laws and regulations prohibit or require a license for the export of certain types of commodities and technical data to specified countries. COMPANY hereby gives written assurance that it will comply with, and will cause its AFFILIATES and SUBLICENSEES to comply with, all United States export control laws and regulations, that it bears sole responsibility for any violation of such laws and regulations by itself or its AFFILIATES or SUBLICENSEES, and that it will indemnify, defend, and hold WHITEHEAD harmless (in accordance with Section 8.1) for the consequences of any such violation.

11.3 <u>Non-Use of Name</u>. COMPANY and its AFFILIATES and SUBLICENSEES shall not use the name of "Whitehead Institute" or any variation, adaptation, or abbreviation thereof, or of any of their trustees, officers, faculty, students, employees, or agents, or any trademark owned by WHITEHEAD, or any terms of this Agreement in any promotional material or other public announcement or disclosure without the prior written consent of the relevant party, which consent such party may withhold in its sole discretion. WHITEHEAD shall not use the name of "Syros Pharmaceuticals, Inc.," or any variation, adaptation, or abbreviation thereof, or of any of their directors, officers, employees, or agents, or any trademark owned by COMPANY, or any terms of this Agreement in any promotional material or other public announcement or disclosure without the prior written consent of the company, which consent such party may withhold in its sole discretion. The foregoing notwithstanding, without the consent of WHITEHEAD, COMPANY may make factual statements during the term of this Agreement that COMPANY has a license from WHITEHEAD under one or more of the patents and/or patent applications comprising the PATENT RIGHTS and to use the WHITEHEAD MATERIALS.

11.4 <u>Marking of PRODUCTS</u>. To the extent commercially feasible and consistent with prevailing business practices, COMPANY shall mark, and shall cause its AFFILIATES and shall use commercially reasonable efforts to cause its SUBLICENSEES to mark, all PRODUCTS that are manufactured or sold under this Agreement with the

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number of each issued patent under the PATENT RIGHTS that applies to such PRODUCT.

12. TERMINATION

12.1 <u>Voluntary Termination by COMPANY</u>. COMPANY will have the right to terminate this Agreement or any part thereof as provided in Section 12.5, for any reason, (i) upon at least three (3) months prior written notice to WHITEHEAD, such notice to state the date at least three (3) months in the future upon which termination is to be effective, and (ii) upon payment of all undisputed amounts due to WHITEHEAD through such termination effective date.

12.2 <u>Cessation of Business</u>. If COMPANY ceases to carry on its business, WHITEHEAD will have the right to terminate this Agreement immediately upon written notice to COMPANY.

12.3 <u>Termination for Default</u>.

(a) <u>Nonpayment</u>. In the event COMPANY fails to pay any amounts due and payable to WHITEHEAD hereunder, and fails to make such payments within [**] days after receiving written notice of such failure, WHITEHEAD may terminate this Agreement immediately upon written notice to COMPANY.

(b) <u>Material Breach</u>. In the event COMPANY commits a material breach of its obligations under this Agreement, except for breach as described in Section 12.3(a), and fails to cure that breach within [**] days after receiving written notice thereof, WHITEHEAD may terminate this Agreement immediately upon written notice to COMPANY subject to completion of the dispute resolution process set forth in Section 13 and subsequent opportunity to cure.

12.4 <u>Effect of Termination</u>.

(a) <u>Survival</u>. The following provisions shall survive the expiration or termination of this Agreement: Sections 1, 4.1(c)(i) (for obligation to pay royalty on IDENTIFIED PRODUCTS), 5.2 (only for obligation to provide final report and

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payment), 6.3 (for obligation to pay patent expenses incurred before the EFFECTIVE DATE), 8, 9, 10, 12.4, 13, 14, and 15.

(b) <u>Inventory</u>. Upon the early termination of this Agreement, COMPANY and its AFFILIATES and SUBLICENSEES may complete and sell any work-in-progress and inventory of PRODUCTS that exist as of the effective date of termination, provided that:

- (i) COMPANY pays WHITEHEAD the applicable running royalty or other amounts due on such sales of PRODUCTS in accordance with the terms and conditions of this Agreement; and
- (ii) COMPANY and its AFFILIATES and SUBLICENSEES shall complete and sell all work-in-progress and inventory of PRODUCTS within [**] months after the effective date of termination.

(c) <u>Pre-termination Obligations</u>. In no event shall termination of this Agreement release COMPANY, AFFILIATES, or SUBLICENSEES from the obligation to pay any amounts that became due on or before the effective date of termination.

12.5 <u>Partial Termination</u>. COMPANY may terminate its rights for any given SUB-FIELD or part thereof, without prejudice to any other rights under this AGREEMENT, for any reason, (i) upon at least three (3) months prior written notice to WHITEHEAD, such notice to state the date at least three (3) months in the future upon which termination is to be effective, and (ii) upon specific identification of the SUB-FIELD or part thereof thereby terminated. COMPANY AND WHITEHEAD shall make any necessary amendments to this AGREEMENT upon the termination of such SUB-FIELD or part thereof.

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13. DISPUTE RESOLUTION

13.1 <u>Mandatory Procedures</u>. The parties agree that any dispute arising out of or relating to this Agreement shall be resolved solely by means of the procedures set forth in this Section 13, and that such procedures constitute legally binding obligations that are an essential provision of this Agreement. If any party fails to observe the procedures of this Section 13, as may be modified by their written agreement, the other parties may bring an action for specific performance of these procedures in any court of competent jurisdiction.

13.2 <u>Equitable Remedies</u>. Although the procedures specified in this Section 13 are the sole and exclusive procedures for the resolution of disputes arising out of or relating to this Agreement, any party may seek a preliminary injunction or other provisional equitable relief if, in its reasonable judgment, such action is necessary to avoid irreparable harm to itself or to preserve its rights under this Agreement.

13.3 Dispute Resolution Procedures.

(a) <u>Mediation</u>. In the event any dispute arising out of or relating to this Agreement remains unresolved within [**] days from the date the affected party informed the other parties of such dispute, any party may initiate mediation upon written notice to the other party ("Notice Date"), whereupon all parties shall be obligated to engage in a mediation proceeding under the then current Center for Public Resources ("CPR") Model Procedure for Mediation of Business Disputes (http://www.cpradr.org), except that specific provisions of this Section 13 shall override inconsistent provisions of the CPR Model Procedure. The mediator will be selected from the CPR Panels of Neutrals. If the parties cannot agree upon the selection of a mediator within [**] business days after the Notice Date, then upon the request of any party, the CPR shall appoint the mediator. The parties shall attempt to resolve the dispute through mediation until the first of the following occurs:

- (i) the parties reach a written settlement;
- (ii) the mediator notifies the parties in writing that they have reached an impasse;

(iii) the parties agree in writing that they have reached an impasse; or

(iv) the parties have not reached a settlement within [**] days after the Notice Date.

(b) <u>Trial Without Jury</u>. If the parties fail to resolve the dispute through mediation, or if no party elects to initiate mediation, each party shall have the right to pursue any other remedies legally available to resolve the dispute, provided, however, that the parties expressly waive any right to a jury trial in any legal proceeding under this Section 13.

13.4 <u>Performance to Continue</u>. Each party shall continue to perform its undisputed obligations under this Agreement pending final resolution of any dispute arising out of or relating to this Agreement; provided, however, that a party may suspend performance of its undisputed obligations during any period in which any other party fails or refuses to perform its undisputed obligations. Nothing in this Section 13 is intended to relieve COMPANY from its obligation to make undisputed payments pursuant to Sections 4 and 6.

13.5 <u>Statute of Limitations</u>. The parties agree that all applicable statutes of limitation and time-based defenses (such as estoppel and laches) shall be tolled while the procedures set forth in Section 13.3(a) are pending. The parties shall cooperate in taking any actions necessary to achieve this result.

14. CONFIDENTIALITY

14.1 Non-disclosure and Non-use.

(a) All information disclosed by one party to the other party hereunder shall be maintained in confidence by the receiving party and shall not be disclosed to any third party or used for any purpose except as set forth herein without the prior written consent of the disclosing party, for a period of [**] years from disclosure of such information, except to the extent that such information:

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- (i) is known by receiving party at the time of its receipt, and not through a prior disclosure by the disclosing party, as documented by the receiving party's business records;
- (ii) is or becomes part of the public domain through no fault of the receiving party;
- (iii) is subsequently disclosed to the receiving party by a third party who may lawfully do so and is not under an obligation of confidentiality to the disclosing party;
- (iv) is developed by the receiving party independently of Information received from the disclosing party, as documented by the receiving party's business records;
- (b) Notwithstanding the foregoing, a party may disclose Information:
 - (i) to governmental or other regulatory agencies in order to obtain patents or to gain or maintain approval to conduct clinical trials or to market PRODUCTS or LICENSED PROCESSES, provided however that such disclosure may be only to the extent reasonably necessary to obtain patents or authorizations.
 - (ii) deemed necessary by COMPANY to be disclosed to sublicensees, agents, consultants, and/or other third parties for the development and/or commercialization of a PRODUCT, and/or in connection with a licensing/sublicensing transaction and/or a permitted assignment under this Agreement, and/or loan, financing or investment and/or acquisition, merger, consolidation or similar transaction (or for such entities to determine their interest in performing such activities) in each case on the condition that any third party to whom such disclosures are made agree to be bound by a confidentiality agreement.

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Information that is disclosed under 14.1(b)(i) or 14.1(b)(ii) shall remain otherwise subject to the confidentiality and non-use provisions hereof.

14.2 <u>Judicial or Administrative Process</u>. If a party is required by judicial or administrative process to disclose Information that is subject to the non-disclosure provisions of this Section 14, such party shall promptly inform the other party of the disclosure that is being sought in order to provide the other party an opportunity to challenge or limit the disclosure obligations.

Information that is disclosed by judicial or administrative process shall remain otherwise subject to the confidentiality and nonuse provisions hereof, and the disclosing party, pursuant to law or court order, shall take all steps reasonably necessary, including without limitation obtaining an order of confidentiality, to ensure the continued confidential treatment of such Information.

14.3 <u>SEC Filings</u>. Either party may publicly disclose the terms of this Agreement to the extent required, in the reasonable opinion of such party's legal counsel, to comply with applicable laws, including without limitation the rules and regulations promulgated by the United States Securities and Exchange Commission (the "SEC"). Notwithstanding the foregoing, before disclosing this Agreement or any of the terms hereof pursuant to this Section 14.3, the parties will consult with one another on the terms of this Agreement to be

redacted in making any such disclosure. If a party discloses this Agreement or any of the terms hereof in accordance with this Section 14.3, such party agrees, at its own expense, to seek confidential treatment of portions of this Agreement or such terms, as may be reasonably requested by the other party.

15. MISCELLANEOUS

15.1 <u>Notice</u>. Any notices required or permitted under this Agreement shall be in writing, shall specifically refer to this Agreement, and shall be sent by hand, recognized national overnight courier, confirmed facsimile transmission, confirmed electronic mail, or registered or certified mail, postage prepaid, return receipt requested, to the following addresses or facsimile numbers of the parties:

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If to WHITEHEAD:	 Whitehead Institute for Biomedical Research Nine Cambridge Center Cambridge, MA 02142 Attention: Intellectual Property Office Tel: 617-258-5104 Fax: 617-258-6294 	
If to COMPANY:	Syros Pharmaceuticals, Inc. 480 Arsenal Street, Suite 130 Watertown, MA 02472 ATTN: CEO 617-744-1340 (phone) 617-744-1377 (fax)	

All notices under this Agreement shall be deemed effective upon receipt. A party may change its contact information immediately upon written notice to the other parties in the manner provided in this Section 15.1.

15.2 <u>Governing Law</u>. This Agreement and all disputes arising out of or related to this Agreement, or the performance, enforcement, breach or termination hereof, and any remedies relating thereto, shall be construed, governed, interpreted and applied in accordance with the laws of the Commonwealth of Massachusetts, U.S.A., without regard to conflict of laws principles, except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent shall have been granted. The state and federal courts having jurisdiction over Cambridge, MA, USA, provide the exclusive forum for any court action between the parties relating to this Agreement. COMPANY and WHITEHEAD submit to the jurisdiction of such courts and waives any claim that such court lacks jurisdiction over WHITEHEAD, COMPANY or its AFFILIATES or constitutes an inconvenient or improper forum.

15.3 <u>Force Majeure</u>. No party will be responsible for delays resulting from causes beyond the reasonable control of such party, including without limitation fire, explosion, flood, war, strike, or riot, provided that the nonperforming party uses commercially reasonable efforts to avoid or remove such causes of nonperformance and continues performance under this Agreement with reasonable dispatch whenever such causes are removed.

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15.4 <u>Amendment and Waiver</u>. This Agreement may be amended, supplemented, or otherwise modified only by means of a written instrument signed by all parties. Any waiver of any rights or failure to act in a specific instance shall relate only to such instance and shall not be construed as an agreement to waive any rights or fail to act in any other instance, whether or not similar.

15.5 <u>Severability</u>. In the event that any provision of this Agreement shall be held invalid or unenforceable for any reason, such invalidity or unenforceability shall not affect any other provision of this Agreement, and the parties shall negotiate in good faith to modify the Agreement to preserve (to the extent possible) their original intent. If the parties fail to reach a modified agreement within [**] days after the relevant provision is held invalid or unenforceable, then the dispute shall be resolved in accordance with the procedures set forth in Section 13. While the dispute is pending resolution, this Agreement shall be construed as if such provision were deleted by agreement of the parties.

15.6 <u>Binding Effect</u>. This Agreement shall be binding upon and inure to the benefit of the parties and their respective permitted successors and assigns.

15.7 <u>Headings</u>. All headings are for convenience only and shall not affect the meaning of any provision of this Agreement.

15.8 <u>Entire Agreement</u>. This Agreement constitutes the entire agreement between the parties with respect to its subject matter and supersedes all prior agreements or understandings between the parties relating to its subject matter.

Signatures follow on the next page.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives.

For WHITEHEAD		For COMPANY:		
By:	/s/ Carla DeMaria	By:	/s/ Nancy Simonian	
Name:	Carla DeMaria	Name:	Nancy Simonian	
Title:	Director of IP & Sponsored Programs	Title:	CEO	
Date:	4/8/2013	Date:	4/9/2013	
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APPENDIX A

List of Patent Applications and Patents

[**].

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APPENDIX B

List of Countries (excluding United States) for which PATENT RIGHTS Applications Will Be Filed, Prosecuted and Maintained

[**].

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APPENDIX C

Initial Common Stock Distribution to WHITEHEAD and Whitehead Holders

This Appendix C to be completed within [**] days of the EFFECTIVE DATE.

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APPENDIX D

List of WHITEHEAD MATERIALS

[**].

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EXHIBIT 2.8

Software Terms and Conditions

Software copyright (C) 2013 by Whitehead Institute for Biomedical Research

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish,

distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of the Whitehead Institute for Biomedical Research shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from the Whitehead Institute for Biomedical Research.

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Confidential Materials omitted and filed separately with the Securities and Exchange Commission. Double asterisks denote omissions.

CANCER LICENSE AGREEMENT

THIS CANCER LICENSE AGREEMENT (this "<u>Agreement</u>") dated as of September 11, 2015 (the "<u>Effective Date</u>") is entered into between TMRC Co., Ltd., a Japanese corporation having a place of business at 1-12-12, Kita Shinjuku, Shinjuku-ku, Tokyo 164-0074, Japan ("<u>TMRC</u>") and Syros Pharmaceuticals, Inc., a Delaware corporation having a place of business at 620 Memorial Drive, Suite 300, Cambridge MA 02139 USA ("<u>Syros</u>").

WHEREAS, TMRC owns or has rights in the Technology (as defined below).

WHEREAS, Syros desires to obtain an exclusive license under TMRC's rights in the Technology on the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants herein contained, the parties hereby agree as follows:

1. <u>DEFINITIONS</u>

For purposes of this Agreement, the terms defined in this Section 1 shall have the respective meanings set forth below:

1.1. "<u>Affiliate</u>" means, with respect to any Person, any other Person which directly or indirectly controls, is controlled by, or is under common control with, such Person. A Person shall be regarded as in control of another Person if it owns, or directly or indirectly controls, at least fifty percent (50%) of the voting stock or other ownership interest of the other Person, or if it directly or indirectly possesses the power to direct or cause the direction of the management and policies of the other Person by any means whatsoever.

1.2. "<u>API</u>" means active pharmaceutical ingredient in bulk form that is manufactured from the Technology.

1.3. "Business Day" means a day that is not a Saturday, Sunday or a day on which banks in Boston, Massachusetts are authorized to remain closed.

1.4. "<u>Clinical Trial</u>" means a Phase I Clinical Trial, a Phase II Clinical Trial or a Phase III Clinical Trial.

1.5. "<u>Competent Authority</u>" means, collectively, the governmental authorities in each country responsible for (a) the regulation of any Product intended for use in the Field, including the FDA, (b) the establishment, maintenance or protection of rights related to the Patent Rights licensed hereunder, or (c) any other applicable regulatory or administrative agency in any country in the Territory that is comparable to, or a counterpart of, the foregoing.

1.6. "<u>Confidential Information</u>" means any proprietary or confidential Know-how of a party which is disclosed (whether in written, graphic, oral, electronic or other form) by or on behalf of such party (the "<u>Disclosing Party</u>") to the other party (the "<u>Receiving</u> <u>Party</u>") pursuant to this Agreement, including: information regarding the Disclosing Party's technology, products, programs, business, financial status, biological or chemical substances, formulations, techniques,

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methodology, equipment, sources of supply, patent positioning or business plans. In addition, the terms of this Agreement shall be deemed Confidential Information of each party, and neither party may rely on clause (ii) to exclude the terms of this Agreement from Confidential Information. Confidential Information excludes any information that: (i) is or becomes generally known to the public other than by fault of the Receiving Party or its Personnel or by breach of this Agreement, (ii) is demonstrated by documentation to have been in the Receiving Party's possession at the time of disclosure, (iii) was disclosed to the Receiving Party on an unrestricted basis from a source not under a duty of confidentiality to the Disclosing Party or (iv) is independently developed by the Receiving Party without reference or reliance upon any of the Disclosing Party's Confidential Information.

1.7. "<u>Control</u>" or "<u>Controlled</u>" means, with respect to a Person and an item of or right under Know-how or Patent Rights, the ability of such Person or its Affiliates, whether by ownership or a license (other than pursuant to a license granted under this Agreement), to assign, transfer or grant access to, or a license or sublicense under, such item or right as provided for herein without violating the terms of any agreement or other arrangement with any Third Party.

1.8. "<u>Data Room</u>" means the electronic data room by which TMRC shared certain materials with Syros under the Memorandum between the parties dated as of July 16, 2015.

1.9. "<u>EMA</u>" means the European Medicines Agency of the European Union, or the successor thereto.

1.10. "FDA" means the Food and Drug Administration of the United States, or the successor thereto.

1.11. "Field" means any and all uses for the treatment of human cancer indications, excluding supportive care.

1.12. "<u>First Commercial Sale</u>" shall mean, with respect to any Product, the first sale of such Product after all applicable marketing and pricing approvals (if any) have been granted by the applicable Competent Authority for the applicable country.

1.13. "<u>IND</u>" or "<u>Investigational New Drug Application</u>" means an Investigational New Drug Application filed with the FDA in the United States or any equivalent counterpart in any country other than the United States, including any supplements or amendments thereto.

1.14. "<u>Know-how</u>" means any information, inventions, know-how, data, results or materials, whether patentable or not, including: (a) ideas, discoveries, improvements or trade secrets, (b) pharmaceutical, chemical or biological materials, products, compositions, formulae or processes, (c) tests, assays, techniques, methods, procedures, formulas or processes, (d) technical, medical, clinical, toxicological or other data or other information relating to any of the foregoing, and (e) drawings, plans, designs, diagrams, sketches, specifications or other documents containing or relating to such information, inventions, know-how, data, results or materials; including any intellectual property rights therein except for Patent Rights covering the foregoing.

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1.15. "<u>Law</u>" means any laws (including common law), statutes, regulations, rules, executive orders, supervisory requirements, licensing requirements, export requirements, directives, circulars, opinions, decrees, interpretive letters, guidance or other official releases of or by any Competent Authority or other governmental authority.

1.16. "Licensed Know-how Rights" means Know-how that is within the TMRC IP Rights.

1.17. "Licensed Patent Rights" means Patent Rights that is within the TMRC IP Rights, including the Patent Rights set forth on Exhibit A.

1.18. "Make, Have Made" or "Make and Have Made" means making and/or having made finished Product from Sales API.

1.19. "<u>NDA</u>" means a New Drug Application, or similar application for marketing approval of a Product for use in the Field submitted to the FDA, or its foreign equivalent.

1.20. "<u>NDA Acceptance</u>" means acceptance for filing of an NDA by the applicable Competent Authority in the applicable jurisdiction.

1.21. "<u>NDA Approval</u>" means (a) in the case of the United States, approval by FDA of an NDA granting marketing approval for a Product; and (b) in the case of the European Union, approval by the EMA of an NDA granting marketing approval and pricing approval by the applicable Competent Authorities in any one (1) of the following countries: the United Kingdom, Germany, France, Italy or Spain.

1.22. "<u>Net Sales</u>" means, with respect to any Product, the gross sales price of such Product invoiced by Syros and its Affiliates and sublicensees to Third Party customers (who are not Affiliates) less, to the extent actually paid or accrued by Syros or its Affiliates or sublicensees (as applicable), (a) credits, allowances, discounts and rebates to, and chargebacks from the account of, such customers for nonconforming, damaged, outdated or returned Product; (b) freight and insurance costs incurred by Syros or its Affiliates or sublicensees (as applicable) in transporting such Product to such customers; (c) cash, quantity and trade discounts, rebates and other price reductions for such Product given to such customers; (e) customs duties, tariffs, surcharges and other governmental charges incurred in exporting or importing such Product to such customers; (f) sales commissions incurred on the sale of such Product to such customers; (f) sales commissions incurred on the sale of such Product to such customers; (f) sales commissions incurred on the sale of such Product to such customers; (f) sales commissions incurred on the sale of such Product to such customers; (f) sales commissions incurred on the sale of such Product to such customers; (and (g) an allowance for uncollectible or bad debts determined in accordance with generally accepted accounting principles.

1.23. "<u>Neutropenia Agreement</u>" means an agreement to be negotiated between the parties, which will have terms comparable to those herein, and which has the effect of expanding the Field applicable to Syros's licenses to API and Products to include the treatment of neutropenia in humans.

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1.24. "Patent Family 3" means the Patent Rights identified as "Family 3" in Exhibit A.

1.25. "<u>Patent Rights</u>" mean patents, patent applications, utility models, and certificates of invention and other governmental grants for the protection of inventions (including any provisional application, continuation, continuation-in-part, divisional, reissue, renewal, re-examination, extension, or supplementary protection certificate granted in relation thereto, as well as any utility model, innovation patent, petty patent, patent of addition, inventor's certificate or equivalent in any country or jurisdiction).

1.26. "<u>Person</u>" means an individual, corporation, partnership, limited liability company, trust, business trust, association, joint stock company, joint venture, pool, syndicate, sole proprietorship, unincorporated organization, governmental authority or any other form of entity not specifically listed herein.

1.27. "<u>Phase I Clinical Trial</u>" means any human clinical trial (whether including a phase 1a or a phase 1b trial) in any country, the principal purpose of which is a preliminary determination of safety in individuals or patients, that would satisfy the requirements of 21

C.F.R. §312.21(a), or an equivalent clinical study required by a Competent Authority outside of the United States.

1.28. "<u>Phase II Clinical Trial</u>" means any human clinical trial conducted in any country, intended to explore multiple doses, dose response and duration of effect to generate initial evidence of safety and activity in a target patient population, that would satisfy the requirements of 21 C.F.R. §312.21(b), or an equivalent clinical study required by a Competent Authority outside of the United States.

1.29. "<u>Phase III Clinical Trial</u>" means any human clinical trial in any country that would satisfy the requirements of 21 C.F.R. §312.21(c), or an equivalent clinical study required by a Competent Authority outside of the United States.

1.30. "<u>Product</u>" means any pharmaceutical product made from or comprising API for human use in the Field.

1.31. "<u>Registration</u>" means any and all permits, licenses, authorizations, registrations or regulatory approvals (including NDAs) required or granted by any Competent Authority as a prerequisite to the development, manufacturing, packaging, marketing or selling of any Product.

1.32. "<u>Royalty Term</u>" means, with respect to each Product in each country, the term, if any, during which (a) a Valid Claim remains in effect and would be infringed but for the license granted by this Agreement, by the use, offer for sale, sale or import of such Product in such country in the Field and (b) no Third Party generic product that has received marketing approval pursuant to an abbreviated regulatory process under which the applicable Third Party or Competent Authority has relied on data or other information in any Registration for the applicable Product is commercially available in such country.

1.33. "<u>Sales API</u>" means API supplied by TMRC to Syros pursuant to the Supply Agreement (or otherwise supplied by TMRC to Syros as mutually agreed by the parties).

1.34. "<u>Supply Agreement</u>" means a supply agreement to be entered into between TMRC and Syros that includes the terms set forth in <u>Exhibit D</u>, and other reasonable and

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customary terms, including specifications and conditions of delivery, mutually agreed upon by the TMRC and Syros, pursuant to which TMRC shall supply Syros's requirements for Sales API to Syros and Syros shall purchase its requirements for Sales API from TMRC.

1.35. "Technology" means the compound known as AM80 (Tamibarotene) listed on Exhibit B, in all formulations.

1.36. "<u>Territory</u>" means (a) North America (the United States of America, Canada, and Mexico); (b) Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom; and (c) any other country to which the EMA's regulatory jurisdiction extends.

1.37. "Third Party" means any Person other than TMRC, Syros and their respective Affiliates.

1.38. "<u>TMRC IP Rights</u>" means TMRC's own rights and rights TMRC has the right to license consisting of: (1) (i) the patents and patent applications listed in <u>Exhibit A</u>; (ii) the foreign equivalent and national phase patent applications of (i); (iii) the patents proceeding from (i) and (ii); (iv) all claims of continuations-in-part that are entitled to the benefit of the priority date of (i) or any applications set forth in (i)-(iv) above, so long as said patents have not been held invalid and/or unenforceable by a court of competent jurisdiction from which there is no appeal or, if appealable, from which no appeal has been taken; (2) clinical data and preclinical data for Technology controlled by, or belonging to, TMRC; (3) Letter(s) of Authorization to reference the contents of the drug master file of TMRC's licensor for Technology and all rights associated with and contents of the manufacturing records and analytical records of Technology which TMRC has rights to license; and (4) Know-how rights and Patent Rights that are Controlled by TMRC as of the Effective Date or come into the Control of TMRC at any time after the Effective Date that related to AM80 (Tamibarotene).

1.39. "Toko" means Toko Pharmaceutical Ind. Co., Ltd., a Japanese corporation.

1.40. "<u>Toko Agreement</u>" means the agreement between Toko and TMRC entitled "License Agreement for the development et al. of retinoid based drug in foreign countries" dated August 15, 2008.

1.41. "<u>Toko Information</u>" means information which is (a) owned, controlled or disclosed by Toko; and (b) subject to the provisions of the Toko Agreement.

1.42. "Toko Letter Agreement" means a Consent and Stand-by License between Toko and Syros that is substantially in the form of Exhibit \underline{E} and reasonably satisfactory to Syros.

1.43. "<u>Valid Claim</u>" means (a) any claim in any issued and unexpired patent within the Licensed Patent Rights that has not been disclaimed, revoked or held invalid or unenforceable by a decision of a court or other governmental authority of competent jurisdiction from which no

appeal can be taken, or with respect to which an appeal is not taken within the time allowed for appeal, and that has not been disclaimed or admitted to be invalid or unenforceable through reissue, disclaimer or otherwise; or (b) any claim of the Licensed Patent Rights in (a) that has not been finally abandoned or finally rejected and which has been pending for no more than [**] years from the date of filing of the earlier priority patent application.

2. <u>REPRESENTATIONS AND WARRANTIES</u>

Each party hereby represents and warrants to the other party as follows:

2.1. <u>Corporate Existence</u>. Such party is a corporation duly organized, validly existing and in good standing under the Laws of the jurisdiction in which it is incorporated.

2.2. <u>Authorization and Enforcement of Obligations</u>. Such party (a) has the corporate power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder, and (b) has taken all necessary corporate action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder. This Agreement has been duly executed and delivered on behalf of such party, and constitutes a legal, valid, binding obligation, enforceable against such party in accordance with its terms.

2.3. <u>No Consents</u>. All necessary consents, approvals and authorizations of all governmental authorities and other Persons required to be obtained by such party in connection with license of this Agreement have been obtained.

2.4. <u>No Conflict</u>. The execution and delivery of this Agreement and the performance of such party's obligations hereunder (a) do not conflict with or violate any requirement of applicable Laws, and (b) do not conflict with, or constitute a default under, any contractual obligation of such party.

In addition, TMRC hereby represents and warrants to Syros as follows:

2.5. <u>IP Rights</u>. TMRC (a) is the sole owner or exclusive licensee of, and Controls, the TMRC IP Rights, and except as set forth in <u>Exhibit F</u>, TMRC has not granted to any Third Party any license or other interest in the TMRC IP Rights in the Territory, (b) is not aware of any Third Party patent, patent application or other intellectual property rights that would be infringed (i) by practicing any process or method or by making, using or selling any composition which is claimed or disclosed in the Licensed Patent Rights or which constitutes Licensed Know-how Rights, or (ii) by making, using or selling Products, (c) Controls and has the right to license all TMRC IP Rights to Syros as provided herein (d) is not aware of any infringement or misappropriation by a Third Party of the TMRC IP Rights and (e)(i) all agreements relating to the Technology or any of the TMRC IP Rights between TMRC and Innovive Pharmaceuticals, Inc. (or its successors or assigns) (collectively, "<u>CytRx</u>") have been terminated, except for a [**], terminating all other such agreements, (ii) [**] TMRC has unfettered rights to use all data and documents generated by CytRx or TMRC [**] relating to the Technology or any of the TMRC IP Rights, including the unfettered right to license and transfer such data and documents to Syros as provided herein, (iii) all litigation between CytRx and TMRC has been settled and dismissed with prejudice and all claims between CytRx and TMRC have been released, in each case that pertain to the Technology or any of the TMRC IP Rights, and (iv) CytRx does not retain any

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right [**] or otherwise to terminate any right of TMRC to use or license data or documents generated by CytRx and TMRC pursuant to any agreement between CytRx and TMRC relating to the Technology or any of the TMRC IP Rights.

DISCLAIMER. EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT NOTHING IN THIS AGREEMENT 2.6. IS OR SHALL BE CONSTRUED AS (i) A WARRANTY OR REPRESENTATION BY TMRC AS TO THE VALIDITY OR SCOPE OF ANY LICENSED PATENT RIGHTS; (ii) A WARRANTY OR REPRESENTATION THAT ANYTHING MADE, USED, SOLD OR OTHERWISE DISPOSED OF UNDER ANY LICENSE GRANTED IN THIS AGREEMENT IS OR WILL BE FREE FROM INFRINGEMENT OF PATENTS OR OTHER INTELLECTUAL PROPERTY OF THIRD PARTIES; OR (iii) A REPRESENTATION OR WARRANTY BY TMRC OF THE ACCURACY, SAFETY OR USEFULNESS FOR ANY PURPOSE OF ANY TMRC KNOW-HOW AT ANY TIME MADE AVAILABLE BY TMRC. TMRC SHALL HAVE NO LIABILITY WHATSOEVER TO SYROS OR ANY OTHER PERSON FOR OR ON ACCOUNT OF ANY INJURY, LOSS OR DAMAGE, OF ANY KIND OR NATURE, SUSTAINED BY, OR ANY DAMAGE ASSERTED OR ASSERTED AGAINST, OR ANY OTHER LIABILITY INCURRED BY OR IMPOSED ON SYROS OR ANY OTHER PERSON, ARISING OUT OF IN CONNECTION WITH OR RESULTING FROM (A) THE PRODUCTION, USE OR SALE OF ANY PRODUCT BY SYROS, OR THE PRACTICE OF THE LICENSED PATENT RIGHTS BY SYROS; OR (B) THE USE BY SYROS OF ANY TMRC KNOW-HOW, AND SYROS SHALL HOLD TMRC, OR ITS OFFICERS, EMPLOYEES OR AGENTS, HARMLESS IN THE EVENT TMRC, OR ITS OFFICERS, EMPLOYEES OR AGENTS, IS HELD LIABLE THEREFOR, EXCEPT TO THE EXTENT RESULTING FROM A BREACH BY TMRC OF ITS REPRESENTATIONS, WARRANTIES OR OBLIGATIONS HEREUNDER OR THE NEGLIGENCE OR WILLFUL MISCONDUCT OF TMRC OR ITS OFFICERS, EMPLOYEES OR AGENTS.

3. <u>LICENSES AND OTHER GRANTS OF RIGHTS; OTHER AGREEMENTS</u>

3.1. <u>TMRC IP Rights</u>.

3.1.1. <u>Grant</u>. TMRC hereby grants to Syros an exclusive license (with the right to grant sublicenses) under the TMRC IP Rights (excluding Patent Rights as to which Syros has opted out of pursuant to Section 9.2) to conduct research and to develop, Make, Have Made, use, offer for sale, sell and import Products in the Territory for use in the Field, provided that Syros shall not exercise

such make and have made rights in any manner that conflicts with TMRC's rights to supply under the Supply Agreement. Syros shall not use TMRC IP Rights to make or have made API except as set forth in the Supply Agreement (or other agreement between the parties) or in the Toko Letter Agreement.

3.1.2. <u>Ex-Territory Development</u>. TMRC hereby grants to Syros a non-exclusive license (with the right to grant sublicenses) under the TMRC IP Rights to conduct research, to develop and to use Products outside the Territory (excluding all Asian countries) solely for the purpose of developing and commercializing Products for use in the Field in the Territory. For clarity, Syros shall not use TMRC IP Rights for the purpose of researching, developing or commercializing Products for use in the Field outside the Territory.

3.1.3. <u>Manufacture</u>. TMRC hereby grants to Syros a non-exclusive license (with the right to grant sublicenses) under the TMRC IP Rights to Make and Have Made Products inside and outside the Territory solely for the purpose of manufacturing Products for use in the Field in the Territory, provided that Syros shall not exercise such Make and Have Made rights in any manner that conflicts with TMRC's rights to supply under the Supply Agreement.

3.2. Information Transfer. TMRC shall, within [**] days after the Effective Date, provide Syros with all information that was made available to Syros in the Data Room and any other Licensed Know-how Rights possessed by TMRC or its Affiliates or in respect of which TMRC or its Affiliates otherwise have the right to grant licenses as of the Effective Date. Thereafter, on at least a [**] basis or more frequently as may be requested by Syros, TMRC shall provide Syros with updates to any chemistry, manufacturing and controls information relating to the Technology possessed by or otherwise available to TMRC or its Affiliates, if any, and with copies of or access to any other information within the Licensed Know-how Rights that Syros may request to satisfy requirements for Registrations or other required submissions to Competent Authorities, including source data and documents underlying any Registration and/or other regulatory documents to which Syros's Right of Reference under Section 3.3 applies.

3.3. <u>Registrations; Right of Reference</u>. TMRC acknowledges and agrees that Syros shall own all Registrations for Products for use in the Field in each country in the Territory. TMRC hereby grants to Syros a fully paid-up, royalty-free right to reference and use and have full access to all Registrations held by TMRC or its Affiliates as of the Effective Date and all other regulatory documents held by TMRC or its Affiliates after the Effective Date that relate to chemistry, manufacturing and controls information for the manufacture of Products, and any supplements, amendments or updates to any of the foregoing (collectively, the "<u>Right of Reference</u>") which TMRC or its Affiliates have the right to grant. Syros shall have the right to license or sublicense the Right of Reference to its Affiliates or sublicensees. TMRC shall promptly notify Syros of any written or oral notices received from, or inspections by any Competent Authority relating to any such Registrations, and shall promptly inform Syros of any responses to such written notices or inspections and the resolution of any issue raised by such Competent Authority.

3.4. <u>Information Sharing Regarding Planned Clinical Trials</u>. Each party will use commercially reasonable efforts to share information regarding Clinical Trials to be conducted by such party or any of its Affiliates or (sub)licensees, which information shall be maintained as Confidential Information of the Disclosing Party and used solely for development, manufacture and commercialization of Products as permitted hereunder.

3.5. <u>Pharmacovigilance Agreement</u>. The parties' responsibilities concerning adverse drug reactions, safety information and compliance with regulatory requirements with respect thereto will be detailed in a separate pharmacovigilance agreement to be mutually agreed upon by the parties as soon as practicable after the Effective Date, and in any event no later than [**] days after the Effective Date.

3.6. <u>Initial Clinical Supply Order</u>. Syros may submit to TMRC and TMRC shall accept and agree to fulfill, a firm order for clinical supply of Product in substantially the form set forth in <u>Exhibit G</u>.

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3.7. <u>Purchase</u>. Subject to the parties entering into the Supply Agreement and the terms and conditions thereof, Syros shall purchase from TMRC all of Syros's requirements of Sales API under this Agreement, which is needed for manufacturing the Products for sales after approval and for use in clinical trials

3.8. <u>Price</u>. Subject to the parties entering into the Supply Agreement and the terms and conditions thereof, Syros shall pay TMRC \$[**] per kilogram of Sales API for sales after approval and for use in clinical trials.

3.9. <u>Clinical Supply Agreement</u>. The parties shall use commercially reasonable efforts to negotiate and enter into the Supply Agreement on the basis of the terms set forth in <u>Exhibit D</u> within sixty (60) days after the Effective Date; <u>provided</u> that neither party shall be obligated to enter into the Supply Agreement unless and until all of the terms thereof, including terms in addition to those set forth in <u>Exhibit D</u>, are reasonably satisfactory to such party.

3.10. <u>Neutropenia Agreement</u>. During the [**] months following the Effective Date, unless Syros otherwise notifies TMRC in writing, the parties shall use commercially reasonable efforts to negotiate in good faith and enter into the Neutropenia Agreement, and TMRC agrees that neither it nor any of its Affiliates shall negotiate or otherwise discuss or provide any information regarding the Technology with respect to the treatment of neutropenia in humans in the Territory with or to any Third Party.

4.1. <u>Royalties</u>. Subject to Section 4.2, in consideration for the licenses granted to Syros herein, Syros shall pay to TMRC royalties on annual Net Sales of each Product by Syros, its Affiliates and its sublicensees, equal to:

(i) [**] percent ([**]%) of calendar year Net Sales of such Product up to US\$[**] in such Net Sales, and

(ii) [**] percent ([**]%) of calendar year Net Sales of such Product over US\$[**] in such Net Sales;

provided, however, that during any period within the Royalty Term in which the Valid Claims of Licensed Patent Rights that are pending claims are in effect, the foregoing royalty rates shall be reduced by half.

4.2. <u>Royalty Term</u>. Royalties as calculated pursuant to Section 4.1 shall be payable on Net Sales during the Royalty Term for the applicable Product in the applicable country in the Field. For purposes of determining the applicable royalty tier specified in Sections 4.1 for calendar year Net Sales, only Net Sales of the applicable Product in the Field made during the Royalty Term therefor shall be counted. Following expiration of the Royalty Term applicable to a Product in the Field in a country, Syros' licenses under Section 3.1 shall become fully paid up, non-royalty-bearing and perpetual.

4.3. <u>Combination Products</u>. If a Product comprises both AM80 (Tamibarotene) and another active pharmaceutical ingredient, then for purposes of the royalty payments under

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Section 4.1 for Net Sales of such Product in the Field, such Net Sales, prior to the royalty calculation set forth in Section 4.1, shall first shall be multiplied by the fraction A/(A+B), where A is the value of the AM80 (Tamibarotene) component, and B is the value of the other active pharmaceutical ingredient, each as reasonably determined by Syros, and such resulting amount shall be the "Net Sales" for purposes of the royalty calculation in Section 4.1 for such Product.

4.4. <u>Allocation Between Fields</u>. If a Product is sold in both the Field (as defined in this Agreement) and the Field (as defined in the Neutropenia Agreement in the same country, then the parties shall mutually agree on a method for allocating the resulting Net Sales between such fields for purposes of determining the applicable royalty tiers pursuant to Section 4.1 of this Agreement and the Neutropenia Agreement, which method shall be based on such Third Party market data (such as IMS Health data) as the parties shall reasonably agree.

4.5. <u>Upfront and Milestone Payments</u>. Syros shall pay to TMRC the following one-time and non-refundable upfront payments (#1 and #2) and one-time (per indication) and non-refundable milestone payments (#3-#9 or #5-#9, as applicable) for each cancer indications within, in the case of upfront payments, [**] days following the Effective Date, and, in the case of milestone payments, [**] days following the first achievement of the corresponding milestones:

1. Upfront paymentUS\$500,0002. Execution of Supply Agreement and Toko Letter AgreementUS\$[**] and such additional amounts as are applicable in
accordance with Exhibit C

The following milestone payments apply to the first indication and any subsequent indication, except for [**].

 Dosing of a first subject in a Phase I Clinical Trial of a Product an indication in the Field Dosing of a first subject in a Phase II Clinical Trial of a Product 	US\$500,000
an indication in the Field	US\$500,000
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
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The following milestone payments apply solely to a second indication where the [**] and, in the event that such milestones apply, are in lieu of the milestones set forth in the table above with respect to the second indication:

[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]
[**]	[**]

For the purposes of this Section 4.5, an "indication" means a distinct tumor type (*i.e.*, irrespective of patient subpopulations) that is tested in a separate Clinical Trial.

milestone payment will become payable upon the achievement of the next milestone for such Product for such indication in the applicable region (*i.e.*, [**], as applicable).

4.6. <u>Full Compensation</u>. The consideration set forth in this Section 4 is the only compensation due from Syros to TMRC, and TMRC shall be responsible for all of its costs and expenses for performance hereunder, including any payments made to any Third Party licensors.

5. <u>ROYALTY REPORTS AND ACCOUNTING</u>

5.1. <u>Royalty Reports</u>. Within [**] days after the end of each calendar quarter during the term of this Agreement following the First Commercial Sale of a Product, Syros shall furnish to TMRC a quarterly written report showing in reasonably specific detail, on a Product-by-Product and country-by-country basis: (a) Net Sales during such calendar quarter; (b) the calculation of the royalties, if any, that shall have accrued based upon such Net Sales; (c) the withholding taxes, if any, required by applicable Law to be deducted with respect to such sales; and (d) the exchange rates, if any, used in determining Net Sales in United States dollars. With respect to sales of Products invoiced in United States dollars, the gross sales, Net Sales and royalties payable shall be expressed in United States dollars. With respect to Net Sales invoiced in a currency other than United States dollars, all such amounts shall be expressed both in the currency in which the distribution is invoiced and in the United States dollar equivalent. The United States dollar equivalent shall be calculated using the average of the exchange rate (local currency per US\$1) published in <u>The Wall Street Journal</u>, Western Edition, under the heading "Currency Trading" on the last business day of each month during the applicable calendar quarter.

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5.2. <u>Audits</u>.

5.2.1. Upon the written request of TMRC and not more than [**], Syros shall permit an independent certified public accounting firm of internationally recognized standing selected by TMRC and reasonably acceptable to Syros, at TMRC's expense, to have access during normal business hours to such of the financial records of Syros as may be reasonably necessary to verify the accuracy of the payment reports hereunder for the [**] immediately prior to the date of such request (other than records for which TMRC has already conducted an audit under this Section).

5.2.2. If such accounting firm concludes that additional amounts were owed during the audited period, Syros shall pay such additional amounts within [**] days after the date TMRC delivers to Syros such accounting firm's written report so concluding. The fees charged by such accounting firm shall be paid by TMRC; provided, however, that if the audit determines that the royalties payable by Syros for such period are more than [**] percent ([**]%) of the royalties actually paid for such period, then Syros shall pay the reasonable fees and expenses charged by such accounting firm.

5.2.3. TMRC shall cause its accounting firm to retain all financial information subject to review under this Section 5.2 in strict confidence; <u>provided</u>, <u>however</u>, that Syros shall have the right to require that such accounting firm, prior to conducting such audit, enter into an appropriate non-disclosure agreement with Syros regarding such financial information. The accounting firm shall disclose to TMRC only whether the reports are correct or not and the amount of any discrepancy. No other information shall be shared. TMRC shall treat any such financial information as Syros' Confidential Information

6. <u>PAYMENTS</u>

6.1. <u>Payment Terms</u>. Royalties shown to have accrued by each royalty report provided for under Section 5.1 above shall be due on the date such royalty report is due. Payment of royalties in whole or in part may be made in advance of such due date.

6.2. <u>Exchange Control</u>. If at any time legal restrictions prevent the prompt remittance of part or all royalties with respect to any country in the Territory where the Product is sold, Syros shall have the right, in its sole discretion, to make such payments by depositing the amount thereof in local currency to TMRC's account in a bank or other depository institution in such country. If the royalty rate specified in this Agreement should exceed the permissible rate established in any country, the royalty rate for sales in such country shall be adjusted to the highest legally permissible or government-approved rate.

6.3. <u>Withholding Taxes</u>. Syros shall be entitled to deduct the amount of any withholding taxes, value-added taxes or other taxes, levies or charges with respect to amounts payable hereunder to TMRC by Syros, its Affiliates or sublicensees, and the amount of any taxes required to be withheld by Syros, its Affiliates or sublicensees with respect to amounts payable hereunder to TMRC, to the extent Syros, its Affiliates or sublicensees pay to the appropriate governmental authority on behalf of TMRC such taxes, levies or charges. Syros shall use reasonable efforts to minimize any such taxes, levies or charges required to be paid on behalf of TMRC by Syros, its Affiliates or sublicensees. Syros promptly shall deliver to TMRC proof of

payment of all such taxes, levies and other charges, together with copies of all communications from or with such governmental authority with respect thereto.

7. <u>DEVELOPMENT OBLIGATIONS</u>

7.1. <u>Development Efforts</u>. As between the parties, Syros shall solely control and fund all Product development activities as

to Products in the Field for any of the Territory. Syros, together with its Affiliates and sublicensees, shall use commercially reasonable efforts to: (a) commence development activities in the Field within one (1) year after the Effective Date; (b) to develop a Product for at least one indication in the Field; and (c) following marketing approval, market the Product. Following the Effective Date, Syros shall promptly begin preparation for an IND filing. Such commercially reasonable efforts shall require Syros to use the level of efforts and resources that Syros generally uses for products of comparable market potential at comparable stage of development, taking into account relevant costs and risks of development and commercialization, including relevant legal, regulatory, scientific, competitive and commercial factors.

7.2. <u>Records</u>. Syros shall maintain records, in sufficient detail and in good scientific manner, which shall reflect all work done and results achieved in the performance of its development regarding the Products.

7.3. <u>Reports</u>. Within [**] days following the end of each quarter during the term of this Agreement prior to the first marketing approval of a Product in each Field in the Territory, Syros shall prepare and deliver to TMRC a written summary report which shall describe (a) the progress of the development and testing of Product(s) in the Field together with a summary of the enrollment of then-active Clinical Trials, and (b) the status of obtaining regulatory approvals to market Product(s) in the Territory in each Field, and Syros shall inform TMRC of the commencement of Clinical Trials and receipt of regulatory approvals from time to time. The parties shall hold a conference call on a quarterly basis at a mutually agreed upon time after TMRC's receipt of the report mentioned above.

8. <u>CONFIDENTIALITY</u>

8.1. <u>Confidential Information</u>. During the term of this Agreement, and for a period of [**] years following the expiration or earlier termination hereof (or, for Toko Information, for such longer period as may be required by the Toko Agreement), each Receiving Party shall maintain in confidence all Confidential Information of the Disclosing Party, and shall not use, disclose or grant the use of the Confidential Information except on a need-to-know basis to those directors, officers, affiliates, employees, to the extent such disclosure is reasonably necessary in connection with performing its obligations or exercising its rights, including its rights to develop and commercialize the Product, under this Agreement. To the extent that disclosure is authorized by this Agreement, prior to disclosure, each Receiving Party shall obtain agreement of any such Person to hold in confidence and not make use of the Confidential Information for any purpose other than those permitted by this Agreement. Each Receiving Party shall notify the Disclosing Party promptly upon discovery of any unauthorized use or disclosure of the Disclosing Party's Confidential Information.

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8.2. <u>Permitted Disclosures</u>. The confidentiality obligations contained in Sections 8.1 above and 8.3 below shall not apply to the extent that any Receiving Party is required (a) to disclose information by Law, including disclosure obligations under applicable securities Laws, or (b) to disclose information to any governmental authority for purposes of obtaining approval to test or market a product, <u>provided that</u> in either case that the Receiving Party shall provide written notice thereof to the Disclosing Party and sufficient opportunity to object to any such disclosure or to request confidential treatment thereof. Notwithstanding any other provision of this Agreement, Syros may disclose Confidential Information of TMRC relating to information developed pursuant to this Agreement: (x) to any Person who is permitted licensees, permitted assignees or agents, consultants, clinical investigators or clinical contractors, to the extent such disclosure is reasonably necessary in connection with performing its obligations or exercising its rights to develop and commercialize the Product under this Agreement as long as such Person has entered into a confidentiality agreement with Syros; (y) in connection with the normal course of development and commercialization of Products for the Territory, including for the filing of Registrations and satisfaction of reporting obligations to Competent Authorities and for the filing and prosecution of Patent Rights; and (z) TMRC may disclose Confidential Information of Syros, including the terms of this Agreement, to Toko, Dr. Shudo and Itsuu Laboratory to the extent such disclosure is reasonably necessary in connection with performing its obligations hereunder or under the Supply Agreement as long as Toko, Dr. Shudo and Itsuu Laboratory have entered into a confidentiality agreement with TMRC.

8.3. Press Releases and Other Public Announcements.

8.3.1. The parties will cooperate in the release of a mutually agreed press release following the Effective Date at a time to be determined by Syros. The parties also recognize that each party may from time to time desire to issue additional press releases and make other public statements or disclosures regarding specific terms of this Agreement, which may be made pursuant to Section 8.3.3 below.

8.3.2. Syros may from time to time issue additional press releases and make other public statements or disclosures regarding the progress of its development or commercialization of Technology and Products hereunder without the need to obtain TMRC's prior consent, so long as such press releases, other public statements or disclosures do not reference TMRC or disclose specific terms of this Agreement that have not previously been made public pursuant to this Section 8.3.

8.3.3. Notwithstanding the foregoing provisions of this Section 8.3, (a) a party may make any disclosure or public announcement if the contents of such disclosure or public announcement have previously been made public other than through a breach of this Agreement by the issuing party; (b) if a party reasonably determines that a public disclosure shall be required by Law, including in a public filing with the U.S. Securities and Exchange Commission or applicable stock exchange (including in connection with an initial public offering), such party may disclose specific terms of this Agreement where so required; <u>provided that</u> such party shall, to the extent practicable and permitted by applicable Law, notify the other party and allow the other party to comment on the proposed disclosure, which comments shall be considered by the party obligated to make such public disclosure in good faith; and (c) a party may disclose the terms of this Agreement to *bona fide* potential or actual advisors, consultants, investors,

acquirers, lenders, investment bankers or other potential financial partners in connection with such party's proposed financing or business combination activities, and to *bona fide* potential or actual sublicensees, as reasonably necessary in connection with a permitted sublicense or license under the rights granted in this Agreement, in each case of (c) provided that such person is under an appropriate obligation of confidentiality.

9. <u>PATENTS</u>

9.1. <u>Patent Prosecution and Maintenance</u>. Except for Patent Family 3 (as to which responsibility for the preparation, filing, prosecution and maintenance shall remain with TMRC, at TMRC's sole cost), Syros shall, subject to Section 9.2, control, at Syros' cost, the preparation, filing, prosecution and maintenance of all patents and patent applications within the Licensed Patent Rights in the Territory. Syros shall give TMRC an opportunity to review and comment on the text of each such patent application, and the preparation, filing and prosecution thereof, and shall supply TMRC with a copy of such patent application as filed, together with notice of its filing date and serial number. TMRC shall cooperate with Syros, execute all lawful papers and instruments and make all rightful oaths and declarations as may be necessary for Syros' preparation, prosecution and maintenance of patents and other filings referred to in this Section 9.1.

9.2. <u>Abandonment; Reverted Patents</u>. If Syros, in its sole discretion, decides to abandon or not pursue the preparation, filing, prosecution or maintenance of any patent or patent application in the Licensed Patent Rights (other than Patent Family 3), then Syros shall notify TMRC in writing thereof and following the date of such notice TMRC may control, at TMRC's cost, the preparation, filing, prosecution and maintenance of such patents and patent applications. If Syros decides to abandon or not pursue the preparation, filing, prosecution or maintenance of any patent or patent applications. If Syros decides to abandon or not pursue the preparation, filing, prosecution or maintenance of any patent or patent application within any of the Licensed Patent Rights in any country of the Territory, Syros's rights to prosecute, maintain and enforce such patent in such country will revert to TMRC, and such reverted patent in such country shall be excluded from the Licensed Patent Rights thereafter. In the event that, as a result of such a reversion, Syros infringes a patent of TMRC, then TMRC shall promptly inform Syros thereof, and Syros and TMRC shall negotiate regarding TMRC granting a license with respect to such reverted patent, as long as TMRC still Controls such reverted Patent Rights. If such reverted Patent Rights are still Controlled by TMRC, Syros has the option to obtain a license from TMRC to such Patent Rights by paying TMRC [**] times TMRC's out-of-pocket patent prosecution and maintenance expenses for such Patent Rights in the Field and in the applicable country in the Territory.

9.3. <u>IP Representations</u>. Subject to Section 9.1, TMRC represents and warrants to Syros that as of the Effective Date and throughout the term of this Agreement TMRC has and shall maintain, together with its Affiliates and licensors, Licensed Patent Rights in the Territory to control the preparation, filing, prosecution and maintenance of all patents and patent applications within the Licensed Patent Rights and also to grant to Syros the right to prepare, file, prosecute and maintain the Licensed Patent Rights in accordance with Section 9.1.

9.4. <u>Patent Family 3</u>. TMRC shall control, at TMRC's cost, the preparation, filing, prosecution and maintenance of all patents and patent applications in Patent Family 3.

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9.5. <u>Notification of Infringement</u>. Each party shall notify the other party of any infringement in the Territory known to such party of any Licensed Patent Rights by a product that is competitive with the Products and shall provide the other party with the available evidence, if any, of such infringement.

9.6. Enforcement of Patent Rights. Syros, at Syros' expense, shall have the right to determine the appropriate course of action to enforce Licensed Patent Rights (except for any Patent Rights that have reverted to TMRC in accordance with Section 9.2) in the Territory or otherwise abate the infringement thereof, to take (or refrain from taking) appropriate action to enforce Licensed Patent Rights in the Territory, to defend any declaratory judgments seeking to invalidate or hold the Licensed Patent Rights unenforceable in the Territory, to control any litigation or other enforcement action and to enter into, or permit, the settlement of any such litigation, declaratory judgments or other enforcement action with respect to Licensed Patent Rights in the Territory, in each case in Syros' own name and, if required by Law, in the name of TMRC and shall consider, in good faith, the interests of TMRC in so doing. If Syros does not, within [**] days of receipt of notice from TMRC, abate the infringement or file suit to enforce the Licensed Patent Rights against at least one infringing party in the Territory, TMRC shall have the right to take whatever action it reasonably deems appropriate to enforce the Licensed Patent Rights; provided that TMRC shall consider, in good faith, the interests of Syros in so doing. The party controlling any such enforcement action shall not settle the action or otherwise consent to an adverse judgment in such action that diminishes the rights or interests of the non-controlling party without the prior written consent of the other party. All monies recovered upon the final judgment or settlement of any such suit to enforce the Licensed Patent Rights shall be shared, after reimbursement of expenses, in relation to the damages suffered by each party.

9.7. <u>Cooperation</u>. In any suit to enforce or defend the License Patent Rights pursuant to this Section 9, the party not in control of such suit shall, at the request and expense (for out-of-pocket costs only) of the controlling party, cooperate in all respects and, to the extent possible, have its employees testify when requested and make available relevant records, papers, information, samples, specimens, and the like.

10. TERMINATION

10.1. <u>Expiration</u>. Subject to Sections 10.2, 10.3, 10.4, 10.5, 10.6 and 10.7 below, this Agreement shall expire on the expiration of the last to expire Royalty Term or fifteen (15) years from the date of the First Commercial Sale of the Product in the

Territory, whichever is later.

10.2. <u>Termination by Syros</u>. At any time after the first anniversary of the Effective Date, Syros shall have the right at its sole discretion to terminate this Agreement upon ninety (90) days advanced written notice to TMRC for reasons such as data or results of development, issues of safety or efficacy, costs and risks of development, manufacturing and supply issues, competitive dynamics, market dynamics, government regulation and regulatory issues or pricing strategy and expected profitability from the commercialization of Products.

10.3. <u>Termination for Supply Agreement and Related Matters</u>. In the event that each of the following events have not taken place within sixty (60) days after the Effective Date, Syros shall have the right to terminate this Agreement by providing written notice to TMRC: (a) the parties

have not entered into the Supply Agreement and (b) Toko and Syros have not executed and delivered to one another the Toko Letter Agreement and in such event: (x) Syros shall have no further commitment or restriction after the effectiveness of such termination; (y) TMRC shall be entitled to retain such payments as have been made by Syros prior to the effectiveness of such termination; and (z) TMRC shall not license any TMRC IP Rights in the Field in the Territory to a Third Party or Affiliate of TMRC for a period of [**] months after the effective date of such termination.

10.4. <u>Termination by Syros for Breach</u>. Except as otherwise provided in Section 12, Syros may terminate this Agreement upon or after the material breach of this Agreement by TMRC if TMRC has not cured such breach in all material respects within [**] days after notice thereof by Syros; <u>provided</u>, <u>however</u>, that if any default is not capable of being cured within such [**] day period and TMRC is diligently undertaking to cure such default as soon as commercially feasible thereafter under the circumstances, Syros shall have no right to terminate this Agreement pursuant to this Section 10.4.

10.5. <u>Termination by TMRC</u>. Except as otherwise provided in Section 12, TMRC may terminate this Agreement upon or after the material breach of this Agreement by Syros if Syros has not cured such breach in all material respects within [**] days after notice thereof by TMRC; <u>provided</u>, <u>however</u>, that if any default is not capable of being cured within such [**] day period and Syros is diligently undertaking to cure such default as soon as commercially feasible thereafter under the circumstances, TMRC shall have no right to terminate this Agreement pursuant to this Section 10.5. Notwithstanding termination by TMRC under this Section 10.5, any royalties or milestone payments that have accrued prior to such termination shall survive such termination.

10.6. <u>Insolvency or Bankruptcy</u>. To the extent permitted by applicable Laws, either party may, in addition to any other remedies available to it by Law or in equity, terminate this Agreement, in whole or in part, by written notice to the other party in the event the other party shall have become insolvent or bankrupt, or shall have made assignment for the benefit of its creditors, or there shall have been appointed a trustee or receiver of the other party. The parties agree that, in the event of the commencement of a bankruptcy proceeding by or against TMRC or Syros under applicable Laws that has not been dismissed or resolved within [**] days, the other party shall be entitled to a complete duplicate of (or complete access to, as appropriate) any intellectual property obtained in the course of development of the Product and all embodiments of such intellectual property shall be promptly delivered to it upon any such termination of this Agreement, upon expiration of such [**] day period upon its written request therefor, unless the insolvent or bankrupt party elects to continue to perform all of its obligations under this Agreement.

10.7. Effect of Expiration or Termination.

10.7.1. Expiration or termination of this Agreement shall not relieve the parties of any right or obligation accruing prior to such expiration or termination, and the provisions of Sections 4.2, 8, 10.3, 10.7, 11 and 13 shall survive the expiration or termination of this Agreement.

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10.7.2. Upon any termination of this Agreement, at Syros' request, TMRC shall grant a direct license to any sublicensee of Syros hereunder having the same scope as the sublicense granted to such sublicensee by Syros and on terms and conditions no less favorable to such sublicensee than the terms and conditions of this Agreement, <u>provided</u> that such sublicensee is not in default of any applicable obligations under this Agreement and agrees in writing to be bound by the terms and conditions of such direct license.

10.7.3. Upon a termination of this Agreement under Sections 10.2 or 10.5 or a termination by TMRC under Section 10.6, (a) Syros shall, within [**] days after the effective date of such termination, provide TMRC with any data generated by Syros or its Affiliates as part of a Clinical Trial of the Technology; and (b) Syros hereby grants TMRC, effective as of the effective date of such termination, a Right of Reference to Registrations held by Syros or its affiliates as of the effective date of such termination that relate to the Technology, which TMRC may sublicense to its Affiliates or sublicensees.

11. INDEMNIFICATION

11.1. <u>Indemnification</u>. Each party shall defend, indemnify and hold harmless the other party from all losses, liabilities, damages and expenses (including attorneys' fees and costs) incurred as a result of any Third Party claim, demand, action or proceeding arising out of any breach of this Agreement by the indemnifying party, or the gross negligence or willful misconduct of the indemnifying party in the performance of its obligations under this Agreement, except in each case to the extent arising from the gross negligence or willful misconduct of the other party or the breach of this Agreement by the other party.

11.2. Procedure. The indemnified party shall promptly notify the indemnifying party of any liability or action in respect of which the indemnified party intends to claim such indemnification and the indemnifying party shall have the right to assume the defense thereof with counsel selected by the indemnifying party. The indemnity agreement in this Section 11 shall not apply to amounts paid in settlement of any loss, claim, damage, liability or action if such settlement is effected without the consent of the indemnifying party, which consent shall not be withheld unreasonably. The failure to deliver notice to the indemnifying party within a reasonable time after the commencement of any such action, if prejudicial to its ability to defend such action, shall relieve the indemnifying party of any liability to the indemnified party under this Section 11, but the omission so to deliver notice to the indemnifying party will not relieve it of any liability that it may have to the indemnified party otherwise than under this Section 11. The indemnified party under this Section 11, and its employees and agents, shall cooperate fully with the indemnifying party and its legal representatives in the investigation and defense of any action, claim or liability covered by this indemnification.

11.3. <u>Insurance</u>. Syros shall maintain product liability insurance with respect to the research, development, manufacture and sales of Products by Syros in such amount as Syros customarily maintains with respect to the research, development, manufacture and sales of its similar products. Syros shall maintain such insurance for so long as it continues to research, develop, manufacture or sell any Products, and thereafter for so long as Syros customarily maintains insurance covering the research, development, manufacture or sale of its similar products.

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12. FORCE MAJEURE

Neither party shall be held liable or responsible to the other party nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement to the extent, and for so long as, such failure or delay is caused by or results from causes beyond the reasonable control of the affected party including fire, floods, embargoes, war, acts of war (whether war be declared or not), acts of terrorism, insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, acts of God or acts, omissions or delays in acting by any governmental authority or the other party.

13. <u>MISCELLANEOUS</u>

13.1. <u>Notices</u>. Any consent, notice or report required or permitted to be given or made under this Agreement by one of the parties hereto to the other party shall be in writing, delivered by any lawful means to such other party at its address indicated below, or to such other address as the addressee shall have last furnished in writing to the addressor and (except as otherwise provided in this Agreement) shall be effective upon receipt by the addressee.

If to TMRC:	TMRC Co., Ltd. 1-12-12 Kita Shinjuku Shinjuku-ku, Tokyo, 164-0074, Japan Attention: Research & Development Department
If to Syros:	Syros Pharmaceuticals, Inc. 620 Memorial Drive, Suite 300 Cambridge, MA 02139, U.S.A. Attention: Chief Business Officer

13.2. <u>Governing Law</u>. This Agreement shall be governed by and construed in accordance with the Laws of the State of California, without regard to the conflicts of Law principles thereof

13.3. <u>Arbitration</u>. Any dispute, controversy or claim initiated by either party arising out of or relating to this Agreement, its negotiations, execution or interpretation, or the performance by either party of its obligations under this Agreement (other than (a) any dispute, controversy or claim regarding the validity, enforceability, claim construction or infringement of any patent rights, or defenses to any of the foregoing, or (b) any bona fide third party action or proceeding filed or instituted in an action or proceeding by a Third Party against a party to this agreement), whether before or after termination of this Agreement, shall be finally resolved by binding arbitration. Whenever a party shall decide to institute arbitration proceedings, it shall give prompt written notice to that effect to the other party. Any such arbitration shall be conducted in the English language under the International Dispute Resolution Procedures and Arbitration Rules of the American Arbitration Association (the "<u>Rules</u>") by a panel of three (3) arbitrators appointed in accordance with such Rules. Any such arbitration shall be held in Los Angeles, California. The method and manner of discovery in any such arbitration proceedings shall be governed by the Rules. The arbitrators shall have the authority to grant specific performance and

to allocate between the parties the costs of arbitration (including attorneys' fees and expenses of the parties) in such equitable manner as they determine.

Judgment upon the award so rendered may be entered in any court having jurisdiction or application may be made to such court for judicial acceptance of any award and an order of enforcement, as the case may be. In no event shall a demand for arbitration be made after the date when institution of a legal or equitable proceeding based upon such claim, dispute or other matter in question would be barred by the applicable statute of limitations. Notwithstanding the foregoing, either party shall have the right, without waiving any right

or remedy available to such party under this Agreement or otherwise, to seek and obtain from any court of competent jurisdiction any interim or provisional relief that is necessary or desirable to protect the rights or property of such party, pending the selection of the arbitrators hereunder or pending the arbitrators' determination of any dispute, controversy or claim hereunder.

13.4. <u>Assignment</u>. Syros shall not assign its rights or obligations under this Agreement without the prior written consent of TMRC; <u>provided</u>, <u>however</u>, that Syros may, without such consent, assign this Agreement and its rights and obligations hereunder (a) to any Affiliate, or (b) in connection with the sale or transfer of all or substantially all of its business or assets relating to the subject matter of this Agreement, or in the event of its merger, consolidation, change in control or similar transaction. Any permitted assignee shall assume all obligations of its assignor under this Agreement.

13.5. <u>Waivers and Amendments</u>. No change, modification, extension, termination or waiver of this Agreement, or any of the provisions herein contained, shall be valid unless made in writing and signed by duly authorized representatives of the parties hereto.

13.6. <u>Entire Agreement</u>. This Agreement embodies the entire agreement between the parties and supersedes any prior representations, understandings and agreements between the parties regarding the subject matter hereof except the Confidential Disclosure and Non-Use Agreement dated as of February 24, 2015 between TMRC and Syros (the "<u>Existing Confidentiality</u> <u>Agreement</u>"). There are no representations, understandings or agreements, oral or written, between the parties regarding the subject matter hereof that are not fully expressed herein except the Existing Confidentiality Agreement. Nothing in this Agreement removes or overrides any right of action by any party in respect of any fraudulent misrepresentation, fraudulent concealment or other fraudulent action.

13.7. <u>No Benefit to Third Parties</u>. The provisions of this Agreement are for the sole benefit of the parties and their successors and permitted assigns, and shall not be construed as conferring any rights in any other Persons.

13.8. <u>Severability</u>. Any of the provisions of this Agreement which are determined to be invalid or unenforceable in any jurisdiction shall be ineffective to the extent of such invalidity or unenforceability in such jurisdiction, without rendering invalid or unenforceable the remaining provisions hereof and without affecting the validity or enforceability of any of the terms of this Agreement in any other jurisdiction.

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13.9. <u>Waiver</u>. The waiver by either party of any right hereunder or the failure to perform or of a breach by the other party shall not be deemed a waiver of any other right hereunder or of any other breach or failure by said other party whether of a similar nature or otherwise.

13.10. <u>Counterparts</u>. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[Signature page follows]

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IN WITNESS WHEREOF, the parties have executed this Cancer License Agreement effective as of the Effective Date.

TMRC CO., LTD.

By:	/s Hisao Ekimoto
Name:	Hisao Ekimoto
Title:	President & CEO
Date:	September 11, 2015

SYROS PHARMACEUTICALS, INC.

By:	/s/ Nancy Simonian
Name:	Nancy Simonian
Title :	Chief Executive Officer

[Signature page to Cancer License Agreement]

EXHIBIT A

Certain Licensed Patent Rights

Series	Country	Serial No.	Filing Date	Publication	Patent	Priority	Matter/Other Info
[**]	[**]		[**]		[**]	[**]	[**]
	[**]		[**]		[**]		
	[**]	[**]	[**]	[**]			
[**]	[**]		[**]		[**]	[**]	[**]
	[**]		[**]		[**]		
	[**]		[**]		[**]		[**]
[**]	[**]		[**]		[**]		[**]
			23				

Subject

EXHIBIT B

AM80 (Tamibarotene)

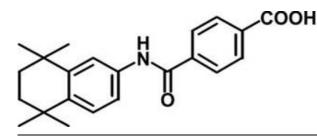


EXHIBIT C

Certain Bonus Amounts

- 1. Syros and TMRC will use commercially reasonable efforts to execute the Toko Letter Agreement and Supply Agreement.
 - If Toko and the parties execute the Toko Letter Agreement and the parties execute the Supply Agreement, Syros will pay the
 - US\$[**] set forth in item #2 of Section 4.5, and shall also pay the following additional amount to the extent applicable:
 - a. A bonus of US\$[**] if the foregoing items are completed within [**] days after the Effective Date;
 - b. A bonus of US\$[**] if the foregoing items are completed within [**] days after the Effective Date; or
 - c. A bonus of US\$[**] if the foregoing items are completed within [**] days after the Effective Date.

EXHIBIT D

Possible Clinical Supply Agreement Terms

- Sourcing. Syros shall purchase 100% of its Sales API requirements from TMRC and TMRC shall sell to Syros such quantities of Sales API as Syros shall require.
- Quality. All Sales API shall be of pharmaceutical quality suitable for human use and meet the specifications therefor at the time of delivery. TMRC shall provide all Sales API manufactured in conformity with specifications and applicable current good manufacturing practices (GMP) standards and in compliance with all applicable laws and regulations in the Territory.
- · Information Update. Information regarding drug manufacturing shall be updated as required to reflect the batches of Sales API as may be required from time to time, whether such information is part of the drug manufacturing file or not.
- Verification. TMRC shall provide Syros with certificates of analysis for all Sales API it supplies. Syros shall have to right to request and obtain from TMRC reports on manufacturing and quality controls and GMP audits at TMRC's and its Third Party suppliers' manufacturing facilities, and at its expense Syros may investigate such reports on site.
- Forecasts and Orders. At the beginning of each [**] Syros will provide to TMRC written [**] rolling forecasts for the subsequent
 [**] for planning purposes. Syros will submit firm purchase orders to TMRC specifying the quantity, price and delivery details no
 less than [**] days prior to the delivery date. Syros may reject any non-conforming Sales API and notify TMRC within [**] days
 of the rejection. TMRC will use commercially reasonable effort to replace any non-conforming Sales API at TMRC's expense
 within [**] days of notice of rejection by Syros.
- Price. Syros will pay TMRC \$[**] per kilogram of Sales API.

Regulatory Cooperation. TMRC will cooperate with all requests from regulatory authorities for information or access to manufacturing facilities, and to cause any subcontractors to likewise cooperate, including pre-approval inspections. TMRC will coordinate with Syros to permit Syros to be present for all inspections by regulatory authorities, and to cause any subcontractors to do the same.

- · Reps and Warranties. TMRC will provide customary reps and warranties.
- Risk Mitigation. TMRC will in good faith discuss and cooperate with Syros and TMRC's Third Party suppliers to develop a reasonable risk mitigation strategy and plan, which shall include the selection and oversight of back-up suppliers, to avoid potential interruptions in supply of Sales API by TMRC to Syros, and will use reasonable efforts to implement such strategy and plan with appropriate input (with Syros to bear any pass-through costs approved by Syros in advance) and participation by Syros. Such strategy and plan will include TMRC establishing back-up suppliers of Sales API (API and bulk tableting). TMRC will cooperate with Syros to establish a Syros back-up option that Syros can use if there is a failure to supply (below).
- Failure to supply. TMRC and Syros will in good faith discuss and cooperate to implement a reasonable plan of action to minimize any supply interruption. Failure to supply standard based on failure by TMRC to deliver conforming Sales API in satisfaction of Syros' orders, with ()-day cure period; failure to supply triggers requirement for TMRC to obtain and deliver conforming supply satisfying Syros' orders from an alternative source for API within () days; if TMRC does not cure within () days and does not thereafter obtain conforming supply satisfying Syros' orders from an alternative source for an alternative source within such () days, Syros will have the right to source Product from suppliers other than TMRC, including any back-up supplier established pursuant to the risk mitigation strategy and plan.
- Termination. This agreement will terminate immediately upon termination or expiration of the License Agreement. Either party may terminate this agreement upon uncured material breach of the other party.
- Commercial Supply Agreement. Upon Syros's request, the parties shall negotiate in good faith a supply agreement in respect of supply of Sales API for commercial production, which the parties anticipate will happen prior to the first dosing of the first subject in a Phase III Clinical Trial.

EXHIBIT E

Possible Consent and Stand-by License

This CONSENT AND STAND-BY LICENSE (**"Consent"**) is given as of , 2015, by TOKO PHARMACEUTICAL IND. CO., LTD., a Japanese corporation having its principal office at , Japan (**"Toko"**), to SYROS PHARMACEUTICALS, INC., a Delaware corporation having its principal office at 480 Arsenal Street, Suite 130, Watertown, Massachusetts 02472, USA (**"Syros"**).

WHEREAS, Toko is a party to an agreement with TMRC Co., Ltd., a Japanese corporation (**'TMRC**') entitled "License Agreement for the development et al. of retinoid based drug in foreign countries for cancer' dated August 15, 2008 and License Agreement for the development et al. of retinoid based drug in foreign countries for neutropenia dated June 13, 2014 (collectively, the **"Toko-TMRC License Agreement**') as well as one or more related supply agreements relating to the compound known as AM80 (Tamibarotene) in bulk active pharmaceutical ingredient form (collectively, the **"Toko-TMRC Supply Agreement**'' and, together with the Toko-TMRC License Agreement, the **"Toko-TMRC Agreement**'');

WHEREAS, Syros and TMRC have negotiated and executed a license agreement for cancer dated September , 2015 and may in the future negotiate a license agreement for neutropenia pursuant to which, upon execution, TMRC will grant to Syros certain rights and licenses under patent rights, know-how and data controlled by TMRC as to AM80 (Tamibarotene), including under certain rights and licenses therein granted to TMRC by Toko in the Toko-TMRC Agreement (collectively, the "**TMRC-Syros License Agreement**"); and

WHEREAS, pursuant to the TMRC-Syros License Agreement, TMRC and Syros will enter into one or more supply agreements pursuant to which TMRC will supply Syros' requirements for AM80 (Tamibarotene) and Syros will purchase such requirements from TMRC (collectively, the "TMRC-Syros Supply Agreement");

WHEREAS, prior to Syros entering into the TMRC-Syros License Agreement, Syros has requested that Toko provide the assurances and make the undertakings set forth herein;

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Syros and Toko hereby agree as follows:

 If at any time the Toko-TMRC License Agreement or any right or license granted to TMRC thereunder terminates or otherwise ceases to be in effect for any reason (the effective time of such termination or other cessation, the "Effective Time"), Toko hereby grants, effective as of the Effective Time, directly to Syros, without any need for further action by Syros, such rights and licenses with respect to AM80 (Tamibarotene) and product(s) comprising AM80 (Tamibarotene) as are 28

products (the "**Stand-by License**"). In this case the word "make" means (a) making finished Product from Sales API and (b) manufacturing AM80 (Tamibarotene) to the extent permitted in paragraph 8 below.

- 2. Toko will provide prompt written notice to Syros of any breach by TMRC of any agreement between Toko and TMRC.
- 3. Toko acknowledges and agrees that nothing in the Toko-TMRC Agreement would prevent the development and commercialization of a companion diagnostic for products comprising AM80 (Tamibarotene), without obtaining any additional right or license from Toko, whether by Syros or any affiliate or third party, and acknowledges that TMRC has the right to grant such development and commercialization rights to Syros without violating the Toko-TMRC Agreement.
- 4. To the extent that Syros requires any information regarding the manufacture of AM80 (Tamibarotene) that is possessed by Toko in order to satisfy requirements of regulatory authorities as to product(s) comprising AM80 (Tamibarotene), Toko shall provide Syros with such information as reasonably requested by Syros through TMRC and hereby grants Syros the right to use such information, and to permit its affiliates and licensees to use such information, to satisfy such regulatory requirements.
- 5. Toko shall cooperate with Syros to comply with requests of regulatory authorities for access to and/or information regarding Toko's manufacturing facilities and processes for product(s) comprising AM80 (Tamibarotene).
- 6. If requested by either Toko or Syros, Toko and Syros shall enter into a reasonable and customary pharmacovigilance agreement for the maintenance and exchange of safety data relating to product(s) comprising AM80 (Tamibarotene).
- 7. [**]
- 8. [**].
- 9. This Consent shall be governed by the laws of the State of California, USA, excluding the provisions thereof relating to conflicts of laws.

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EXHIBIT F

TMRC Grants of Rights to Third Parties

The rights granted by TMRC to CHILDREN'S HOSPITAL LOS ANGELES in the COLLABORATION AGREEMENT as of July 18, 2014.

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EXHIBIT G

Form of Initial Supply Order

PURCHASE ORDER

Purchase Order No.:

BETWEEN

TMRC Co., Ltd. ("TMRC") 1-12-12, Kita Shinjyuku	Syros Pharmaceuticals, Inc. ("Syros") 620 Memorial Drive, Suite 300		
Shinjuku-ku, Tokyo 164-0074	Cambridge, MA 02139		
Japan	USA		
Principal Contact:	Principal Contact:		
Phone:	Phone:		
Fax:	Fax:		
Email:	Email:		

This Purchase Order is subject to the terms of the Cancer License Agreement between TMRC and Syros, dated [September 10, 2015].

1.	Sales	API

Batch Name	DMF number	Destination	Delivery Date	Amount of Sales API	Unit Price	Subtotal
					Grand total before tax Applicable tax Grand total	

2. <u>Shipping Term</u>

All Sales API shall be shipped CIF the destination set forth above (Incoterms 2010).

3. <u>Invoices</u>

Original invoices shall be sent to: [Contact], Syros Pharmaceuticals, Inc., 620 Memorial Drive, Suite 300, Cambridge, MA 02139, USA.

TMRC Co., Ltd.	Syros Pharmaceuticals, Inc.
By:	Ву:
Name:	Name:
Title: Date:	Title: Date:

620 MEMORIAL DRIVE CAMBRIDGE, MASSACHUSETTS

LEASE SUMMARY SHEET

Execution Date:	March 13, 2015
<u>Tenant:</u>	Syros Pharmaceuticals, Inc., a Delaware corporation
Landlord:	620 Memorial Leasehold LLC, a Massachusetts limited liability company
<u>Building:</u>	620 Memorial Drive, Cambridge, Massachusetts. The Building consists of approximately 89,443 rentable square feet. The land on which the Building is located (the " <u>Land</u> ") is more particularly described in <u>Exhibit 2</u> attached hereto and made a part hereof (the Land, together with the Building, are hereinafter collectively referred to as the " <u>Property</u> ").
<u>Premises:</u>	Approximately 21,488 rentable square feet of space on the third (3 rd) floor of the Building, as more particularly shown as hatched, highlighted or outlined on the plan attached hereto as Exhibit 1 and made a part hereof (the "Lease Plan").
<u>Term Commencement Date:</u>	The date on which the Premises are delivered to Tenant with Landlord's Work substantially complete and otherwise in the condition required by Section 3.1 below. Targeted for August 31, 2015.
Rent Commencement Date:	Two (2) months after the Term Commencement Date.
Expiration Date:	The last day of the fifth (5 th) Rent Year (hereinafter defined)
Extension Term:	Subject to Section 1.2 below, one (1) extension term of five (5) years
Landlord's Contribution:	Subject to Section 3.5 below, One Million Six Hundred Eleven Thousand Six Hundred Dollars (\$1,611,600).
<u>Permitted Uses:</u>	Subject to Legal Requirements, general office, research, development and laboratory use, and other ancillary uses related to the foregoing (all in proportions consistent with the design of the base Building).

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Base Rent:		ANNUAL RENT YEAR(1) BASE RENT		MONTHLY RENT		
		1	\$	1,160,352.00	\$	96,696.00
		2	\$	1,195,162.50	\$	99,596.88
		3	\$	1,231,017.30	\$	102,584.77
		4	\$	1,267,947.80	\$	105,662.31
		5	\$	1,305,986.20		108,832.18
	ts and Taxes: t's Share: t's Tax Share:	See Sections 5.2 and 5.3 A fraction, the numerator of wh the denominator of which is the Execution Date, Tenant's Share A fraction, the numerator of wh the denominator of which is the by the City of Cambridge as be taxation as of the date on which the Execution Date, Tenant's Te	ich is the num number of rer number of rer ing used for pu the assessmen	table square feet in ber of rentable squa table square feet in rposes which are no t is made for the ta:	the Buildi are feet in t the Buildi ot exempt	ing. As of the the Premises and ing recognized from real estate
Security Depos	it/ Letter of Credit:	Subject to Section 7.1, \$483,48	0.00			
EXHIBIT 1 EXHIBIT 2 FXHIBIT 3	LEASE PLAN LEGAL DESCRIPTION LANDI ORD'S WORK					

EXHIBIT 2	LEGAL DESCRIPTION
EXHIBIT 3	LANDLORD'S WORK
EXHIBIT 4	FORM OF LETTER OF CREDIT
EXHIBIT 5	ALTERATIONS CHECKLIST
EXHIBIT 6	TENANT'S HAZARDOUS MATERIALS
EXHIBIT 7	RULES AND REGULATIONS

(1) For the purposes of this Lease, the first "<u>Rent Year</u>" shall be defined as the period commencing as of the Rent Commencement Date and ending on the last day of the twelfth full month after the Rent Commencement Date occurs; provided, however, if the Rent Commencement Date occurs on the first day of a calendar month, then the first Rent Year shall end on the day immediately preceding the first anniversary of the Rent Commencement Date. Thereafter, "Rent Year" shall be defined as any subsequent twelve (12) month period during the term of this Lease.

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THIS INDENTURE OF LEASE (this "Lease") is hereby made and entered into on the Execution Date by and between Landlord and Tenant.

This Lease and all of its terms, covenants, representations, warranties, agreements and conditions are in all respects subject and subordinate to that certain Master Lease Agreement dated as of May 15, 2014 by and between MIT 620 Memorial LLC ("<u>Fee Owner</u>"), as landlord, and Landlord, as tenant (as it may be amended from time to time, the "<u>Ground Lease</u>"), a redacted copy of which has been delivered to Tenant. Tenant acknowledges notice and full knowledge of all of the terms, covenants and conditions of the Ground Lease.

Each reference in this Lease to any of the terms and titles contained in any Exhibit attached to this Lease shall be deemed and construed to incorporate the data stated under that term or title in such Exhibit. All capitalized terms not otherwise defined herein shall have the meanings ascribed to them as set forth in the Lease Summary Sheet which is attached hereto and incorporated herein by reference.

1. LEASE GRANT; TERM; APPURTENANT RIGHTS; EXCLUSIONS.

1.1 Lease Grant. Landlord hereby leases to Tenant, and Tenant hereby leases from Landlord, the Premises upon and subject to terms and conditions of this Lease, for a term of years commencing on the Term Commencement Date and, unless earlier terminated or extended pursuant to the terms hereof, ending on the Expiration Date (the "Initial Term"; the Initial Term and any duly exercised Extension Terms are hereinafter collectively referred to as the "Term").

1.2 Extension Term.

(a) Provided (i) Tenant, an Affiliated Entity (hereinafter defined), a Successor (hereinafter defined) or an assignee pursuant to a Permitted Transfer (hereinafter defined) is occupying(2) at least sixty-five percent (65%) of the Premises; and (ii) there is no Event of Default (1) as of the date of the Extension Notice (hereinafter defined), and (2) at the commencement of the applicable Extension Term (hereinafter defined), Tenant shall have the option to extend the Term for one (1) additional term of five (5) years (the "Extension Term"), commencing as of the expiration of the Initial Term. Tenant must exercise such option to extend by giving Landlord written notice (the "Extension Notice") on or before the date that is twelve (12) months prior to the expiration of the then-current term of this Lease, *time being of the essence*. Notwithstanding the foregoing, Landlord may nullify Tenant's exercise of its option to extend the Term by written notice to Tenant (the "Nullification Notice") if (A) on the date Landlord receives the applicable Extension Notice, there is an event which, with the passage of time and/or the giving of notice, would constitute an Event of Default hereunder and (B) Tenant fails to cure such default within the applicable cure period set forth in Section 20.1 after receipt of the Nullification Notice. Upon the timely giving of such notice, the Term shall be deemed extended upon all of the terms and conditions of this Lease, except that Base Rent during the Extension Term shall be calculated in accordance with this Section 1.2, Landlord shall have no obligation to construct or renovate the Premises and Tenant shall have no further right to extend the Term. If Tenant fails to give timely notice, as aforesaid, Tenant shall have no further right to extend the Term. Notwithstanding the

fact that Tenant's proper and timely exercise of such option to extend the Term shall be self executing, the parties shall promptly execute

⁽²⁾ For purposes of this Section 1.2, space shall be deemed "occupied" if it is not subject to any sublease, license or use or occupancy agreement

a lease amendment reflecting such Extension Term after Tenant exercises such option. The execution of such lease amendment shall not be deemed to waive any of the conditions to Tenant's exercise of its rights under this Section 1.2.

(b) The Base Rent during the Extension Term (the "<u>Extension Term Base Rent</u>") shall be determined in accordance with the process described hereafter. Extension Term Base Rent shall be the greater of (i) Base Rent for the last Rent Year of the prior term, or (ii) the fair market rental value of the Premises then demised to Tenant as of the commencement of the Extension Term as determined in accordance with the process described below, for renewals of combination laboratory and office space in the vicinity of the Building of equivalent quality, size, utility and location, with all relevant factors to be taken into account. Within thirty (30) days after receipt of the Extension Notice, Landlord shall deliver to Tenant written notice of its determination of the Extension Term Base Rent for the Extension Term. Tenant shall, within thirty (30) days after receipt of such notice, notify Landlord in writing whether Tenant accepts or rejects Landlord's determination of the Extension Term Base Rent ("**Tenant's Response Notice**, Landlord's determination of the Extension Term Base Rent shall be binding on Tenant.

If and only if Tenant's Response Notice is timely delivered to Landlord and indicates both that Tenant rejects (c)Landlord's determination of the Extension Term Base Rent and desires to submit the matter to arbitration, then the Extension Term Base Rent shall be determined in accordance with the procedure set forth in this Section 1.2(c). In such event, within ten (10) days after receipt by Landlord of Tenant's Response Notice indicating Tenant's desire to submit the determination of the Extension Term Base Rent to arbitration. Tenant and Landlord shall each notify the other, in writing, of their respective selections of an appraiser (respectively, "Landlord's Appraiser" and "Tenant's Appraiser"). Landlord's Appraiser and Tenant's Appraiser shall then jointly select a third appraiser (the "Third Appraiser") within ten (10) days of their appointment. All of the appraisers selected shall be individuals with at least five (5) consecutive years' commercial appraisal experience in the area in which the Premises are located, shall be members of the Appraisal Institute (M.A.I.), and, in the case of the Third Appraiser, shall not have acted in any capacity for either Landlord or Tenant within five (5) years of his or her selection. The three appraisers shall determine the Extension Term Base Rent in accordance with the requirements and criteria set forth in Section 1.2(b) above, employing the method commonly known as *Baseball Arbitration*, whereby Landlord's Appraiser and Tenant's Appraiser each sets forth its determination of the Extension Term Base Rent as defined above, and the Third Appraiser must select one or the other (it being understood that the Third Appraiser shall be expressly prohibited from selecting a compromise figure). Landlord's Appraiser and Tenant's Appraiser shall deliver their determinations of the Extension Term Base Rent to the Third Appraiser within five (5) days of the appointment of the Third Appraiser and the Third Appraiser shall render his or her decision within ten (10) days after receipt of both of the other two determinations of the Extension Term Base Rent. The Third Appraiser's decision shall be binding on both Landlord and Tenant. Each party shall bear the cost of its own appraiser and shall share equally in the cost of the Third Appraiser.

1.3 Notice of Lease. Neither party shall record this Lease, but each of the parties hereto agrees to join in the execution, in recordable form, of a statutory notice of lease and/or

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written declaration in which shall be stated the Term Commencement Date, the number and length of the Extension Terms and the Expiration Date, which notice of lease may be recorded by Tenant with the Middlesex South Registry of Deeds and/or filed with the Registry District of the Land Court, as appropriate (collectively, the "**Registry**") at Tenant's sole cost and expense. If a notice of lease was previously recorded with the Registry, upon the expiration or earlier termination of this Lease, Landlord shall deliver to Tenant a notice of termination of lease and Tenant shall promptly execute and deliver the same to Landlord for Landlord's execution and recordation with the Registry. If Tenant fails to deliver the executed notice of termination of lease within ten (10) days of receipt thereof, *time being of the essence*, Tenant hereby appoints Landlord as Tenant's attorney-in-fact to execute the same, such appointment being coupled with an interest.

1.4 Appurtenant Rights.

(a) <u>Common Areas</u>. Subject to the terms of this Lease and the Rules and Regulations (hereinafter defined), Tenant shall have, as appurtenant to the Premises, rights to use in common with others entitled thereto, the areas designated from time to time for the common use of Tenant and other tenants of the Property (such areas are hereinafter referred to as the "<u>Common Areas</u>"). The Common Areas include: (i) the common lobbies, passenger and freight elevators, loading docks, hallways and stairways of the Building serving the Premises, (ii) common walkways necessary for access to the Building, (iii) if the Premises include less than the entire rentable area of any floor, the common toilets and other common facilities of such floor; and (iv) other areas designated by Landlord from time to time for the common use of Tenant and other tenants of the Building; and no other appurtenant rights or easements

(b) Parking. During the Term, commencing on the Term Commencement Date, Landlord shall, subject to the terms hereof, make available up to twenty-one (21) parking spaces for Tenant's use in the parking areas serving the Building (which parking spaces are, subject to the last sentence of this Section 1.4(b), located in the surface lot in front of the Building). The number of parking spaces in the parking areas reserved for Tenant, as modified pursuant to this Lease or as otherwise permitted by Landlord are hereinafter referred to as the "Parking Spaces." Tenant shall have no right to hypothecate or encumber the Parking Spaces, and shall not sublet, assign, or otherwise transfer the Parking Spaces other than to employees of Tenant occupying the Premises or to a Successor (hereinafter defined), an Affiliated Entity (hereinafter defined) or a transferee pursuant to an approved Transfer under Section 13 of this Lease. Throughout the Term, Tenant shall pay Landlord (or at Landlord's direction, directly to the parking operator(3)) for all of the Parking Spaces at the then-current prevailing rate, as such rate may vary from time to time. As of the Execution Date, the monthly charge for parking is Two Hundred Dollars (\$200) per Parking Space per month. If, for any reason, Tenant shall fail timely to pay the charge for any of said Parking Spaces for which Tenant failed to pay the charge under this Section 1.4(b) and Landlord may allocate such Parking Spaces for use by other tenants of the Property free and clear of Tenant's rights under this Section 1.4(b). Said Parking Spaces will be on an unassigned, non-reserved basis, and shall be subject to such reasonable rules and regulations as may be in effect for the use

of the parking areas from time to time (including, without limitation, Landlord's right, without additional charge to Tenant above

(3) e.g., in the event that the Landlord has leased or subleased the parking areas to a third party

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the prevailing rate for Parking Spaces, to institute a valet or attendant-managed parking system). Reserved and handicap parking spaces must be honored. Notwithstanding anything to the contrary contained herein, in connection with the exercise of Landlord's rights pursuant to Section 2.2 below, or in connection with the development or redevelopment of other property owned or controlled by Landlord, Landlord shall have the right to relocate the Parking Spaces from time to time to other property owned or controlled by Landlord or its affiliates, so long as such other property is within 1,000 feet of the Land.

1.5 Tenant's Access. From and after the Term Commencement Date and until the end of the Term, Tenant shall have access to the Premises twenty-four (24) hours a day, seven (7) days a week, subject to Legal Requirements, the Rules and Regulations, the terms of this Lease , Landlord's Force Majeure (hereinafter defined) and matters of record.

1.6 Exclusions. The following are expressly excluded from the Premises and reserved to Landlord: all the perimeter walls of the Premises (except the inner surfaces thereof), the Common Areas, and any space in or adjacent to the Premises used for shafts, stacks, pipes, conduits, wires and appurtenant fixtures, fan rooms, ducts, electric or other utilities, sinks or other Building facilities, and the use of all of the foregoing, except as expressly permitted pursuant to Section 1.4(a) above.

2. RIGHTS RESERVED TO LANDLORD.

2.1 Additions and Alterations. Landlord reserves the right, at any time and from time to time, to make such changes, alterations, additions, improvements, repairs or replacements in or to the Property (including the Premises but, with respect to the Premises, only for purposes of repairs, maintenance, replacements and other rights expressly reserved to Landlord herein) and the fixtures and equipment therein, as well as in or to the street entrances and/or the Common Areas, as it may deem necessary or desirable, provided, however, that there be no material obstruction of access to, or material interference with the use and enjoyment of, the Premises by Tenant. Subject to the foregoing, Landlord expressly reserves the right to temporarily close all, or any portion, of the Common Areas for the purpose of making repairs or changes thereto.

2.2 Additions to the Property. Landlord may at any time or from time to time construct additional improvements in all or any part of the Property, including, without limitation, adding additional buildings or changing the location or arrangement of any improvement in or on the Property or all or any part of the Common Areas, or add or deduct any land to or from the Property; provided that there shall be no material increase in Tenant's obligations or material interference with Tenant's rights under this Lease in connection with the exercise of the foregoing reserved rights.

2.3 Name and Address of Building. Landlord reserves the right at any time and from time to time to change the name or address of the Building and/or the Property, provided Landlord gives Tenant at least three (3) months' prior written notice thereof.

2.4 Landlord's Access. Subject to the terms hereof, Tenant shall (a) upon as much advance notice as is practical under the circumstances, and in any event at least one (1) business day's prior written notice (except that no notice shall be required in emergency situations), permit

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Landlord and any holder of a Mortgage (hereinafter defined) (each such holder, a "Mortgagee"), and their agents, employees and contractors, to have free and unrestricted access to and to enter upon the Premises at all reasonable hours for the purposes of inspection, making repairs, replacements or improvements in or to the Premises or the Building or equipment therein (including, without limitation, sanitary, electrical, heating, air conditioning or other systems), complying with all applicable laws, ordinances, rules, regulations, statutes, by-laws, court decisions and orders and requirements of all public authorities (collectively, "Legal Requirements"), or exercising any right reserved to Landlord under this Lease (including without limitation the right to take upon or through, or to keep and store within the Premises all necessary materials, tools and equipment); (b) permit Landlord and its agents and employees, at reasonable times, upon reasonable advance notice, to show the Premises during normal business hours (i.e. Monday - Friday 8 A.M. - 6 P.M., Saturday 8 A.M. - 1 P.M., excluding holidays) to any prospective Mortgagee or purchaser of the Building and/or the Property or of the interest of Landlord therein, and, during the last nine (9) months of the Term, prospective tenants; (c) upon reasonable prior written notice from Landlord, permit Landlord and its agents, at Landlord's sole cost and expense, to perform environmental audits, environmental site investigations and environmental site assessments ("Site Assessments") in, on, under and at the Premises and the Land, it being understood that Landlord shall repair any damage arising as a result of the Site Assessments, and such Site Assessments may include both above and below the ground testing and such other tests as may be necessary or appropriate to conduct the Site Assessments; and (d) in case any excavation shall be made for building or improvements or for any other purpose upon the land adjacent to or near the Premises, afford without charge to Landlord, or the person or persons, firms or corporations causing or making such excavation, license to enter upon the Premises for the purpose of doing such work as Landlord or such person or persons, firms or corporation shall deem to be necessary to preserve the walls or structures of the Building from injury, and to protect the Building by proper securing of foundations. The parties agree and acknowledge that, despite reasonable and customary precautions (which Landlord agrees it shall exercise), any property or equipment in the Premises of a delicate, fragile or vulnerable nature may nevertheless be damaged in the course of maintenance services being performed. Accordingly, Tenant shall take reasonable protective precautions with unusually fragile, vulnerable or sensitive

property and equipment. Landlord shall provide Tenant with written notice at least seven (7) days' prior to performing routine maintenance which would be reasonably expected to cause such damage.

Tenant may identify certain areas of the Premises that require limited access and strict security measures ("Security Areas") by written notice to Landlord from time to time. Except in the event of an emergency threatening personal injury, damage to property or a violation of any Legal Requirement (a "Secure Area Emergency"), and except as otherwise approved by Tenant, any entry in the Secure Areas must be done in the presence of a representative of Tenant so long as Tenant makes such representative available upon at least one (1) business day's advance notice. Notwithstanding foregoing, in the event of a Secure Area Emergency, Landlord may enter any part of the Premises without prior notice or a representative of Tenant; provided that Landlord provides Tenant with notice of such entry as soon as reasonably possible thereafter and Landlord takes reasonable precautions to protect the health and safety of its entrants. Nothing in this paragraph will be construed as permitting Tenant to prohibit such access to any portion of the Premises. Except in Secure Area Emergency situations, anyone who has access to a Secure Area may, at Tenant's election, be subject to Tenant's reasonable security measures and protocols, which may include limiting access to normal business hours and requiring the wearing of an ID badge.

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2.5 Pipes, Ducts and Conduits. Tenant shall permit Landlord to erect, use, maintain and relocate pipes, ducts and conduits in and through the Premises, provided the same do not materially reduce the floor area or materially adversely affect the appearance thereof.

2.6 Minimize Interference. Subject to the provisions of this Lease, Tenant agrees to cooperate with Landlord as reasonably necessary in connection with the exercise of Landlord's rights under this Section 2. Tenant further agrees that dust, noise, vibration, temporary closures of Common Areas, or other inconvenience or annoyance resulting from the exercise of Landlord's rights under Section 2.1 and 2.2 shall not be deemed to be a breach of Landlord's obligations under the Lease, so long as Landlord shall, except in the event of an emergency, use reasonable efforts, consistent with accepted construction practice when applicable, to avoid unreasonably interfering with the conduct of Tenant's business and Tenant's use and occupancy of the Premises. Notwithstanding the foregoing, in no event shall any of the space leased by Tenant at the Property under this Lease be deprived of safe and reasonable access or rendered untenantable for the Permitted Uses by reason of Landlord's exercise of its rights under this Section 2.

3. DELIVERY AND CONDITION OF PREMISES; CONSTRUCTION.

3.1 Delivery and Condition of Premises. On the Term Commencement Date, the Premises shall be broom-clean with the Landlord's Work substantially complete and the Building structure and the Building systems serving the Premises and Common Areas shall be in good working order, condition and repair. Subject to the foregoing, Tenant acknowledges and agrees that Tenant is leasing the Premises in their "AS IS," "WHERE IS" condition and with all faults on the Execution Date, without representations or warranties, express or implied, in fact or by law, of any kind, and without recourse to Landlord. Within thirty (30) days after the Term Commencement Date, Landlord and Tenant shall execute a document acknowledging the actual Term Commencement Date and Expiration Date.

3.2 Landlord's Work.

(a) Subject to delays due to governmental regulation, unusual scarcity of or inability to obtain labor or materials, labor difficulties, casualty or other causes reasonably beyond Landlord's control (collectively "Landlord's Force Majeure") and subject to any act or omission by Tenant and/or Tenant's agents, servants, employees, consultants, contractors, subcontractors, licensees and/or subtenants (collectively with Tenant, the "Tenant Parties") which causes an actual delay in the performance of Landlord's Work (a "Tenant Delay"), Landlord, at Landlord's sole cost and expense, shall perform the work ("Landlord's Work") more particularly shown in the permit set prepared by Landlord's architect, which permit set shall be based on the schematic plans attached hereto as Exhibit 3 and made a part hereof (the "Schematics") and which permit set shall take into account Tenant's input at weekly design meetings (as such permit set may be amended or modified pursuant to Section 3.2(b) below, the "Permit Set").

(b) Tenant shall have the right, in accordance herewith, to submit for Landlord's approval (which approval shall not be unreasonably withheld) change proposals to amend or modify the Permit Set (each, a "<u>Change Proposal</u>"). Landlord agrees to respond to any such Change Proposal within five (5) business days after the submission thereof by Tenant (unless Landlord has previously advised Tenant that a longer time period for such response is reasonably

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necessary due to the nature and scope of the Change Proposal, together with Landlord's good faith estimate as to the amount of additional time that will be necessary, or the fact that the information provided by Tenant in the Change Proposal is insufficient for the purposes of enabling Landlord to make the determination set forth herein), and if approved by Landlord, advising Tenant of any anticipated increase in costs associated with such Change Proposal ("<u>Anticipated Costs</u>"), as well as an estimate of any delay which would likely result in the completion of Landlord's Work if a Change Proposal is made pursuant thereto ("<u>Landlord's Change Order Response</u>"). Tenant shall have the right to then approve or withdraw such Change Proposal within five (5) business days after receipt of Landlord's Change Order Response. If Tenant fails to respond to Landlord's Change Order Response within such five (5) business day period, such Change Proposal shall be deemed withdrawn. If Tenant approves Landlord's Change Order Response, then (a) such Change Proposal shall be deemed a "Change Order" hereunder, and (b) Landlord shall perform the work described in the Change Order as part of Landlord's Work on all the terms and conditions applicable to Landlord's Work except as expressly set forth herein with respect to Tenant's payment obligation. Any actual delay in the substantial completion of Landlord's Work resulting from Change Proposals (whether approved or

not) shall constitute a Tenant Delay.

3.3 Substantial Completion; Punchlist Items; Remedies for Late Delivery.

(a) Landlord's Work shall be deemed "<u>substantially complete</u>" on the date that all of Landlord's Work has been completed, except for Punchlist Items (defined below), as certified in writing by Landlord's architect. Promptly following delivery of the Premises to Tenant with Landlord's Work substantially complete, Landlord shall provide Tenant with a list prepared by Landlord's architect (the "<u>Punchlist</u>") of outstanding items (the "<u>Punchlist Items</u>") which (a) need to be performed to complete Landlord's Work, (b) do not impede the issuance of a certificate of occupancy for the Premises, and (c) do not materially impair Tenant's ability to use the Premises for the Permitted Use. Subject to Landlord's Force Majeure and Tenant Delays, Landlord shall, unless otherwise specified on the Punchlist, complete all Punchlist Items within sixty (60) days of the date of the Punchlist.

(b) Subject to Landlord's Force Majeure and Tenant Delays, if the Term Commencement Date has not occurred on or before (i) October 1, 2015, then the Rent Commencement Date shall be delayed one day for each day after such date that the Term Commencement Date does not occur(4), and (ii) November 30, 2015, then Tenant shall be entitled to terminate this Lease by thirty (30) days' prior written notice to Landlord (provided that such termination notice shall be of no force and effect if the Term Commencement Date occurs within such 30 day period). The remedies set forth in this Section 3.3(b) are Tenant's sole and exclusive rights and remedies if the Term Commencement Date does not occur on or before August 31, 2015.

3.4 Cost of Landlord's Work.

(a) <u>Landlord's Contribution</u>. As an inducement to Tenant's entering into this Lease, Landlord shall pay for up to One Million Six Hundred Eleven Thousand Six Hundred

(4) For illustration purposes only, if the Term Commencement Date occurs on October 5, 2015, then the Rent Commencement Date shall be delayed 5 days and shall occur on December 10, 2015 (which is 2 months and 5 days after the Term Commencement Date)

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Dollars (\$1,611,600) ("Landlord's Contribution") of the costs incurred in connection with the performance of Landlord's Work other than the following costs (collectively, "Excluded Construction Costs"), which shall be paid for by Tenant within thirty (30) days of demand from time to time: (i) the cost of acquiring or installing any of Tenant's Property (hereinafter defined), including without limitation telecommunications and computer equipment and all associated wiring and cabling, any de-mountable decorations, artwork and partitions, signs, and trade fixtures (provided that, notwithstanding the foregoing, Landlord's Contribution may be applied to the cost of any items of Tenant's Property which constitute lab equipment and which are to become a part of the Premises and be surrendered with Premises upon the expiration of the Term), (ii) the cost of any fixtures or Alterations that will be removed at the end of the Term, (iii) more than \$161,160 of any so-called "soft costs." Landlord shall not charge any supervisory or management fees with respect to Landlord's Work, provided, however, that the costs of any third party construction/project manager(s) engaged by Landlord shall be included in the costs of Landlord's Work (as such general contractor may be replaced by Landlord with a general contractor of comparable or greater experience and reputation, the "Contractor").

(b) <u>Responsibility for Costs</u>. If the Work Costs (defined as (i) all costs incurred in connection with Landlord's Work, including without limitation the costs of designing, permitting and performing Landlord's Work, as affected by any Change Orders, less (ii) the Excluded Construction Costs) exceed Landlord's Contribution (such excess, the "<u>Excess Costs</u>"), Tenant shall pay, within thirty (30) days after demand from time to time, Tenant's Proportion (hereinafter defined) of the Work Costs reflected on each requisition. "<u>Tenant's Proportion</u>" shall be a fraction, the numerator of which is the estimated Excess Costs, and the denominator of which is the estimated Work Costs. Within ninety (90) days after final completion of Landlord's Work, Landlord shall prepare and submit to Tenant a final reconciliation in sufficient detail to reasonably determine actual Work Costs (including without limitation all Punchlist Items) (the "<u>Final Reconciliation</u>"). Within thirty (30) days after delivery of the Final Reconciliation, Tenant shall pay to Landlord any remaining Excess Costs.

4. USE OF PREMISES.

4.1 Permitted Uses. During the Term, Tenant shall use the Premises only for the Permitted Uses and for no other purposes. Service and utility areas (whether or not a part of the Premises) shall be used only for the particular purpose for which they are designed. All corridor doors, when not in use, shall be kept closed. It is understood and agreed that Tenant shall not have any obligation to continuously use and/or occupy the Premises; provided, however, if Tenant shall abandon the Premises for a period in excess of twelve (12) months (i.e., whether or not the keys shall have been surrendered or the Rent shall have been paid, Tenant is not actively operating its business in the Premises, is not actively marketing the Premises for a Transfer, there is not a sublease, licenses relating to use or occupancy of space or other occupancy agreements for the Premises to a party that is actively operating its business in the Premises, and the Premises are not undergoing material modifications or affected by casualty, condemnation or other circumstances preventing the foregoing), and either (a) Tenant fails to adequately secure the Premises reasonably lit so as not to appear unoccupied or "dark", then Landlord

shall have the right to terminate this Lease upon at least ninety (90) days' written notice to Tenant; provided, however, if Tenant notifies Landlord within thirty (30) days after receipt of any such termination notice either that (i) Tenant intends to commence operating its business in the Premises prior to the proposed effective date of such termination and Tenant does in fact commence operating its business in the Premises prior to such date, or (ii) Tenant adequately secures the Premises, maintains all required insurance and, subject to Legal Requirements, causes the Premises to be reasonably lit so as not to appear unoccupied or "dark" (and provides Landlord with reasonable evidence that the Premises shall remain secured, insured and, subject to Legal Requirements, reasonably lit), then such termination notice shall be null and void and this Lease shall continue in full force and effect. Upon the effective date of any such termination, (a) Tenant shall surrender the Premises in the condition required under Section 21 below, and (b) all rights and obligations of the parties hereunder shall terminate and be of no further force and effect except with respect to obligations accruing with respect to the period of time prior to such termination date.

4.2 Prohibited Uses.

Notwithstanding any other provision of this Lease, Tenant shall not use the Premises or the Building, or any (a) part thereof, or suffer or permit the use or occupancy of the Premises or the Building or any part thereof by any of the Tenant Parties (i) in a manner which would violate any of the covenants, agreements, terms, provisions and conditions of this Lease or otherwise applicable to or binding upon the Premises; (ii) for any unlawful purposes or in any unlawful manner; (iii) which, in the reasonable judgment of Landlord (taking into account the use of the Building as a combination laboratory, research and development and office building and the Permitted Uses) shall (a) impair the appearance or reputation of the Building; (b) impair, interfere with or otherwise diminish the quality of any of the Building services or the proper and economic heating, cleaning, ventilating, air conditioning or other servicing of the Building or Premises, or the use or occupancy of any of the Common Areas; (c) occasion discomfort, inconvenience or annoyance in any material respect (and Tenant shall not install or use any electrical or other equipment of any kind which, in the reasonable judgment of Landlord, will cause any such impairment, interference, discomfort, inconvenience, annovance or injury), or cause any injury or damage to any occupants of the Premises or other tenants or occupants of the Building or their property; or (d) cause harmful air emissions, laboratory odors or noises or any unusual or other objectionable odors, noises or emissions to emanate from the Premises; (iv) in a manner which is inconsistent with the operation and/or maintenance of the Building as a first-class combination office, research, development and laboratory facility; or (v) in a manner which shall increase such insurance rates on the Building or on property located therein over that applicable when Tenant first took occupancy of the Premises hereunder (unless Tenant agrees in writing to pay the cost of any such increase).

(b) With respect to the use and occupancy of the Premises and the Common Areas, Tenant will not: (i) place or maintain any signage, trash, refuse or other articles in any vestibule or entry of the Premises, on the footwalks or corridors adjacent thereto or elsewhere on the exterior of the Premises, nor obstruct any driveway, corridor, footwalk, parking area, mall or any other Common Areas; (ii) permit undue accumulations of or burn garbage, trash, rubbish or other refuse within or without the Premises; (iii) permit the parking of vehicles so as to interfere with the use of any driveway, corridor, footwalk, parking area, or other Common Areas; (iv)

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receive or ship articles of any kind outside of those areas reasonably designated by Landlord; (v) conduct or permit to be conducted any auction, going out of business sale, bankruptcy sale (unless directed by court order), or other similar type sale in or connected with the Premises; (vi) use the name of the Building, the Property, Landlord, or any of Landlord's affiliates or subsidiaries or any photograph, film, drawing, or other depiction or representation of the Building and/or the Property or any part thereof, which contains signage or distinctive architectural characteristics that cause the scene photographed, filmed, drawn, depicted, or represented to be identifiable as being the Building and/or the Property, in any publicity, promotion, trailer, press release, advertising, printed, or display materials without Landlord's prior written consent; or (vii) except in connection with Alterations (hereinafter defined) approved by Landlord, cause or permit any hole to be drilled or made in any part of the Building.

5. RENT; ADDITIONAL RENT.

5.1 Base Rent. During the Term, Tenant shall pay to Landlord Base Rent in equal monthly installments, in advance and without demand on the first day of each month for and with respect to such month, except that, if the Rent Commencement Date is any day other than the first day of a calendar month, Base Rent due for the period between the Rent Commencement Date and the last day of the calendar month in which the Rent Commencement Date occurs shall be due on the Rent Commencement Date. Except to the extent otherwise set forth in Section 3.1, the payment of Base Rent and additional rent and other charges reserved and covenanted to be paid under this Lease with respect to the Premises (collectively, "<u>**Rent**</u>") shall commence on the Rent Commencement Date, and shall be prorated for any partial months. Rent shall be payable to Landlord or, if Landlord shall so direct in writing, to Landlord's agent or nominee, in lawful money of the United States which shall be legal tender for payment of all debts and dues, public and private, at the time of payment.

5.2 Operating Costs.

(a) "<u>Operating Costs</u>" shall mean all costs incurred and expenditures of whatever nature made by Landlord in the operation and management of the Building or allocated to the Building, including without limitation any costs for utilities supplied to the Common Areas, the costs of maintaining the MWRA permit(s) for the Building, and any costs for repair and replacements, cleaning and maintenance of the Common Areas, related equipment, facilities and appurtenances and HVAC equipment, a management fee paid to Landlord's property manager, the costs of Landlord's management office for the Property, the cost of operating any amenities in the Property available to all tenants of the Property and any subsidy provided by Landlord for or with respect to any such amenity. For costs and expenditures made by Landlord in connection with the operation, management, repair, replacement, maintenance and insurance of the Building as a whole, Landlord shall make a reasonable allocation thereof between the retail and non-retail portions of the Building, if

applicable. To the extent that a cost included in Operating Costs is also allocable to property other than the Property, such cost shall be equitably allocated to each parcel of property which benefits from such cost. Operating Costs shall not include Excluded Costs (hereinafter defined). Landlord shall have the right but not the obligation, from time to time, to equitably allocate some or all of the Operating Costs among different tenants of the Building (for example, and without limiting the generality of the foregoing, based in whole or in part on shared or similar use of particular systems or equipment).

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"Excluded Costs" shall be defined as (i) any mortgage charges (including interest, principal, points and fees); (b)(ii) brokerage commissions; (iii) salaries of executives and owners not directly employed in the management/operation of the Property; (iv) the cost of work done by Landlord for a particular tenant; (v) subject to Subsection 5.2(h) below, capital expenditures; (vi) the costs of Landlord's Work and any contributions made by Landlord to any tenant of the Property in connection with the build-out of its premises; (vii) franchise or income taxes imposed on Landlord or Taxes; (viii) costs paid directly by individual tenants to suppliers, including tenant electricity, telephone and other utility costs; (ix) increases in premiums for insurance when such increase is caused by the use of the Building by Landlord or any other tenant of the Building; (x) maintenance and repair of capital items not a part of the Building or the Property; (xi) depreciation of the Building; (xii) costs relating to maintaining Landlord's existence as a corporation, partnership or other entity; (xiii) advertising and other fees and costs incurred in procuring tenants; (xiv) the cost of any items for which Landlord is reimbursed by insurance, condemnation awards, refund, rebate or otherwise, and any expenses for repairs or maintenance to the extent covered by warranties, guaranties and service contracts; and (xv) costs incurred in connection with any disputes between Landlord and its employees, between Landlord and Building management, or between Landlord and other tenants or occupants; (xvi) the cost of testing, remediation or removal, transportation or storage of Hazardous Materials (hereinafter defined) in the Building or on the Property required by Environmental Laws (hereinafter defined), provided however, that with respect to the testing, remediation or removal of (i) any material or substance located in the Building on the Execution Date and which, as of the Execution Date, is not considered, as a matter of law, to be a Hazardous Material, but which is subsequently determined to be a Hazardous Material as a matter of law, and (ii) any material or substance located in the Building after the Execution Date and which, when placed in the Building, was not considered, as a matter of law, to be a Hazardous Material, but which is subsequently determined to be a Hazardous Material as a matter of law, the costs thereof may be included in Operating Costs; (xvii) capital expenditures not expressly permitted under Section 5.2(h) below; and (xviii) amounts paid by Landlord to or at the direction of Fee Owner pursuant to the Ground Lease.

(c) "<u>Capital Interest Rate</u>" shall be defined as an annual rate of either one percentage point over the AA Bond rate (Standard & Poor's corporate composite or, if unavailable, its equivalent) as reported in the financial press at the time the capital expenditure is made or, if the capital item is acquired through third party financing, then the actual (including fluctuating) rate paid by Landlord in financing the acquisition of such capital item.

(d) "<u>Annual Charge Off</u>" shall be defined as the annual amount of principal and interest payments which would be required to repay a loan ("<u>Capital Loan</u>") in equal monthly installments over the Useful Life (hereinafter defined), of the capital item in question on a direct reduction basis at an annual interest rate equal to the Capital Interest Rate, where the initial principal balance is the cost of the capital item in question.

(e) "Useful Life" shall be reasonably determined by Landlord in accordance with sound accounting principles and practices consistently applied.

(f) <u>Payment of Operating Costs</u>. Tenant shall pay to Landlord, as additional rent, Tenant's Share of Operating Costs. Landlord may make a good faith estimate of Tenant's Share of Operating Costs for any fiscal year or part thereof during the term, and Tenant shall pay to

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Landlord, on the Term Commencement Date and on the first (1st) day of each calendar month thereafter, an amount equal to Tenant's Share of Operating Costs for such fiscal year and/or part thereof divided by the number of months therein. Landlord may estimate and reestimate Tenant's Share of Operating Costs and deliver a copy of the estimate or re-estimate to Tenant. Thereafter, the monthly installments of Tenant's Share of Operating Costs shall be appropriately adjusted in accordance with the estimations so that, by the end of the fiscal year in question, Tenant shall have paid all of Tenant's Share of Operating Costs as estimated by Landlord. Any amounts paid based on such an estimate shall be subject to adjustment as herein provided when actual Operating Costs are available for each fiscal year.

(g) <u>Annual Reconciliation</u>. Landlord shall, within one hundred twenty (120) days after the end of each fiscal year, deliver to Tenant a reasonably detailed statement of the actual amount of Operating Costs for such fiscal year ("<u>Year End</u> <u>Statement</u>"). Failure of Landlord to provide the Year End Statement within the time prescribed shall not relieve Tenant from its obligations hereunder. If the total of such monthly remittances on account of any fiscal year is greater than Tenant's Share of Operating Costs actually incurred for such fiscal year, then, provided no Event of Default has occurred nor any event which, with the passage of time and/or the giving of notice would constitute an Event of Default, Tenant may credit the difference against the next installment of additional rent on account of Operating Costs due hereunder, except that if such difference is determined after the end of the Term, Landlord shall refund such difference to Tenant within thirty (30) days after such determination to the extent that such difference exceeds any amounts then due from Tenant to Landlord (it being understood and agreed that if Tenant cures any default prior to the expiration of the notice and/or cure periods set forth in Section 20.1 below, Tenant shall then be entitled to take such credit). If the total of such remittances is less than Tenant's Share of Operating Costs actually incurred for such fiscal year as reflected in the Year-End difference to Landlord, as additional rent hereunder, within ten (10) days of Tenant's receipt of an invoice therefor. Landlord's estimate of Operating Costs actually incurred for the prior fiscal year as reflected in the Year-End statement plus a reasonable adjustment based upon estimated increases in Operating Costs. The provisions of this Section 5.2(g)

shall survive the expiration or earlier termination of this Lease.

(h) <u>Capital Expenditures</u>. If, during the Term, Landlord shall replace any capital items or make any capital expenditures (collectively, "<u>Capital Expenditures</u>") the total amount of which (net of any warranty claims) is not properly includable in Operating Costs for the fiscal year in which they were made, in accordance with sound accounting principles and practices consistently applied in effect at the time of such replacement, there shall nevertheless be included in such Operating Costs (and in Operating Costs for each succeeding fiscal year) the amount, if any, by which the Annual Charge Off (determined as hereinafter provided) of such Capital Expenditure (less insurance proceeds, if any, collected by Landlord by reason of damage to, or destruction of the capital item being replaced) exceeds the Annual Charge Off of the Capital Expenditure for the item being replaced. If a new capital item is acquired which does not replace another capital item, and such new capital item being acquired is either (i) required by any Legal Requirements enacted after the Execution Date or (ii) reasonably projected to reduce Operating Costs, then there shall be included in Operating Costs for each fiscal year in which and after such capital expenditure is made the Annual Charge Off of such capital expenditure.

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(i) <u>Part Years</u>. If the Term Commencement Date or the Expiration Date occurs in the middle of a fiscal year, Tenant shall be liable for only that portion of the Operating Costs with respect to such fiscal year within the Term.

(j) <u>Gross-Up</u>. If, during any fiscal year, less than ninety-five percent (95%) of the Building is occupied by tenants or if Landlord was not supplying all tenants with the services being supplied to Tenant hereunder, actual Operating Costs incurred shall be reasonably extrapolated by Landlord on an item-by-item basis to the reasonable Operating Costs that would have been incurred if the Building was ninety-five percent (95%) occupied and such services were being supplied to all tenants, and such extrapolated Operating Costs shall, for all purposes hereof, be deemed to be the Operating Costs for such fiscal year.

Audit Right. Provided there is no Event of Default nor any event which, with the passage of time and/or the (k) giving of notice would constitute an Event of Default, Tenant may, upon at least sixty (60) days' prior written notice, inspect or audit Landlord's records relating to Operating Costs for any periods of time within the previous fiscal year before the audit or inspection. However, no audit or inspection shall extend to periods of time before the Term Commencement Date. If Tenant fails to object to the calculation of Tenant's Share of Operating Costs on the Year-End Statement within sixty (60) days after such statement has been delivered to Tenant and/or fails to complete any such audit or inspection within ninety (90) days after receipt of the Year End Statement, then Tenant shall be deemed to have waived its right to object to the calculation of Tenant's Share of Operating Costs for the year in question and the calculation thereof as set forth on such statement shall be final. Tenant's audit or inspection shall be conducted only at Landlord's offices or the offices of Landlord's property manager during business hours reasonably designated by Landlord. Tenant shall pay the cost of such audit or inspection, provided, however, that if such audit discloses that Tenant has been overcharged by more than five percent (5%), Landlord shall reimburse Tenant for up to Five Thousand Dollars (\$5,000) of Tenant's reasonable out of pocket costs incurred in connection with such audit. Tenant may not conduct an inspection or have an audit performed more than once during any fiscal year. If such inspection or audit reveals that an error was made in the calculation of Tenant's Share of Operating Costs previously charged to Tenant, then, provided no Event of Default has occurred nor an event which, with the passage of time and/or the giving of notice would constitute an Event of Default, Tenant may credit the difference against the next installment of additional rent on account of Operating Costs due hereunder, except that if such difference is determined after the end of the Term, Landlord shall refund such difference to Tenant within thirty (30) days after such determination to the extent that such difference exceeds any amounts then due from Tenant to Landlord. If such inspection or audit reveals an underpayment by Tenant, then Tenant shall pay to Landlord, as additional rent hereunder, any underpayment of any such costs, as the case may be, within ten (10) days after receipt of an invoice therefor. Tenant shall maintain the results of any such audit or inspection confidential and shall not be permitted to use any third party to perform such audit or inspection, other than an independent firm of certified public accountants (A) reasonably acceptable to Landlord, (B) which is not compensated on a contingency fee basis or in any other manner which is dependent upon the results of such audit or inspection, and (C) which executes Landlord's standard confidentiality agreement whereby it shall agree to maintain the results of such audit or inspection confidential. The provisions of this Section 5.2(k) shall survive the expiration or earlier termination of this Lease.

5.3 Taxes.

(a) <u>"Taxes</u>" shall mean the real estate taxes and other taxes, levies and assessments imposed upon the Building, and upon any personal property of Landlord used in the operation of the Building, or on Landlord's interest in the Building or such personal property or reasonably allocated thereto; charges, fees and assessments for transit, housing, police, fire or other services or purported benefits to the Building (including without limitation any community preservation assessments); service or user payments in lieu of taxes; and any and all other taxes, levies, betterments, assessments and charges arising from the ownership, leasing, operation, use or occupancy of the Building or based upon rentals derived therefrom, which are or shall be imposed by federal, state, county, municipal or other governmental authorities. Taxes shall not include any inheritance, estate, succession, gift, franchise, rental, income or profit tax, capital stock tax, capital levy or excise, or any income taxes arising out of or related to the ownership and operation of the Building, provided, however, that any of the same and any other tax, excise, fee, levy, charge or assessment, however described, that may in the future be levied or assessed as a substitute for or an addition to, in whole or in part, any tax, levy or assessment which would otherwise constitute Taxes, but only to the extent calculated as if the Property were the only real estate owned by Landlord. "Taxes" shall also include reasonable expenses (including without limitation legal and consultant fees) of tax abatement or other proceedings contesting assessments or levies.

(b) **"<u>Tax Period</u>**" shall be any fiscal/tax period in respect of which Taxes are due and payable to the appropriate governmental taxing authority (i.e., as mandated by the governmental taxing authority), any portion of which period occurs during the Term of this Lease.

Payment of Taxes. Tenant shall pay to Landlord, as additional rent, Tenant's Tax Share of Taxes. Landlord (c)may make a good faith estimate of the Taxes to be due by Tenant for any Tax Period or part thereof during the Term, and Tenant shall pay to Landlord, on the Term Commencement Date and on the first (1st) day of each calendar month thereafter, an amount equal to Tenant's Tax Share of Taxes for such Tax Period or part thereof divided by the number of months therein. Landlord may estimate and re-estimate Tenant's Tax Share of Taxes and deliver a copy of the estimate or re-estimate to Tenant. Thereafter, the monthly installments of Tenant's Tax Share of Taxes shall be appropriately adjusted in accordance with the estimations so that, by the end of the Tax Period in question, Tenant shall have paid all of Tenant's Tax Share of Taxes as estimated by Landlord. Any amounts paid based on such an estimate shall be subject to adjustment as herein provided when actual Taxes are available for each Tax Period. If the total of such monthly remittances is greater than Tenant's Tax Share of Taxes actually due for such Tax Period, then, provided no Event of Default has occurred nor any event which, with the passage of time and/or the giving of notice would constitute an Event of Default, Tenant may credit the difference against the next installment of additional rent on account of Taxes due hereunder, except that if such difference is determined after the end of the Term, Landlord shall refund such difference to Tenant within thirty (30) days after such determination to the extent that such difference exceeds any amounts then due from Tenant to Landlord (it being understood and agreed that if Tenant cures any default prior to the expiration of the notice and/or cure periods set forth in Section 20.1 below. Tenant shall then be entitled to take such credit). If the total of such remittances is less than Tenant's Tax Share of Taxes actually due for such Tax Period, Tenant shall

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pay the difference to Landlord, as additional rent hereunder, within thirty (30) days of Tenant's receipt of an invoice therefor. Landlord's estimate for the next Tax Period shall be based upon actual Taxes for the prior Tax Period plus a reasonable adjustment based upon estimated increases in Taxes. In the event that Payments in Lieu of Taxes ("<u>PILOT</u>"), instead of or in addition to Taxes, are separately assessed to certain portions of the Building or the Property including the Premises, Tenant agrees, except as otherwise expressly provided herein to the contrary, to pay to Landlord, as additional rent, the portion of such PILOT attributable to the Premises in the same manner as provided above for the payment of Taxes. The provisions of this Section 5.3(c) shall survive the expiration or earlier termination of this Lease.

(d) <u>Effect of Abatements</u>. Appropriate credit against Taxes or PILOT shall be given for any refund obtained by reason of a reduction in any Taxes by the assessors or the administrative, judicial or other governmental agency responsible therefor after deduction of Landlord's expenditures for reasonable legal fees and for other reasonable expenses incurred in obtaining the Tax or PILOT refund.

(e) <u>Part Years</u>. If the Term Commencement Date or the Expiration Date occurs in the middle of a Tax Period, Tenant shall be liable for only that portion of the Taxes, as the case may be, with respect to such Tax Period within the Term.

5.4 Late Payments.

(a) Any payment of Rent due hereunder not paid when due shall bear interest for each month or fraction thereof from the due date until paid in full at the annual rate of twelve percent (12%), or at any applicable lesser maximum legally permissible rate for debts of this nature (the "<u>Default Rate</u>"). Notwithstanding the foregoing, Tenant shall be entitled to a grace period of five (5) business days after written notice from Landlord with respect to the first late payment in any twelve (12) month period. Acceptance of interest shall not constitute a waiver of Tenant's default with respect to the overdue amount or prevent Landlord from exercising any of the other rights and remedies available to Landlord under this Lease or at law or in equity now or hereafter in effect.

(b) For each Tenant payment check to Landlord that is returned by a bank for any reason, Tenant shall pay a returned check charge equal to the amount as shall be customarily charged by Landlord's bank at the time.

(c) Money paid by Tenant to Landlord shall be applied to Tenant's account in the following order: first, to any unpaid additional rent, including without limitation late charges, returned check charges, legal fees and/or court costs chargeable to Tenant hereunder; and then to unpaid Base Rent.

5.5 No Offset; Independent Covenants; Waiver. Rent shall be paid without notice or demand, and without setoff, counterclaim, defense, abatement, suspension, deferment, reduction or deduction, except as expressly provided herein. TENANT WAIVES ALL RIGHTS (I) TO ANY ABATEMENT, SUSPENSION, DEFERMENT, REDUCTION OR DEDUCTION OF OR FROM RENT, AND (II) TO QUIT, TERMINATE OR SURRENDER THIS LEASE OR THE PREMISES OR ANY PART THEREOF, EXCEPT

AS EXPRESSLY PROVIDED HEREIN. TENANT HEREBY ACKNOWLEDGES AND AGREES THAT THE OBLIGATIONS OF TENANT HEREUNDER SHALL BE SEPARATE AND INDEPENDENT COVENANTS AND AGREEMENTS, THAT RENT SHALL CONTINUE TO BE PAYABLE IN ALL EVENTS AND THAT THE OBLIGATIONS OF TENANT HEREUNDER SHALL CONTINUE UNAFFECTED, UNLESS THE REQUIREMENT TO PAY OR PERFORM THE SAME SHALL HAVE BEEN TERMINATED PURSUANT TO AN EXPRESS PROVISION OF THIS LEASE. LANDLORD AND TENANT EACH ACKNOWLEDGES AND AGREES THAT THE INDEPENDENT NATURE OF THE OBLIGATIONS OF

TENANT HEREUNDER REPRESENTS FAIR, REASONABLE, AND ACCEPTED COMMERCIAL PRACTICE WITH RESPECT TO THE TYPE OF PROPERTY SUBJECT TO THIS LEASE, AND THAT THIS AGREEMENT IS THE PRODUCT OF FREE AND INFORMED NEGOTIATION DURING WHICH BOTH LANDLORD AND TENANT WERE REPRESENTED BY COUNSEL SKILLED IN NEGOTIATING AND DRAFTING COMMERCIAL LEASES IN MASSACHUSETTS, AND THAT THE ACKNOWLEDGEMENTS AND AGREEMENTS CONTAINED HEREIN ARE MADE WITH FULL KNOWLEDGE OF THE HOLDING IN <u>WESSON V. LEONE ENTERPRISES, INC.</u>, 437 MASS. 708 (2002). SUCH ACKNOWLEDGEMENTS, AGREEMENTS AND WAIVERS BY TENANT ARE A MATERIAL INDUCEMENT TO LANDLORD ENTERING INTO THIS LEASE.

5.6 Survival. Any obligations under this Section 5 which shall not have been paid at the expiration or earlier termination of the Term shall survive such expiration or earlier termination and shall be paid when and as the amount of same shall be determined and be due.

6. **RIGHT OF FIRST OFFER.**

6.1 Right of First Offer. Subject to the provisions of this Section 6, from and after the date on which all of the rentable areas of the Building have been leased, and provided that as of the date of the ROFO Notice (hereinafter defined) (i) there has been no Event of Default nor an event which, with the passage of time and/or the giving of notice would constitute an Event of Default hereunder (it being understood that if Tenant cures a default prior to the expiration of any applicable grace period, Tenant shall then be entitled to exercise its rights under this Section 6 so long as the condition in subsection (ii) hereafter is met), and (ii) Tenant is in occupancy of all of the Premises(5), Tenant shall have a one-time right of first offer to lease less than all of the rentable space on the second floor of the Building (the "ROFO Space") if, as and when the same shall become available for lease, upon the terms and conditions specified in the ROFO Notice <u>but only if</u> less than all of the rentable space on the second floor of the Building is available for lease (it being acknowledged that another tenant in the Building has a superior right of first offer to lease all rentable areas on the second floor is extinguished during the Term, Tenant's right of first offer shall apply to all of the rentable space on the second floor of the Building. Tenant's right of first offer shall apply to all of the rentable space on the second floor of the Building. Tenant's right of first offer subject to (a) all currently-existing extension rights and/or expansion rights of tenant's right of the Building, and (b) any

(5) For purposes of this Section 6.1, the parties agree that license agreements with respect to the use of any desks or benches and/or collaboration agreements entered into by Tenant with respect to the Premises shall not, for purposes of subsection (ii) above, prevent Tenant from exercising its right of first offer pursuant to this Section 6.1.

space needs of Landlord or Landlord's affiliates or related academic and/or research entities. It is understood and agreed that base rent for the ROFO Space shall be the greater of (A) then-current Base Rent for the Premises on a per rentable square foot basis, and (B) fair market rent.

6.2 Offer and Acceptance Procedures for Right of First Offer.

(a) Promptly after Landlord determines, in its reasonable judgment, that the ROFO Space is available for lease and all of the preconditions to the right of first offer granted to Tenant in this Section 6 have been met, Landlord shall deliver to Tenant a written notice offering to lease the ROFO Space to Tenant upon the terms and conditions set forth therein (the "**ROFO Notice**"). Tenant then shall have five (5) business days after receipt of the ROFO Notice to notify Landlord in writing (the "**ROFO Response**") whether Tenant will exercise its right to lease the ROFO Space, the ROFO Response shall indicate whether Tenant accepts Landlord's determination of base rent for the ROFO Space, or if Tenant disputes Landlord's determination of fair market rent for the ROFO Space. If the ROFO Response does not indicate that Tenant disputes Landlord's determination of fair market rent for the ROFO Space, Landlord's determination thereof shall be binding on Tenant. If the ROFO Response does indicate that Tenant disputes Landlord's determination of fair market rent for the ROFO Space, fair market rent for the ROFO Space shall be determined in the same manner as provided for the determination of fair market rental value set forth in Section 1.2 of this Lease.

(b) If Tenant fails to notify Landlord in writing within such 5-business day period that Tenant accepts the offer contained in the ROFO Notice, or if Tenant refuses in writing the offer contained in the ROFO Notice, Landlord shall have the right to lease the ROFO Space to any third party tenant on whatever terms and conditions Landlord may determine in its sole discretion. If Tenant timely notifies Landlord of its desire to lease the ROFO Space pursuant to this Section 6, Landlord shall submit to Tenant, and Tenant shall execute and deliver to Landlord within thirty (30) days of receipt thereof, a lease amendment which incorporates all of the terms and conditions set forth in the ROFO Notice. Landlord and Tenant shall reasonably diligently negotiate such lease amendment in good faith.

6.3 Termination of Rights. All rights of Tenant under this Section 6 shall terminate upon the expiration or earlier termination of the Term of this Lease.

6.4 **Rights Personal to Tenant.** Except in connection with a Transfer (hereinafter defined) pursuant to Section 13 below, Tenant may not assign, mortgage, pledge, encumber or otherwise transfer its interest or rights under this Section 6, and any such purported transfer or attempt to transfer shall be void and without effect, shall terminate Tenant's rights under this Section 6, and shall constitute an Event of Default under this Lease.

6.5 Time is of the Essence. Time is of the essence with respect to all aspects of this Section 6.

7. LETTER OF CREDIT.

7.1 Amount.

(a) Contemporaneously with the execution of this Lease, Tenant shall deliver to Landlord either (i) cash in an amount specified in the Lease Summary Sheet (the "<u>Cash Security Deposit</u>"), which shall be held by Landlord in accordance with Section 7.5 below, or (ii) an irrevocable letter of credit which shall (a) be in the amount specified in the Lease Summary Sheet and otherwise in the form attached hereto as <u>Exhibit 4</u>; (b) issued by a bank reasonably acceptable to Landlord upon which presentment may be made in Boston, Massachusetts (if Landlord so requires at the time of its approval thereof); and (c) be for a term of one (1) year, subject to extension in accordance with the terms hereof (the "<u>Letter of Credit</u>"). The Letter of Credit shall be held by Landlord, without liability for interest, as security for the faithful performance by Tenant of all of the terms, covenants and conditions of this Lease by the Tenant to be kept and performed during the Term. In no event shall the Letter of Credit be deemed to be a prepayment of Rent nor shall it be considered a measure of liquidated damages. Unless the Letter of Credit is automatically renewing, at least thirty (30) days prior to the maturity date of the Letter of Credit (or any replacement Letter of Credit), Tenant shall deliver to Landlord a replacement Letter of Credit which shall have a maturity date no earlier than the next anniversary of the Term Commencement Date or one (1) year from its date of delivery to Landlord, whichever is later.

(b) If no Event of Default has occurred and there is no event which, with the passage of time and/or the giving of notice, would constitute an Event of Default, and further provided that there is no material adverse change in Tenant's net worth at the commencement of such Rent Year as verified by Landlord based upon a certificate from Tenant's chief financial officer and Tenant's audited financials, then the Cash Security Deposit or face amount of the Letter of Credit, as applicable, may be reduced by Tenant to (a) \$386,784.00 at the commencement of the second Rent Year, (b) \$290,088.00 at the commencement of the third Rent Year, and (c) \$193,392.00 at the commencement of the fifth Rent Year; it being understood that if and when Tenant cures a default prior to the expiration of the applicable grace period, Tenant shall then be entitled to effect such reduction in accordance with this Section 7.1(b). Landlord shall, at no cost to Landlord, cooperate with Tenant and the issuer of the Letter of Credit, if applicable, in connection with such reduction.

7.2 Application of Proceeds of Letter of Credit. Upon an Event of Default, or if any proceeding shall be instituted by or against Tenant pursuant to any of the provisions of any Act of Congress or State law relating to bankruptcy, reorganizations, arrangements, compositions or other relief from creditors (and, in the case of any proceeding instituted against it, if Tenant shall fail to have such proceedings dismissed within thirty (30) days) or if Tenant is adjudged bankrupt or insolvent as a result of any such proceeding, or upon the end of the Term if there remains any uncured default of which Tenant shall have received notice, Landlord at its sole option may draw down all or a part of the Letter of Credit. The balance of any Letter of Credit cash proceeds shall be held in accordance with Section 7.5 below. Should the entire Letter of Credit in the amount drawn, and Tenant's failure to do so within ten (10) days after receipt of such written demand shall constitute an additional Event of Default hereunder. The application of all or any part of the cash proceeds of the Letter of Credit to any obligation or default of Tenant under this Lease shall not deprive Landlord of any other rights or remedies Landlord may have nor shall such application by Landlord constitute a waiver by Landlord.

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7.3 Transfer of Letter of Credit. In the event that Landlord transfers its interest in the Premises, Tenant shall upon notice from and at no cost to Landlord, deliver to Landlord an amendment to the Letter of Credit or a replacement Letter of Credit naming Landlord's successor as the beneficiary thereof. If Tenant fails to deliver such amendment or replacement within twenty (20) days after written notice from Landlord, Landlord shall have the right to draw down the entire amount of the Letter of Credit and hold the proceeds thereof in accordance with Section 7.5 below.

7.4 Credit of Issuer of Letter of Credit. In event of a material adverse change in the financial position of any bank or institution which has issued the Letter of Credit or any replacement Letter of Credit hereunder, Landlord reserves the right to require that Tenant change the issuing bank or institution to another bank or institution reasonably approved by Landlord. Tenant shall, within ten (10) days after receipt of written notice from Landlord, which notice shall include the basis for Landlord's reasonable belief that there has been a material adverse change in the financial position of the issuer of the Letter of Credit, replace the then-outstanding letter of credit with a like Letter of Credit from another bank or institution approved by Landlord.

7.5 Security Deposit. Landlord shall hold the Cash Security Deposit and/or the balance of proceeds remaining after a draw on the Letter of Credit (each hereinafter referred to as the "Security Deposit") as security for Tenant's performance of all its Lease obligations. After an Event of Default, or upon the end of the Term if there remains any uncured default of which Tenant shall have received notice, Landlord may apply the Security Deposit, or any part thereof, to Landlord's damages without prejudice to any other Landlord remedy. Should Landlord apply all or any portion of the Security Deposit in accordance with the terms of this Lease, Tenant shall, upon the written demand of Landlord, deliver cash in the amount applied, and Tenant's failure to do so within twenty (20) days after receipt of such written demand shall constitute an additional Event of Default hereunder. Tenant shall have the right to deliver a replacement Letter of Credit in the form and amount required hereunder, and upon receipt of such replacement Letter of Credit, Landlord has no obligation to pay interest on the Security Deposit, or any part not applied previously, may be turned over to the grantee in which case Tenant shall look solely to the grantee for the proper application and return of

the Security Deposit.

7.6 <u>Return of Security Deposit or Letter of Credit</u>. Should Tenant comply with all of such terms, covenants and conditions and promptly pay all sums payable by Tenant to Landlord hereunder, the Security Deposit and/or Letter of Credit or the remaining proceeds therefrom, as applicable, shall be returned to Tenant within sixty (60) days after the end of the Term, less any portion thereof which may have been utilized by Landlord to cure any default or applied to any actual damage suffered by Landlord.

8. INTENTIONALLY OMITTED.

9. UTILITIES, HVAC; WASTE.

9.1 Electricity. Commencing on the Term Commencement Date, Tenant shall pay all charges for electricity furnished to the Premises and/or any equipment exclusively serving the same as additional rent as provided hereafter. Such charges shall be based in part on (a) reasonable

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estimates by Landlord based on percentage of air flow used by Tenant (measured through Landlord's Building energy management system) as to equipment in the Building serving the Building, Tenant and other tenants, to be separately billed by Landlord, (b) metering equipment installed as part of Landlord's Base Building Work, as to other electricity used in the Premises, which Tenant shall pay directly to the supplier, and (c) if applicable, such other metering equipment, if any, approved by Landlord in its reasonable discretion. Landlord shall, at Tenant's sole cost and expense, maintain and keep in good order, condition and repair any such metering equipment. Tenant shall pay the full amount of any charges attributable to such meter on or before the due date therefor either to Landlord or directly to the supplier thereof, at Landlord's election.

9.2 Water. Commencing on the Term Commencement Date, Tenant shall pay all water and sewer charges for water furnished to the Premises and/or any equipment exclusively serving the same as additional rent. Such charges shall be reasonably estimated by Landlord based on the percentage of air flow used by Tenant (measured through Landlord's Building energy management system).

9.3 Gas. Commencing on the Term Commencement Date, Tenant shall pay all charges for natural gas service furnished to the Premises and/or any equipment exclusively serving the same as additional rent as provided hereafter. Such charges shall be based in part on (a) reasonable estimates by Landlord based on percentage of air flow used by Tenant (measured through Landlord's Building energy management system) as to equipment in the Building serving the Building, Tenant, and other tenants, to be separately billed by Landlord, and (b) metering equipment installed as part of Landlord's Base Building Work, as to natural gas used in the Premises, which Tenant shall pay directly to the supplier, and (c) if applicable, such other metering equipment, if any, approved by Landlord in its reasonable discretion.

9.4 HVAC. Consistent with the levels provided by Class A laboratory/office buildings in East Cambridge, Landlord shall provide to the Common Areas and the Premises on a twenty-four (24) hours per day, seven (7) days per week basis (i) heat 365 days/year and (ii) air conditioning during the normal cooling season; provided, however, that Landlord will provide air conditioning at such other times as reasonably requested by Tenant and (iii) general exhaust/ventilation. Excluded from such services are air conditioning requirements for (A) personal computers in excess of an average of one personal computer per person in occupancy of the Premises, or (B) exceptional office machinery. It is expressly acknowledged and agreed that Tenant shall be solely responsible for specialty exhaust, including without limitation exhaust for H2 rooms, radiation hoods and isotope hoods, vivarium, chemical storage rooms which require Class I, Division II classification, if any, and any other special Tenant equipment. Whenever the air conditioning systems are in operation, Tenant agrees to use reasonable efforts to lower and close the blinds or drapes when necessary because of the sun's position, and to cooperate fully with Landlord with regard to, and to abide by all the reasonable regulations and requirements which Landlord may prescribe for the proper functioning and protection of the air conditioning systems.

9.5 Other Utilities; Utility Information. Subject to Landlord's reasonable rules and regulations governing the same, Tenant shall obtain and pay, as and when due, for all other utilities and services consumed in and/or furnished to the Premises, together with all taxes, penalties, surcharges and maintenance charges pertaining thereto. Within ten (10) business days after

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Landlord's request from time to time, Tenant shall provide Landlord with reasonably detailed information regarding tenant's utility usage in the Premises.

9.6 Interruption or Curtailment of Utilities.

(a) When necessary by reason of accident or emergency, or for repairs, alterations, replacements or improvements which in the reasonable judgment of Landlord are desirable or necessary to be made, Landlord reserves the right, upon as much prior notice to Tenant as is practicable under the circumstances and no less than twenty-four (24) hours' notice except in the event of an emergency, to interrupt, curtail, or stop (i) the furnishing of hot and/or cold water, and (ii) the operation of the plumbing and electric systems. Landlord shall exercise reasonable diligence to eliminate the cause of any such interruption, curtailment, stoppage or suspension, but, subject to Section 9.6(b) below, there shall be no diminution or abatement of Rent or other compensation due from Landlord to Tenant hereunder, nor shall this Lease be affected or any of Tenant's obligations hereunder reduced, and Landlord shall have no responsibility or liability for any such interruption, curtailment, stoppage, or suspension of services or systems.

Notwithstanding anything to the contrary in this Lease contained, if the Premises shall lack any service which (b)Landlord is required to provide hereunder, or if Tenant's use and occupancy of the Premises or any part thereof shall be disturbed in violation of Section 23 hereof (thereby rendering the Premises or a portion thereof substantially untenantable) such that, for the duration of the Landlord Service Interruption Cure Period (hereinafter defined), the continued operation in the ordinary course of Tenant's business in any portion of the Premises is materially and adversely affected, and if Tenant ceases to use the affected portion of the Premises (the "Affected Portion") during the period of untenantability as the direct result of such lack of service or disturbance, then, provided that Tenant ceases to use the Affected Portion during the entirety of the Landlord Service Interruption Cure Period and that such untenantability and Landlord's inability to cure such condition is not caused by the acts or omissions of any of the Tenant Parties, Base Rent shall thereafter be abated in proportion to such untenantability until the day such condition is completely corrected. For purposes hereof, the "Landlord Service Interruption Cure Period" shall be defined as seven (7) consecutive business days after Landlord's receipt of written notice from Tenant of the condition causing untenantability in the Affected Portion. The provisions of this Section 9.6(b) shall not apply in the event of Casualty or Taking, or in the event of untenantability caused by causes beyond Landlord's control or if Landlord is unable to cure such condition as the result of causes beyond Landlord's control. The remedy set forth in this Section 9.6(b) shall be Tenant's sole and exclusive remedy on account of any interruption of services or Landlord's default resulting in an interruption of services other than Tenant's right to obtain affirmative injunctive relief.

9.7 Telecommunications Providers. Notwithstanding anything to the contrary herein or in this Lease contained, Landlord has no obligation to allow any particular telecommunications service provider to have access to the Building or to Premises other than Verizon and LightTower (collectively, the "<u>Approved Providers</u>"). If Landlord permits such access, Landlord may condition such access upon (a) the execution of Landlord's standard telecommunications agreement (which shall include a provision requiring the payment of fair market rent for any space in the Property dedicated, licensed and/or leased to such provider), and (b) the payment to Landlord by Tenant or the service provider of any costs incurred by Landlord in facilitating such

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access. Subject to the preceding sentence, Landlord's consent to providing access to the Building to any service provider other than the Approved Providers shall not be unreasonably withheld, conditioned or delayed provided such access does not require any street opening permits or approvals (unless otherwise agreed to by the City of Cambridge) or would unreasonably interfere with the use of the Common Areas. Notwithstanding the foregoing, Landlord hereby agrees to permit Cogent to have access to the Building to provide internet connectivity services to the Premises so long as (1) such access can be reasonably facilitated without interfering with current or planned use of space in the risers, conduits and elsewhere in the Building, (2) Cogent executes Landlord's standard telecommunications agreement (which shall include a provision requiring the payment of fair market rent for any space in the Property dedicated, licensed and/or leased to Cogent and/or its affiliates), and (3) Tenant reimburses Landlord for any and all reasonable out-of-pocket costs incurred by Landlord in facilitating such access.

9.8 Landlord's Services. Subject to reimbursement pursuant to Section 5.2 above, Landlord shall provide the services described in Exhibit 8 attached hereto and made a part hereof ("Landlord's Services").

10. MAINTENANCE AND REPAIRS.

10.1 Maintenance and Repairs by Tenant. Tenant shall keep all and singular the Premises (including, without limitation, doors and door frames and plate glass (provided that Landlord shall have the right to repair plate glass at Tenant's cost)) neat and clean and free of insects, rodents, vermin and other pests and in such good repair, order and condition as the same are in on the Term Commencement Date or in such better condition as the Premises may be put in during the Term, reasonable wear and tear and damage by insured Casualty excepted. Tenant shall be solely responsible, at Tenant's cost and expense, for the proper maintenance of all building systems, sanitary, electrical, heating, air conditioning, plumbing, security or other systems and of all equipment and appliances installed and/or operated by Tenant and/or exclusively serving the Premises. Tenant agrees to provide regular maintenance by contract with a reputable qualified service contractor for the heating and air conditioning equipment exclusively servicing the Premises. Such maintenance contract and contractor shall be subject to Landlord's reasonable approval. Tenant, at Landlord's request, shall at reasonable intervals provide Landlord with copies of such contracts and maintenance and repair records and/or reports.

10.2 Maintenance and Repairs by Landlord. Except as otherwise provided in Section 15, and subject to Tenant's obligations in Section 10.1 above, Landlord shall keep and maintain the roof, Building structure, exterior window frames, structural floor slabs and columns and base building and common systems (including without limitation life-safety, sanitary, electrical, heating, air conditioning, plumbing, security or other systems) in good repair, order and condition. In addition, Landlord shall operate and maintain the Common Areas in substantially the same manner as other first-class combination office and laboratory facilities in the vicinity of the Building.

10.3 Accidents to Sanitary and Other Systems. Tenant shall give to Landlord prompt notice of any fire or accident in the Premises or, if Tenant has knowledge thereof, elsewhere in the Building and of any damage to, or defective condition in, any part or appurtenance of the Building including, without limitation, sanitary, electrical, ventilation, heating and air conditioning or other

systems located in, or passing through, the Premises. Except as otherwise provided in Section 15, and subject to Tenant's obligations in Section 10.1 above, such damage or defective condition shall be remedied by Landlord with reasonable diligence, but, subject to Section 14.5 below, if such damage or defective condition was caused by any of the Tenant Parties, the cost to remedy the same shall be paid by

10.4 Floor Load—Heavy Equipment. Tenant shall not place a load upon any floor of the Premises exceeding the floor load per square foot of area which such floor was designed to carry and which is allowed by Legal Requirements. Landlord reserves the right to prescribe the weight and position of all safes, heavy machinery, heavy equipment, freight, bulky matter or fixtures (collectively, "<u>Heavy Equipment</u>"), which shall be placed so as to distribute the weight. Heavy Equipment shall be placed and maintained by Tenant at Tenant's expense in settings sufficient in Landlord's reasonable judgment to absorb and prevent vibration, noise and annoyance. Tenant shall not move any Heavy Equipment into or out of the Building without giving Landlord prior written notice thereof and observing all of Landlord's Rules and Regulations with respect to the same. If such Heavy Equipment requires special handling, Tenant agrees to employ only persons holding a Master Rigger's License to do said work, and that all work in connection therewith shall comply with Legal Requirements. Any such moving shall be at the sole risk and hazard of Tenant and Tenant will defend, indemnify and save Landlord and Landlord's agents (including without limitation its property manager), contractors and employees (collectively with Landlord, the "Landlord Parties") harmless from and against any and all claims, damages, losses, penalties, costs, expenses and fees (including without limitation reasonable legal fees) (collectively, "Claims") resulting directly or indirectly from such moving. Proper placement of all Heavy Equipment in the Premises shall be Tenant's responsibility.

11. ALTERATIONS AND IMPROVEMENTS BY TENANT.

11.1 Landlord's Consent Required. Tenant shall not make any alterations, decorations, installations, removals, additions or improvements (collectively, "Alterations") in or to the Premises without Landlord's prior written approval of the contractor(s), written plans and specifications, a time schedule therefor and the items listed in Exhibit 5 attached hereto and made a part hereof. Landlord reserves the right to require that Tenant use Landlord's preferred vendor(s) for any Alterations that involve roof penetrations, alarm tieins, sprinklers, fire alarm and other life safety equipment. Tenant shall not make any amendments or additions to plans and specifications approved by Landlord without Landlord's prior written consent. Landlord's approval of non-structural Alterations and Tenant's contractor(s) shall not be unreasonably withheld, conditioned or delayed. Notwithstanding the foregoing, Landlord may withhold its consent in its sole discretion (a) to any Alteration to or affecting the lab benches, fume hoods, roof and/or building systems, (b) with respect to matters of aesthetics relating to Alterations to or affecting the exterior of the Building, and (c) to any Alteration affecting the Building structure. Notwithstanding the foregoing, Landlord's consent shall not be required (but the applicable Exhibit 5 items shall be provided if reasonably required by Landlord) with respect to Alterations that are purely decorative in nature nor with respect to nonstructural Alterations that do not trigger any requirement for Alterations outside the Premises and which cost less than \$25,000 in any one instance (and \$75,000 in the aggregate per year) so long as such Alterations do not materially adversely affect the roof, Building systems or Building exterior (each, a "Permitted Alteration"), provided Tenant shall provide Landlord with reasonably detailed prior written notice thereof.

Tenant shall be responsible for all elements of the design of Tenant's plans (including, without limitation, compliance with Legal Requirements, functionality of design, the structural integrity of the design, the configuration of the Premises and the placement of Tenant's furniture, appliances and equipment), and Landlord's approval of Tenant's plans shall in no event relieve Tenant of the responsibility for such design. Landlord shall have no liability or responsibility for any claim, injury or damage alleged to have been caused by the particular materials (whether building standard or non-building standard), appliances or equipment selected by Tenant in connection with any work performed by or on behalf of Tenant. Except as otherwise expressly set forth herein, all Alterations shall be done at Tenant's sole cost and expense and at such times and in such manner as Landlord may from time to time reasonably designate. If Tenant shall make any Alterations, then Landlord may elect, at the time Landlord approves such Alterations (or, for Permitted Alterations, promptly after Tenant notifies the Landlord of Tenant's intent to make such Permitted Alterations and provides Landlord with the applicable Exhibit 5 items related thereto), to require Tenant at the expiration or sooner termination of the Term to restore the Premises to substantially the same condition as existed immediately prior to the Alterations. If Landlord does not so elect, then any such Alteration shall become a part of the Premises upon installation, and shall be surrendered with the Premises at the end of the Term. Tenant shall provide Landlord with reproducible record drawings (in CAD format) of all Alterations within sixty (60) days after completion thereof.

11.2 Supervised Work. Landlord and Tenant recognize that to the extent Landlord permits Tenant to perform any Alterations outside the Premises and/or affecting the Building systems, or if required by Legal Requirements, Landlord will need to make arrangements to have supervisory personnel on site. Accordingly, Landlord and Tenant agree as follows: Tenant shall give Landlord at least two (2) business days' prior written notice of any time outside of normal construction hours when Tenant intends to perform portions of Alterations (the "Supervised Work"). Tenant shall reimburse Landlord, within thirty (30) days after demand therefor, for the reasonable cost of Landlord's supervisory personnel overseeing the Supervised Work.

11.3 <u>Harmonious Relations</u>. Tenant agrees that it will not, either directly or indirectly, use any contractors and/or materials if their use will create any difficulty, whether in the nature of a labor dispute or otherwise, with other contractors and/or labor engaged by Tenant or Landlord or others in the construction, maintenance and/or operation of the Building, the Property or any part thereof. In the event of any such difficulty, upon Landlord's request, Tenant shall cause all contractors, mechanics or laborers causing such difficulty to leave the Property immediately.

11.4 Liens. No Alterations shall be undertaken by Tenant until Tenant has made provision for written waiver of liens from all contractors for such Alteration and taken other appropriate protective measures approved and/or required by Landlord. Tenant shall either: (a) demonstrate to Landlord, to Landlord's reasonable satisfaction, that Tenant is able to pay for the cost of such Alteration, or (b) provide to Landlord security, in form and amount reasonably satisfactory to Landlord (such as a letter of credit, escrowed funds, payment, performance and lien bonds or a guaranty), securing Tenant's obligation to pay for the entire cost of such Alteration. Any mechanic's lien filed against the Premises or the Building for work claimed to have been done for, or materials claimed to have been furnished to, Tenant shall be discharged by Tenant within ten (10) days thereafter, at Tenant's expense by filing the bond required by law or otherwise.

11.5 <u>General Requirements</u>. Unless Landlord and Tenant otherwise agree in writing, Tenant shall (a) obtain Landlord's written approval of any and all building permit applications relating to Alterations to the Premises prior to submission thereof; (b) procure or cause others to procure on its behalf all necessary permits before undertaking any Alterations in the Premises (and provide copies thereof to Landlord); (c) perform all of such Alterations in a good and workmanlike manner, employing materials of good quality and in compliance with Landlord's construction rules and regulations, all insurance requirements of this Lease, and Legal Requirements; and (d) defend, indemnify and hold the Landlord Parties harmless from and against any and all Claims occasioned by or growing out of such Alterations. Tenant shall cause contractors employed by Tenant to (i) carry Worker's Compensation Insurance in accordance with statutory requirements, (ii) carry Automobile Liability Insurance and Commercial General Liability Insurance (A) naming Landlord as an additional insured, and (B) covering such contractors on or about the Premises in the amounts stated in Section 14 hereof or in such other reasonable amounts as Landlord shall require, and (iii) submit binders evidencing such coverage to Landlord prior to the commencement of any such Alterations. In addition, if construction during normal business hours unreasonably disturbs other tenants of the Property, in Landlord's sole discretion, Landlord may require Tenant to stop the performance of Alterations during normal business hours and to perform the same after hours.

12. SIGNAGE.

12.1 **Restrictions.** Tenant shall have the right to install Building standard signage identifying Tenant's business at the entrance to the Premises, which signage shall be subject to Landlord's prior written consent (which consent shall not be unreasonably withheld, conditioned or delayed so long as the same complies with Landlord's then-current signage guidelines for the Building). Subject to the foregoing, Tenant shall not place or suffer to be placed or maintained on the exterior of the Premises, or any part of the interior visible from the exterior thereof, any sign, banner, advertising matter or any other thing of any kind (including, without limitation, any hand-lettered advertising), and shall not place or maintain any decoration, letter or advertising matter on the glass of any window or door of the Premises without first obtaining Landlord's written approval. No signs or blinds may be put on or in any window or elsewhere if visible from the exterior of the Building. Landlord may provide Tenant with building standard blinds for each window within the Premises and Tenant shall install the same at Tenant's sole cost and expense. Tenant may not remove the building standard blinds without Landlord's prior written consent. Tenant may hang its own drapes, provided that they shall not in any way interfere with any building standard drapery or blinds provided by Landlord or be visible from the exterior of the Building, and that such drapes are so hung and installed that, when drawn, the building standard drapery or blinds are automatically also drawn.

12.2 Building Directory. Landlord shall list Tenant within the directory in the Building lobby at Landlord's sole cost and expense. Subject to reasonable limits on the number of lines on the directory Landlord can provide and all such additional signage in the lobby directory, Landlord shall add the names of any approved subtenants or licensees occupying any portion of the Premises at Tenant's sole cost and expense.

12.3 Monument Sign. Subject to the issuance of applicable permits and approvals and subject further to Legal Requirements as of right, Landlord intends to install a monument sign on

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the Property on which Landlord shall list Tenant's name (as well as the names of other tenants or occupants of the Building). Such listing shall comply with Landlord's then-current signage guidelines for the Property.

13. ASSIGNMENT, MORTGAGING AND SUBLETTING.

13.1 Landlord's Consent Required. Tenant shall not, without Landlord's prior written consent, which consent may be withheld in Landlord's sole discretion, mortgage or otherwise encumber this Lease or the Premises in whole or in part. Except as expressly otherwise set forth herein, Tenant shall not, without Landlord's prior written consent, which consent shall be granted or may be withheld in accordance with Section 13.3 below, assign, sublet, mortgage, license, transfer or encumber this Lease or the Premises in whole or in part whether by changes in the ownership or control of Tenant, or any direct or indirect owner of Tenant, whether at one time or at intervals, by sale or transfer of stock, partnership or beneficial interests, operation of law or otherwise, or permit the occupancy of all or any portion of the Premises by any person or entity other than Tenant's employees (each of the foregoing, a "Transfer"). Any purported Transfer made without Landlord's consent, if required hereunder, shall be void and confer no rights upon any third person, provided that if there is a Transfer, Landlord may collect rent from the transferee without waiving the prohibition against Transfers, accepting the transferee, or releasing Tenant from full performance under this Lease. In the event of any Transfer in violation of this Section 13, Landlord shall have the right to terminate this Lease upon thirty (30) days' written notice to Tenant given within sixty (60) days after receipt of written notice from Tenant to Landlord of any Transfer, or within one (1) year after Landlord first learns of the Transfer if no notice is given. No Transfer shall relieve Tenant of its primary obligation as party Tenant hereunder, nor shall it reduce or increase Landlord's obligations under this Lease. In no event shall any transfer of shares in Tenant over a nationally recognized stock exchange be deemed to be a Transfer.

13.2 Landlord's Recapture Right.

(a) Subject to Section 13.7 below, Tenant shall, prior to offering or advertising the Premises or any portion thereof for a Transfer, give a written notice (the "<u>Recapture Notice</u>") to Landlord which: (i) states that Tenant desires to make a Transfer, (ii) identifies the affected portion of the Premises (the "<u>Recapture Premises</u>"), (iii) identifies the period of time (the "<u>Recapture Period</u>")

during which Tenant proposes to sublet the Recapture Premises, or indicates that Tenant proposes to assign its interest in this Lease, and (iv) offers to Landlord to terminate this Lease with respect to the Recapture Premises (in the case of a proposed assignment of Tenant's interest in this Lease or a subletting for the remainder of the term of this Lease) or to suspend the Term for the Recapture Period (i.e. the Term with respect to the Recapture Premises shall be terminated during the Recapture Period and Tenant's rental obligations shall be proportionately reduced). Landlord shall have fifteen (15) business days within which to respond to the Recapture Notice.

(b) If Tenant does not enter into a Transfer on the terms and conditions contained in the Recapture Notice on or before the date which is one hundred eighty (180) days after the earlier of: (x) the expiration of the 15-business day period specified in Section 13.2(a) above, or (y) the date that Landlord notifies Tenant that Landlord will not accept Tenant's offer contained in the Recapture Notice, *time being of the essence*, then prior to entering into any

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Transfer after such 180-day period, Tenant must deliver to Landlord a new Recapture Notice in accordance with Section 13.2(a) above.

(c) Notwithstanding anything to the contrary contained herein, if Landlord notifies Tenant that it accepts the offer contained in the Recapture Notice or any subsequent Recapture Notice, Tenant shall have the right, for a period of fifteen (15) days following receipt of such notice from Landlord, *time being of the essence*, to notify Landlord in writing that it wishes to withdraw such offer and this Lease shall continue in full force and effect.

13.3 Standard of Consent to Transfer. If Landlord does not timely give written notice to Tenant accepting an offer contemplated in a Recapture Notice or declines to accept the same, then Landlord agrees that, subject to the provisions of this Section 13, Landlord shall not unreasonably withhold, condition or delay its consent to a Transfer at fair market rent and otherwise on the terms contained in the Recapture Notice to an entity which will use the Premises for the Permitted Uses (provided that such consent shall be given or denied within thirty (30) days after Tenant submits a request therefor together with all other required information) and, in Landlord's reasonable opinion: (a) has a tangible net worth and other financial indicators sufficient to meet the Transferee's obligations under the Transfer instrument in question; (b) has a business reputation compatible with the operation of a first-class combination laboratory, research, development and office building; and (c) the intended use of such entity does not violate any exclusive or restrictive use provisions of any leases then in effect with respect to space in the Building; provided, however, if there shall be, at the time that Landlord is otherwise required to provide its consent, an event which, with the passage of time and/or the giving of notice, would constitute an Event of Default, then it shall be reasonable for Landlord to condition its consent to the Transfer in question on Tenant's cure of such default prior to the expiration of applicable cure periods set forth in Section 20.1 (any Transfer to which Landlord's consent has been given pursuant this Section 13.3, a "**Permitted Transfer**").

13.4 Listing Confers no Rights. The listing of any name other than that of Tenant, whether on the doors of the Premises or on the Building directory, or otherwise, shall not operate to vest in any such other person, firm or corporation any right or interest in this Lease or in the Premises or be deemed to effect or evidence any consent of Landlord, it being expressly understood that any such listing is a privilege extended by Landlord revocable at will by written notice to Tenant.

13.5 Profits In Connection with Transfers. Tenant shall, within thirty (30) days of receipt thereof, pay to Landlord fifty percent (50%) of any rent, sum or other consideration to be paid or given in connection with any Transfer, either initially or over time, after deducting reasonable actual out-of-pocket legal, and brokerage expenses incurred by Tenant, market concessions granted to the applicable Transferee and unamortized improvements paid for by Tenant in connection therewith, in excess of Rent hereunder as if such amount were originally called for by the terms of this Lease as additional rent. This Section 13.5 shall not apply to any Transfer to a Successor.

13.6 Prohibited Transfers. Notwithstanding any contrary provision of this Lease, Tenant shall have no right to make a Transfer unless on both (i) the date on which Tenant notifies Landlord of its intention to enter into a Transfer and (ii) the date on which such Transfer is to take

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effect, there is not an Event of Default. Notwithstanding anything to the contrary contained herein, Tenant agrees that in no event shall Tenant make a Transfer to (a) any government agency; (b) any tenant, subtenant or occupant of other space in the Building; or (c) any entity with whom Landlord shall have negotiated for space in the Property in the six (6) months immediately preceding such proposed Transfer.

13.7 Exceptions to Requirement for Consent. Notwithstanding anything to the contrary herein contained, Tenant shall have the right, without obtaining Landlord's consent and without giving Landlord a Recapture Notice, to make a Transfer to (a) an Affiliated Entity (hereinafter defined) so long as such entity remains in such relationship to Tenant, and (b) a Successor, provided that prior to or simultaneously with any such Transfer, such Affiliated Entity or Successor, as the case may be, and Tenant execute and deliver to Landlord an assignment and assumption agreement in form and substance reasonably acceptable to Landlord whereby such Affiliated Entity or Successor, as the case may be, shall agree to be independently bound by and upon all the covenants, agreements, terms, provisions and conditions set forth in the Lease on the part of Tenant to be performed, and whereby such Affiliated Entity or Successor, as the case may be, shall expressly agree that the provisions of this Section 13 shall, notwithstanding such Transfer, continue to be binding upon it with respect to all future Transfers. For the purposes hereof, an "<u>Affiliated Entity</u>" shall be defined as any entity which is controlled by, is under common control with, or which controls Tenant. For the purposes hereof, a "<u>Successor</u>" shall be defined as any entity into or with which Tenant is merged or with which Tenant is consolidated or which acquires all or substantially all of Tenant's stock

or assets, provided that the surviving entity shall have a net worth and other financial indicators sufficient to meet Tenant's obligations hereunder. Notwithstanding the provisions of this Section 13.7, no transaction or series of transactions which are effected solely for the purpose of qualifying as a transaction which does not require Landlord's consent (i.e. and thereby avoiding the operation of the provisions of this Article 13) shall be permitted pursuant to this Section 13.7.

14. INSURANCE; INDEMNIFICATION; EXCULPATION.

14.1 Tenant's Insurance.

(a) Tenant shall procure, pay for and keep in force throughout the Term (and for so long thereafter as Tenant remains in occupancy of the Premises) commercial general liability insurance insuring Tenant on an occurrence basis against all claims and demands for personal injury liability (including, without limitation, bodily injury, sickness, disease, and death) or damage to property which may be claimed to have occurred from and after the time any of the Tenant Parties shall first enter the Premises, of not less than Three Million Dollars (\$3,000,000) per occurrence, Five Million Dollars (\$5,000,000) aggregate, and from time to time thereafter shall be not less than such higher amounts, if procurable, as may be reasonably required by Landlord. Tenant shall also carry umbrella liability coverage in an amount of no less than Five Million Dollars (\$5,000,000). Such policy shall also include contractual liability coverage covering Tenant's liability assumed under this Lease, including without limitation Tenant's indemnification obligations. Such insurance policy(ies) shall name Landlord, Landlord's managing agent and persons claiming by, through or under them, if any, as additional insureds.

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(b) Tenant shall take out and maintain throughout the Term a policy of fire, vandalism, malicious mischief, extended coverage and so-called "all risk" coverage insurance in an amount equal to one hundred percent (100%) of the replacement cost insuring (i) all items or components of Tenant's Alterations (collectively, the "<u>Tenant-Insured Improvements</u>"), and (ii) Tenant's furniture, equipment, fixtures and property of every kind, nature and description related or arising out of Tenant's leasehold estate hereunder, which may be in or upon the Premises or the Building (collectively, "<u>Tenant's Property</u>"). Such insurance shall insure the interests of both Landlord and Tenant as their respective interests may appear from time to time.

(c) Tenant shall take out and maintain a policy of business interruption insurance throughout the Term sufficient to cover at least twelve (12) months of Rent due hereunder and Tenant's business losses during such 12-month period.

(d) Tenant shall procure and maintain at its sole expense such additional insurance as may be necessary to comply with any Legal Requirements.

(e) During periods when any Alterations are being performed, Builders Risk Insurance .

(f) The insurance required pursuant to Sections 14.1(a), (b), (c), (d) and (e) (collectively, "<u>Tenant's Insurance</u> <u>Policies</u>") shall be effected with insurers approved by Landlord, with a rating of not less than "A-XI" in the current *Best's Insurance Reports*, and authorized to do business in the Commonwealth of Massachusetts under valid and enforceable policies. Tenant's Insurance Policies shall each provide that it shall not be canceled or modified without at least thirty (30) days' prior written notice to each insured named therein (or, in the case of a cancellation due to non-payment of premium, without at least ten (10) days prior written notice to each insured named therein). Tenant's Insurance Policies may include no greater than commercially reasonable deductible amounts. On or before the date on which any of the Tenant Parties shall first enter the Premises and thereafter prior to the expiration date of each expiring policy, Tenant shall deliver to Landlord binders of Tenant's Insurance Policies issued by the respective insurers setting forth in full the provisions thereof together with evidence satisfactory to Landlord of the payment of all premiums for such policies. In the event of any claim, and upon Landlord's request, Tenant shall deliver to Landlord complete copies of Tenant's Insurance Policies. Upon request of Landlord, Tenant shall deliver to any Mortgagee copies of the foregoing documents.

14.2 Indemnification.

(a) Except to the extent caused by the negligence or willful misconduct of any of the Landlord Parties, Tenant shall defend, indemnify and save the Landlord Parties harmless from and against any and all Claims asserted by or on behalf of any person, firm, corporation or public authority arising from:

(i) Tenant's breach of any covenant or obligation under this Lease;

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(ii) Any injury to or death of any person, or loss of or damage to property, sustained or occurring in, upon, at or about the Premises during the Term and any period thereafter, if any, during which any Tenant Party holds over;

(iii) Any injury to or death of any person, or loss of or damage to property arising out of the use or occupancy of the Premises by or the negligence or willful misconduct of any of the Tenant Parties; and

(iv) On account of or based upon any work or thing whatsoever done (other than by Landlord or any of the Landlord Parties) at the Premises during the Term and during the period of time, if any, prior to the Term Commencement Date that any of the Tenant Parties may have been given access to the Premises.

(b) Except to the extent caused by the negligence or willful misconduct of any of the Tenant Parties, Landlord shall defend, indemnify and save Tenant harmless from and against any and all Claims asserted by or on behalf of any person, firm, corporation or public authority arising from (i) Landlord's breach of any covenant or obligation under this Lease, or (ii) any injury to or death of any person, or loss of or damage to property arising out of the negligence or willful misconduct of any of the Landlord Parties.

14.3 Property of Tenant. Tenant covenants and agrees that, to the maximum extent permitted by Legal Requirements, all of Tenant's Property at the Premises shall be at the sole risk and hazard of Tenant, and that if the whole or any part thereof shall be damaged, destroyed, stolen or removed from any cause or reason whatsoever, no part of said damage or loss shall be charged to, or borne by, Landlord, except, subject to Section 14.5 hereof, to the extent such damage or loss is due to the negligence or willful misconduct of any of the Landlord Parties.

14.4 Limitation of Landlord's Liability for Damage or Injury. Landlord shall not be liable for any injury or damage to persons, animals, or property resulting from fire, explosion, falling plaster, steam, gas, air contaminants or emissions, electricity, electrical or electronic emanations or disturbance, water, rain or snow or leaks from any part of the Building or from the pipes, appliances, equipment or plumbing works or from the roof, street or sub-surface or from any other place or caused by dampness, vandalism, malicious mischief or by any other cause of whatever nature, except to the extent caused by or due to the negligence or willful misconduct of any of the Landlord Parties, and then, where notice and an opportunity to cure are appropriate (i.e., where Tenant has an opportunity to know or should have known of such condition sufficiently in advance of the occurrence of any such injury or damage resulting therefrom as would have enabled Landlord to prevent such damage or loss had Tenant notified Landlord of such condition) only after (i) notice to Landlord of the condition claimed to constitute negligence or willful misconduct, and (ii) the expiration of a reasonable time after such notice has been received by Landlord without Landlord having commenced to take all reasonable and practicable means to cure or correct such condition; and pending such cure or correction by Landlord, Tenant shall take all reasonably prudent temporary measures and safeguards to prevent any injury, loss or damage to persons or property. Notwithstanding the foregoing, in no event shall any of the Landlord Parties be liable for any loss which is covered by insurance policies actually carried or required to be so carried by this Lease; nor shall any of the Landlord Parties be liable for any such damage caused by other tenants or persons in the Building or caused by operations in construction of any private, public, or

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quasi-public work; nor shall any of the Landlord Parties be liable for any latent defect in the Premises or in the Building.

14.5 Waiver of Subrogation; Mutual Release. Landlord and Tenant each hereby waives on behalf of itself and its property insurers (none of which shall ever be assigned any such claim or be entitled thereto due to subrogation or otherwise) any and all rights of recovery, claim, action, or cause of action against the other and its agents, officers, servants, partners, shareholders, or employees (collectively, the "Related Parties") for any loss or damage (excluding rights of recovery, claims, actions, and causes of action relating to damage to the roof of the Building caused by Tenant but including rights of recovery, claims, actions, and causes of action relating to damage to the roof of the Building caused by any Casualty (hereinafter defined)) that may occur to or within the Premises or the Building or any improvements thereto, or any personal property of such party therein which is insured against under any property insurance policy actually being maintained by the waiving party from time to time, even if not required hereunder, or which would be insured against under the terms of any insurance policy required to be carried or maintained by the waiving party hereunder, whether or not such insurance coverage is actually being maintained, including, in every instance, such loss or damage that may be caused by the negligence of the other party hereto and/or its Related Parties. Landlord and Tenant each agrees to cause appropriate clauses to be included in its property insurance policies necessary to implement the foregoing provisions.

14.6 Tenant's Acts—Effect on Insurance. Tenant shall not do or permit any Tenant Party to do any act or thing upon the Premises or elsewhere in the Building which will invalidate or be in conflict with any insurance policies or warranties covering the Building and the fixtures and property therein; and shall not do, or permit to be done, any act or thing upon the Premises which shall subject Landlord to any liability or responsibility for injury to any person or persons or to property by reason of any business or operation being carried on upon said Premises or for any other reason. If by reason of the failure of Tenant to comply with the provisions hereof the insurance rate applicable to any policy of insurance shall at any time thereafter be higher than it otherwise would be, Tenant shall reimburse Landlord upon demand for that part of any insurance premiums which shall have been charged because of such failure by Tenant, together with interest at the Default Rate until paid in full, within ten (10) days after receipt of an invoice therefor.

15. CASUALTY; TAKING.

15.1 Damage. If the Premises are damaged in whole or part because of fire or other insured casualty ("<u>Casualty</u>"), or if the Premises are subject to a taking in connection with the exercise of any power of eminent domain, condemnation, or purchase under threat or in lieu thereof (any of the foregoing, a "<u>Taking</u>"), then unless this Lease is terminated in accordance with Section 15.2 below, Landlord shall restore the Building and/or the Premises to substantially the same condition as existed immediately following completion of Landlord's Work, or in the event of a partial Taking which affects the Building and the Premises, restore the remainder of the Building and the Premises not so Taken to substantially the same condition as is reasonably feasible. Within ninety (90) days following such Casualty or Taking, Landlord shall provide Tenant with a written notice (the "<u>Restoration Notice</u>") indicating the expected timeframe for completion of Landlord's repair and restoration. If, in Landlord's reasonable judgment, any element of the Tenant-Insured Improvements can more effectively be restored as an integral part

expense. Subject to rights of Mortgagees, Tenant Delays, Legal Requirements then in existence and to delays for adjustment of insurance proceeds or Taking awards, as the case may be, and instances of Landlord's Force Majeure, Landlord shall exercise diligent efforts to substantially complete such restoration within the time period set forth in the Restoration Notice. Upon substantial completion of such restoration by Landlord, Tenant shall use diligent efforts to complete restoration of the Premises to substantially the same condition as existed immediately prior to such Casualty or Taking, as the case may be, as soon as reasonably possible, subject to Force Majeure and Landlord-caused delays. Tenant agrees to cooperate with Landlord in such manner as Landlord may reasonably request to assist Landlord in collecting insurance proceeds due in connection with any Casualty which affects the Premises or the Building. In no event shall Landlord be required to expend more than the Net (hereinafter defined) insurance proceeds Landlord receives for damage to the Premises and/or the Building or the Net Taking award attributable to the Premises and/or the Building. "<u>Net</u>" means the insurance proceeds or Taking award actually paid to Landlord (and not paid over to a Mortgagee) less all costs and expenses, including adjusters and attorney's fees, of obtaining the same. In the Operating Year in which a Casualty occurs, there shall be included in Operating Costs Landlord's deductible under its property insurance policy. Except as Landlord may elect pursuant to this Section 15.1, under no circumstances shall Landlord be required to repair any damage to, or make any repairs to or replacements of, any Tenant-Insured Improvements.

15.2 Termination Rights.

(a)

...

to Tenant if:

- Landlord's Termination Rights. Landlord may terminate this Lease upon thirty (30) days' prior written notice
- (i) any material portion of the Building or any material means of access thereto is taken; or
- (ii) more than thirty-five percent (35%) of the Building is damaged by Casualty.

(b) <u>Tenant's Termination Right</u>. If Landlord is so required but fails to complete restoration of the Premises within one (1) year from the date of Casualty or Taking, subject to the conditions set forth in Section 15.1 above, then Tenant may terminate this Lease upon thirty (30) days' written notice to Landlord; provided, however, that in the case of clause (i) of this Section 15.2(b), if Landlord completes such restoration within thirty (30) days after receipt of any such termination notice, such termination notice shall be null and void and this Lease shall continue in full force and effect. The remedies set forth in this Section 15.2(b) and in Section 15.2(c) below are Tenant's sole and exclusive rights and remedies based upon Landlord's failure to complete the restoration of the Premises as set forth herein.

(c) <u>Either Party May Terminate</u>. In the case of any Casualty or Taking affecting the Premises and occurring during the last six (6) months of the Term, then (i) if such Casualty or Taking results in more than ten percent (10%) of the floor area of the Premises being unsuitable for the Permitted Uses, or (ii) the damage to the Premises costs more than \$100,000 to restore, then either Landlord or Tenant shall have the option to terminate this Lease upon thirty

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(30) days' written notice to the other. In addition, Landlord or Tenant may terminate this Lease by written notice to the other if (A) any Mortgagee does not release sufficient insurance proceeds to cover the cost of Landlord's restoration work and Landlord does not agree in writing to cover the difference, or (B) the estimated time to complete Landlord's restoration exceeds one (1) year after the Casualty or Taking.

(d) <u>Automatic Termination</u>. In the case of a Taking of the entire Premises, then this Lease shall automatically terminate as of the date of possession by the Taking authority.

(e) Notwithstanding anything to the contrary contained herein, Tenant may not terminate this Lease pursuant to this Section 15 if the Casualty in question was caused by the willful misconduct of any of the Tenant Parties.

15.3 Taking for Temporary Use. If the Premises are Taken for temporary use, this Lease and Tenant's obligations, including without limitation the payment of Rent, shall continue. For purposes hereof, a "<u>Taking for temporary use</u>" shall mean a Taking of ninety (90) days or less.

15.4 Disposition of Awards. Except for any separate award for Tenant's movable trade fixtures, relocation expenses, and unamortized leasehold improvements paid for by Tenant (provided that the same may not reduce Landlord's award), all Taking awards to Landlord or Tenant shall be Landlord's property without Tenant's participation, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award. Tenant may pursue its own claim against the Taking authority.

15.5 Abatement. In the event of any Casualty or Taking affecting the Premises, Base Rent and Tenant's regular monthly payments of additional rent on account of Operating Costs and Taxes shall be equitably abated for the period from the date of such Casualty or Taking until the earlier of (a) the date that Landlord substantially completes Landlord's restoration work (provided that if Landlord would have completed Landlord's restoration work at an earlier date but for delays caused by the acts or wrongful or negligent omissions of any of the Tenant Parties of which Tenant has prior notice, then the Premises shall be deemed to have been repaired and restored on such earlier date), or (b) the date Tenant or other occupant reoccupies any portion of the Premises for the conduct of its business (in which case the Base Rent and Additional Rent allocable to such reoccupied portion shall be payable by Tenant from the date of such occupancy). The reasonable determination of Landlord's architect of the date Landlord given within fifteen (15) days after receipt of written notice from Landlord setting forth such determination by Landlord, and pending resolution of such dispute, Tenant's obligation to re-commence the payment of Rent shall commence in accordance with Landlord's determination. In the event of a Taking where this Lease is not terminated, a just proportion of the Rent, based on the nature and extent of the interference with Tenant's business

operations, shall, subject to Section 15.3 above, be abated for the duration of the Taking.

16. ESTOPPEL CERTIFICATE. Tenant shall at any time and from time to time upon not less than ten (10) days' prior notice from Landlord, execute, acknowledge and deliver to Landlord a statement in writing certifying that this Lease is unmodified and in full force and effect (or if

there have been modifications, that the same is in full force and effect as modified and stating the modifications), and the dates to which Rent has been paid in advance, if any, stating whether or not Landlord is in default in performance of any covenant, agreement, term, provision or condition contained in this Lease and, if so, specifying each such default, and such other facts as Landlord may reasonably request, it being intended that any such statement delivered pursuant hereto may be relied upon by Landlord, any prospective purchaser of the Building or of any interest of Landlord therein, any Mortgagee or prospective mortgage thereof, any lessor or prospective lessor thereof, any lessee or prospective lessee thereof, or any prospective assignee of any mortgage thereof. *Time is of the essence with respect to any such requested certificate*, Tenant hereby acknowledging the importance of such certificates in mortgage financing arrangements, prospective sales and the like.

17. HAZARDOUS MATERIALS.

Prohibition. Tenant shall not, without the prior written consent of Landlord, bring or permit to be brought or kept in or 17.1 on the Premises or elsewhere in the Building or the Property (i) any inflammable, combustible or explosive fluid, material, chemical or substance (except for standard office supplies stored in proper containers); and (ii) any Hazardous Material (hereinafter defined), other than the types and quantities of Hazardous Materials which are listed on Exhibit 6 attached hereto ("Tenant's Hazardous Materials"), provided that the same shall at all times be brought upon, kept or used in so-called 'control rooms' and in accordance with all applicable Environmental Laws (hereinafter defined) and prudent environmental practice and (with respect to medical waste and so-called "biohazard" materials) good scientific and medical practice. Tenant shall be responsible for assuring that all laboratory uses are adequately and properly vented. On or before each anniversary of the Rent Commencement Date, and on any earlier date during the 12month period on which Tenant intends to add a new Hazardous Material to, or materially increase the quantity of any Hazardous Material already on, the list of Tenant's Hazardous Materials, Tenant shall submit to Landlord an updated list of Tenant's Hazardous Materials for Landlord's review and approval, which approval shall not be unreasonably withheld, conditioned or delayed. Landlord shall have the right, from time to time, to inspect the Premises for compliance with the terms of this Section 17.1 at Tenant's sole cost and expense. Notwithstanding the foregoing, with respect to any of Tenant's Hazardous Materials which Tenant does not properly handle, store or dispose of in compliance with all applicable Environmental Laws (hereinafter defined), prudent environmental practice and (with respect to medical waste and so-called "biohazard" materials) good scientific and medical practice, Tenant shall, upon written notice from Landlord, no longer have the right to bring such material into the Building or the Property until Tenant has demonstrated, to Landlord's reasonable satisfaction, that Tenant has implemented programs to thereafter properly handle, store or dispose of such material.

17.2 Environmental Laws. For purposes hereof, "<u>Environmental Laws</u>" shall mean all laws, statutes, ordinances, rules and regulations of any local, state or federal governmental authority having jurisdiction concerning environmental, health and safety matters, including but not limited to any discharge by any of the Tenant Parties into the air, surface water, sewers, soil or groundwater of any Hazardous Material (hereinafter defined) whether within or outside the Premises, including, without limitation (a) the Federal Water Pollution Control Act, 33 U.S.C. Section 1251 et seq., (b) the Federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq., (c) the Comprehensive Environmental Response, Compensation and Liability Act, 42

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U.S.C. Section 9601 et seq., (d) the Toxic Substances Control Act of 1976, 15 U.S.C. Section 2601 et seq., and (e) Chapter 21E of the General Laws of Massachusetts. Tenant, at its sole cost and expense, shall comply with (i) all Environmental Laws, and (ii) any rules, requirements and safety procedures of the Massachusetts Department of Environmental Protection, the City of Cambridge and any insurer of the Building or the Premises with respect to Tenant's use, storage and disposal of any Hazardous Materials.

17.3 Hazardous Material Defined. As used herein, the term "<u>Hazardous Material</u>" means asbestos, oil or any hazardous, radioactive or toxic substance, material or waste or petroleum derivative which is or becomes regulated by any Environmental Law, including without limitation live organisms, viruses and fungi, medical waste and any so-called "biohazard" materials.". The term "<u>Hazardous Material</u>" includes, without limitation, oil and/or any material or substance which is (i) designated as a "hazardous substance," "hazardous material," "oil," "hazardous waste" or toxic substance under any Environmental Law.

17.4 Testing. If any Mortgagee or governmental authority requires testing to determine whether there has been any release of Hazardous Materials and such testing is required as a result of the acts or omissions of any of the Tenant Parties, then Tenant shall reimburse Landlord upon demand, as additional rent, for the reasonable costs thereof, together with interest at the Default Rate until paid in full. Tenant shall execute affidavits, certifications and the like, as may be reasonably requested by Landlord from time to time concerning Tenant's best knowledge and belief concerning the presence of Hazardous Materials in or on the Premises, the Building or the Property.

17.5 Indemnity; Remediation.

(a) Tenant hereby covenants and agrees to indemnify, defend and hold the Landlord Parties harmless from and against any and all Claims against any of the Landlord Parties arising out of contamination of any part of the Property or other adjacent

property, which contamination arises as a result of: (i) the presence of Hazardous Material in the Premises, the presence of which is caused by any act or omission of any of the Tenant Parties, or (ii) from a breach by Tenant of its obligations under this Section 17. This indemnification of the Landlord Parties by Tenant includes, without limitation, reasonable costs incurred in connection with any investigation of site conditions or any cleanup, remedial, removal or restoration work or any other response action required by any federal, state or local governmental agency or political subdivision because of Hazardous Material present in the soil, soil vapor, or ground water on or under, or any indoor air in, the Building based upon the circumstances identified in the first sentence of this Section 17.5. The indemnification and hold harmless obligations of Tenant under this Section 17.5 shall survive the expiration or any earlier termination of this Lease. Without limiting the foregoing, if the presence of any Hazardous Material in the Building or otherwise at the Property is caused or permitted by any of the Tenant Parties and results in any contamination of any part of the Property or any adjacent property, Tenant shall promptly take all actions at Tenant's sole cost and expense as are necessary to return the Property and/or the Building or any adjacent property to their condition as of the date of this Lease, provided that Tenant shall first obtain Landlord's written approval of such actions, which approval shall not be unreasonably withheld, conditioned or delayed so long as such actions, in Landlord's reasonable discretion, would not

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potentially have any adverse effect on the Property, and, in any event, Landlord shall not withhold its approval of any proposed actions which are required by applicable Environmental Laws.

(b) Without limiting the obligations set forth in Section 17.5(a) above, if any Hazardous Material is in, on, under, at or about the Building or the Property as a result of the acts or omissions of any of the Tenant Parties and results in any contamination of any part of the Property or any adjacent property that is in violation of any applicable Environmental Law or that requires the performance of any response action pursuant to any Environmental Law, Tenant shall promptly take all actions at Tenant's sole cost and expense as are necessary to reduce such Hazardous Material to amounts below any applicable Reportable Quantity, any applicable Reportable Concentration and any other applicable standard set forth in any Environmental Law such that no further response actions are required; provided that Tenant shall first obtain Landlord's written approval of such actions, which approval shall not be unreasonably withheld, conditioned or delayed so long as such actions would not be reasonably expected to have an adverse effect on the market value or utility of the Property for the Permitted Uses, and in any event, Landlord shall not withhold its approval of any proposed actions which are required by applicable Environmental Laws (such approved actions, "Tenant's Remediation"). For the avoidance of doubt, the parties acknowledge that Tenant's Remediation with respect to the Property shall not contain any requirement that Tenant remediate any contamination to levels or standards more stringent than those associated with the use of the Property for office, research and development, laboratory, and vivarium uses.

(c) In the event that Tenant fails to complete Tenant's Remediation prior to the end of the Term, then:

(i) until the completion of Tenant's Remediation (as evidenced by the certification of Tenant's Licensed Site Professional (as such term is defined by applicable Environmental Laws), who shall be reasonably acceptable to Landlord) (the "<u>Remediation Completion Date</u>"), Tenant shall pay to Landlord, with respect to the portion of the Premises which reasonably cannot be occupied by a new tenant until completion of Tenant's Remediation, (A) Additional Rent on account of Operating Costs and Taxes and (B) Base Rent in an amount equal to the greater of (1) the fair market rental value of such portion of the Premises (determined in substantial accordance with the process described in Section 1.2 above), and (2) Base Rent attributable to such portion of the Premises in effect immediately prior to the end of the Term; and

(ii) Tenant shall maintain responsibility for Tenant's Remediation and Tenant shall complete Tenant's Remediation as soon as reasonably practicable in accordance with all Environmental Laws. If Tenant does not diligently pursue completion of Tenant's Remediation, Landlord shall have the right to either (A) assume control for overseeing Tenant's Remediation, in which event Tenant shall pay all reasonable costs and expenses of Tenant's Remediation (it being understood and agreed that all costs and expenses of Tenant's Remediation incurred pursuant to contracts entered into by Tenant shall be deemed reasonable) within thirty (30) days of demand therefor (which demand shall be made no more often than monthly), and Landlord shall be substituted as the party identified on any governmental filings as the party responsible for the performance of such Tenant's Remediation or (B) require Tenant to maintain responsibility for Tenant's Remediation, in which event Tenant shall complete Tenant's Remediation as soon as reasonably practicable in accordance with all Environmental Laws, it

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being understood that Tenant's Remediation shall not contain any requirement that Tenant remediate any contamination to levels or standards more stringent than those associated with the Property's current office, research and development, laboratory, and vivarium uses.

(d) The provisions of this <u>Section 17.5</u> shall survive the expiration or earlier termination of this Lease.

17.6 Disclosures. Prior to bringing any Hazardous Material into any part of the Property, Tenant shall deliver to Landlord the following information with respect thereto: (a) a description of handling, storage, use and disposal procedures; (b) all plans or disclosures and/or emergency response plans which Tenant has prepared, including without limitation Tenant's Spill Response Plan, and all plans which Tenant is required to supply to any governmental agency or authority pursuant to any Environmental Laws; and (c) other information reasonably requested by Landlord.

17.7 **Removal.** Tenant shall be responsible, at its sole cost and expense, for Hazardous Material and other biohazard

disposal services for the Premises. Such services shall be performed by contractors reasonably acceptable to Landlord and on a sufficient basis to ensure that the Premises are at all times kept neat, clean and free of Hazardous Materials and biohazards except in appropriate, specially marked containers reasonably approved by Landlord. In addition, if any Legal Requirements or the trash removal company requires that any substances be disposed of separately from ordinary trash, Tenant shall make arrangements at Tenant's expense for such disposal directly with a qualified and licensed disposal company at a lawful disposal site.

18. RULES AND REGULATIONS.

18.1 Rules and Regulations. Tenant will faithfully observe and comply with all rules and regulations promulgated from time to time with respect to the Building, the Property and construction within the Property (collectively, the "**Rules and Regulations**"). The current version of the Rules and Regulations is attached hereto as <u>Exhibit 7</u>. In the case of any conflict between the provisions of this Lease and any future rules and regulations, the provisions of this Lease shall control. Nothing contained in this Lease shall be construed to impose upon Landlord any duty or obligation to enforce the Rules and Regulations or the terms, covenants or conditions in any other lease as against any other tenant and Landlord shall not be liable to Tenant for violation of the same by any other tenant, its servants, employees, agents, contractors, visitors, invitees or licensees.

18.2 Energy Conservation. Notwithstanding anything to the contrary contained herein, Landlord may institute upon written notice to Tenant such policies, programs and measures as may be necessary, required, or expedient for the conservation and/or preservation of energy or energy services (collectively, the "<u>Conservation Program</u>"), provided however, that the Conservation Program does not, by reason of such policies, programs and measures, reduce the level of energy or energy services being provided to the Premises below the level of energy or energy services then being provided in comparably aged, first-class combination laboratory, research and development and office buildings in the vicinity of the Building, or as may be necessary or required to comply with Legal Requirements or standards or the other provisions of this Lease. Upon receipt of such notice, Tenant shall comply with the Conservation Program.

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18.3 Recycling. Upon written notice, Landlord may establish policies, programs and measures for the recycling of paper, products, plastic, tin and other materials (a "<u>Recycling Program</u>"). Upon receipt of such notice, Tenant will comply with the Recycling Program at Tenant's sole cost and expense.

19. LAWS AND PERMITS.

19.1 Legal Requirements. Tenant shall be responsible at its sole cost and expense for complying with (and keeping the Premises in compliance with) all Legal Requirements which are applicable to Tenant's particular use or occupancy of, or Alterations made by or on behalf of Tenant to, the Premises. Tenant shall furnish all data and information to governmental authorities, with a copy to Landlord, as required in accordance with Legal Requirements as they relate to Tenant's use or occupancy of the Premises or the Building. If Tenant receives notice of any violation of Legal Requirements applicable to the Premises or the Building, it shall give prompt notice thereof to Landlord. Nothing contained in this Section 19.1 shall be construed to expand the uses permitted hereunder beyond the Premitted Uses. Landlord shall comply with any Legal Requirements and with any direction of any public office or officer relating to the maintenance or operation of the Building as a combination laboratory, research and development and office building, and the costs so incurred by Landlord shall be included in Operating Costs in accordance with the provisions of Section 5.2.

19.2 Required Permits. Tenant shall, at Tenant's sole cost and expense, use diligent good faith efforts to apply for, seek and obtain all necessary state and local licenses, permits and approvals needed for the operation of Tenant's business, excluding the certificate of occupancy which Tenant must obtain prior to operating its business in the Premises (collectively, the "**Required Permits**"), on or before the Rent Commencement Date, *time being of the essence*. Tenant shall thereafter maintain all Required Permits. Tenant, at Tenant's expense, shall at all times comply with the terms and conditions of each such Required Permit. Landlord shall cooperate with Tenant, at Tenant's sole cost and expense, in connection with its application for Required Permits.

20. DEFAULT.

20.1 Events of Default. The occurrence of any one or more of the following events shall constitute an "<u>Event of Default</u>" hereunder by Tenant:

(a) If Tenant fails to make any payment of Rent or any other payment required hereunder, as and when due, and such failure shall continue for a period of five (5) days after notice thereof from Landlord to Tenant; provided, however, an Event of Default shall occur hereunder without any obligation of Landlord to give any notice if (i) Tenant fails to make any payment within five (5) days after the due date therefor, and (ii) Landlord has given Tenant written notice under this Section 20.1(a) on two (2) or more occasions during the twelve (12) month interval preceding such failure by Tenant;

(b) Intentionally omitted

(c) If Tenant shall fail to execute and deliver to Landlord an estoppel certificate pursuant to Section 16 above or a subordination and attornment agreement pursuant to Section 22

(d) If Tenant shall fail to maintain any insurance required hereunder;

(e) If Tenant shall fail to restore the Security Deposit to its original amount or deliver a replacement Letter of Credit as required under Section 7 above;

(f) If Tenant causes or suffers any release of Hazardous Materials in or near the Property;

(g) If Tenant shall make a Transfer in violation of the provisions of Section 13 above, or if any event shall occur or any contingency shall arise whereby this Lease, or the term and estate thereby created, would (by operation of law or otherwise) devolve upon or pass to any person, firm or corporation other than Tenant, except as expressly permitted under Section 13 hereof and Tenant does not cure such default within ten (10) days following written notice from Landlord;

(h) If Tenant shall fail to timely perform its obligations under Section 3 and such failure continues for fifteen (15) days after notice;

(i) The failure by Tenant to observe or perform any of the covenants or provisions of this Lease to be observed or performed by Tenant, other than as specified above, and such failure continues for more than thirty (30) days after notice thereof from Landlord; provided, further, that if the nature of Tenant's default is such that more than thirty (30) days are reasonably required for its cure, then Tenant shall not be deemed to be in default if Tenant shall commence such cure within said thirty (30) day period and thereafter diligently prosecute such cure to completion, which completion shall occur not later than ninety (90) days from the date of such notice from Landlord;

(j) Tenant shall be involved in financial difficulties as evidenced by an admission in writing by Tenant of Tenant's inability to pay its debts generally as they become due, or by the making or offering to make a composition of its debts with its creditors;

(k) Tenant shall make an assignment or trust mortgage, or other conveyance or transfer of like nature, of all or a substantial part of its property for the benefit of its creditors,

(l) an attachment on mesne process, on execution or otherwise, or other legal process shall issue against Tenant or its property and a sale of any of its assets shall be held thereunder;

(m) any judgment, attachment or the like in excess of \$100,000 shall be entered, recorded or filed against Tenant in any court, registry, etc. and Tenant shall fail to pay such judgment within thirty (30) days after the judgment shall have become final beyond appeal or to discharge or secure by surety bond such lien, attachment, etc. within thirty (30) days of such entry, recording or filing, as the case may be;

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(n) the leasehold hereby created shall be taken on execution or by other process of law and shall not be revested in Tenant within thirty (30) days thereafter;

(o) a receiver, sequesterer, trustee or similar officer shall be appointed by a court of competent jurisdiction to take charge of all or any part of Tenant's Property and such appointment shall not be vacated within thirty (30) days; or

(p) any proceeding shall be instituted by or against Tenant pursuant to any of the provisions of any Act of Congress or State law relating to bankruptcy, reorganizations, arrangements, compositions or other relief from creditors, and, in the case of any proceeding instituted against it, if Tenant shall fail to have such proceedings dismissed within thirty (30) days or if Tenant is adjudged bankrupt or insolvent as a result of any such proceeding.

Tenant shall reimburse Landlord, within thirty (30) days after demand, for up to \$1,000.00 of Landlord's reasonable out-of-pocket costs and expenses (including without limitation legal fees and costs) incurred in connection with the preparation and delivery of each notice of default delivered pursuant to this Section 20.1.

20.2 Remedies. Upon an Event of Default, Landlord may, by notice to Tenant, elect to terminate this Lease; and thereupon (and without prejudice to any remedies which might otherwise be available for arrears of Rent or preceding breach of covenant or agreement and without prejudice to Tenant's liability for damages as hereinafter stated), upon the giving of such notice, this Lease shall terminate as of the date specified therein as though that were the Expiration Date. Upon such termination, Landlord shall have the right to utilize the Security Deposit or draw down the entire Letter of Credit, as applicable, and apply the proceeds thereof to its damages hereunder. Without being taken or deemed to be guilty of any manner of trespass or conversion, and without being liable to indictment, prosecution or damages therefor, Landlord may, by lawful process, enter into and upon the Premises (or any part thereof in the name of the whole); repossess the same, as of its former estate; and expel Tenant and those claiming under Tenant. The words "re-entry" and "re-enter" as used in this Lease are not restricted to their technical legal meanings.

20.3 Damages - Termination.

(a) Upon the termination of this Lease under the provisions of this Section 20, Tenant shall pay to Landlord Rent up to the time of such termination, shall continue to be liable for any preceding breach of covenant, and in addition, shall pay to Landlord as damages, at the election of Landlord, either:

(i) the amount (discounted to present value at the rate of five percent (5%) per annum) by which, at the time of the termination of this Lease (or at any time thereafter if Landlord shall have initially elected damages under Section 20.3(a) (ii) below), (x) the aggregate of Rent projected over the period commencing with such termination and ending on the Expiration Date, exceeds (y) the aggregate projected fair market rental value of the Premises for such period, taking into account a reasonable time period during which the Premises shall be unoccupied, plus all Reletting Costs (hereinafter defined); or (ii) amounts equal to Rent which would have been payable by Tenant had this Lease not been so terminated, payable upon the due dates therefor specified herein following such termination and until the Expiration Date, *provided, however*, if

Landlord shall re-let the Premises during such period, that Landlord shall credit Tenant with the net rents received by Landlord from such re-letting, such net rents to be determined by first deducting from the gross rents as and when received by Landlord from such re-letting the expenses incurred or paid by Landlord in terminating this Lease, as well as the expenses of re-letting, including altering and preparing the Premises for new tenants, brokers' commissions, and all other similar and dissimilar expenses properly chargeable against the Premises and the rental therefrom (collectively, "**Reletting Costs**"), it being understood that any such re-letting may be for a period equal to or shorter or longer than the remaining Term; and *provided, further*, that (x) in no event shall Tenant be entitled to receive any excess of such net rents over the sums payable by Tenant to Landlord hereunder and (y) in no event shall Tenant be entitled in any suit for the collection of damages pursuant to this Section 20.3(a)(ii) to a credit in respect of any net rents from a re-letting except to the extent that such net rents are actually received by Landlord prior to the commencement of such suit. If the Premises or any part thereof should be re-let in combination with other space, then proper apportionment on a square foot area basis shall be made of the rent received from such re-letting and of the expenses of re-letting. Landlord shall use reasonable efforts to mitigate any damages hereunder following any termination of this Lease or any termination of Tenant's possession of the Premises. The obligation of Landlord to use reasonable efforts to mitigate damages shall not be construed to require Landlord to rent all or any portion of the Premises for a use which, or to a tenant who, would not qualify pursuant to the assignment provisions of this Lease, or to prioritize the renting of the Premises over other space which Landlord may have available in the Building or in other buildings owned by Landlord or its affiliates.

(b) In calculating the amount due under Section 20.3(a)(i), above, there shall be included, in addition to the Base Rent, all other considerations agreed to be paid or performed by Tenant, including without limitation Tenant's Share of Operating Costs and Tenant's Tax Share of Taxes, on the assumption that all such amounts and considerations would have increased at the rate of five percent (5%) per annum for the balance of the full term hereby granted.

(c) Suit or suits for the recovery of such damages, or any installments thereof, may be brought by Landlord from time to time at its election, and nothing contained herein shall be deemed to require Landlord to postpone suit until the date when the Term would have expired if it had not been terminated hereunder.

(d) Nothing herein contained shall be construed as limiting or precluding the recovery by Landlord against Tenant of any sums or damages to which, in addition to the damages particularly provided above, Landlord may lawfully be entitled by reason of any Event of Default hereunder.

(e) In lieu of any other damages or indemnity and in lieu of full recovery by Landlord of all sums payable under all the foregoing provisions of this Section 20.3, Landlord may, by written notice to Tenant, at any time after this Lease is terminated under any of the provisions herein contained or is otherwise terminated for breach of any obligation of Tenant and before such full recovery, elect to recover, and Tenant shall thereupon pay, as liquidated damages, an amount equal to the aggregate of (x) an amount equal to the lesser of (1) Rent accrued under this Lease in the twelve (12) months immediately prior to such termination, or (2) Rent payable during the remaining months of the Term if this Lease had not been terminated, plus (y) the amount of

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Rent accrued and unpaid at the time of termination, less (z) the amount of any recovery by Landlord under the foregoing provisions of this Section 20.3 up to the time of payment of such liquidated damages.

20.4 Landlord's Self-Help; Fees and Expenses. If Tenant shall default in the performance of any covenant on Tenant's part to be performed in this Lease contained, including without limitation the obligation to maintain the Premises in the required condition pursuant to Section 10.1 above, Landlord may, upon reasonable advance notice, except that no notice shall be required in an emergency, immediately, or at any time thereafter, perform the same for the account of Tenant. Tenant shall pay to Landlord upon demand therefor any costs incurred by Landlord in connection therewith, together with interest at the Default Rate until paid in full. In addition, Tenant shall pay all of Landlord's costs and expenses, including without limitation reasonable attorneys' fees, incurred (i) in enforcing any obligation of Tenant under this Lease or (ii) as a result of Landlord or any of the Landlord Parties, without its fault, being made party to any litigation pending by or against any of the Tenant Parties.

20.5 Waiver of Redemption, Statutory Notice and Grace Periods. Tenant does hereby waive and surrender all rights and privileges which it might have under or by reason of any present or future Legal Requirements to redeem the Premises or to have a continuance of this Lease for the Term hereby demised after being dispossessed or ejected therefrom by process of law or under the terms of this Lease or after the termination of this Lease as herein provided. Except to the extent prohibited by Legal Requirements, any statutory notice and grace periods provided to Tenant by law are hereby expressly waived by Tenant.

20.6 Landlord's Remedies Not Exclusive. The specified remedies to which Landlord may resort hereunder are cumulative and are not intended to be exclusive of any remedies or means of redress to which Landlord may at any time be lawfully entitled, and

Landlord may invoke any remedy (including the remedy of specific performance) allowed at law or in equity as if specific remedies were not herein provided for.

20.7 No Waiver. Landlord's failure to seek redress for violation, or to insist upon the strict performance, of any covenant or condition of this Lease, or any of the Rules and Regulations promulgated hereunder, shall not prevent a subsequent act, which would have originally constituted a violation, from having all the force and effect of an original violation. The receipt by Landlord of Rent with knowledge of the breach of any covenant of this Lease shall not be deemed a waiver of such breach. The failure of Landlord to enforce any of such Rules and Regulations against Tenant and/or any other tenant in the Building shall not be deemed a waiver of any such Rules and Regulations. No provisions of this Lease shall be deemed to have been waived by either party unless such waiver be in writing signed by such party. No payment by Tenant or receipt by Landlord of a lesser amount than the Rent herein stipulated shall be deemed to be other than on account of the stipulated Rent, nor shall any endorsement or statement on any check or any letter accompanying any check or payment as Rent be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or pursue any other remedy in this Lease provided.

20.8 Restrictions on Tenant's Rights. During the continuation of any Event of Default, (a) Landlord shall not be obligated to provide Tenant with any notice pursuant to Sections

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2.3 and 2.4 above; and (b) Tenant shall not have the right to make, nor to request Landlord's consent or approval with respect to, any Alterations.

20.9 Landlord Default. Notwithstanding anything to the contrary contained in the Lease, Landlord shall in no event be in default in the performance of any of Landlord's obligations under this Lease unless Landlord shall have failed to perform such obligations within thirty (30) days (or such additional time as is reasonably required to correct any such default, provided Landlord commences cure within 30 days) after notice by Tenant to Landlord properly specifying wherein Landlord has failed to perform any such obligation. Except as expressly set forth in this Lease, Tenant shall not have the right to terminate or cancel this Lease or to withhold rent or to set-off or deduct any claim or damages against rent as a result of any default by Landlord or breach by Landlord of its covenants or any warranties or promises hereunder, except in the case of a wrongful eviction of Tenant from the Premises (constructive or actual) by Landlord, and then only if the same continues after notice to Landlord thereof and an opportunity for Landlord to cure the same as set forth above. In addition, Tenant shall not assert any right to deduct the cost of repairs or any monetary claim against Landlord from rent thereafter due and payable under this Lease.

21. SURRENDER; ABANDONED PROPERTY; HOLD-OVER.

21.1 Surrender

(a) Upon the expiration or earlier termination of the Term, Tenant shall (i) peaceably quit and surrender to Landlord the Premises (including without limitation all lab benches, fume hoods, electric, plumbing, heating and sprinkling systems, fixtures and outlets, vaults, paneling, molding, shelving, radiator enclosures, cork, rubber, linoleum and composition floors, ventilating, silencing, air conditioning and cooling equipment therein) broom clean, in good order, repair and condition excepting only ordinary wear and tear and damage by fire or other insured Casualty or loss by Taking; (ii) remove all of Tenant's Property, all autoclaves and cage washers and, to the extent specified by Landlord in accordance with Section 11 above, Alterations made by Tenant (provided Tenant shall have no obligation to remove any part of Landlord's Work); and (iii) repair any damages to the Premises or the Building caused by the installation or removal of Tenant's Property and/or such Alterations. Tenant's obligations under this Section 21.1(a) shall survive the expiration or earlier termination of this Lease.

(b) At least thirty (30) days prior to the expiration of the Term (or, if applicable, within five (5) business days after any earlier termination of this Lease), Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Legal Requirements) to be taken by Tenant in order to render the Premises (including, without limitation, floors, walls, ceilings, counters, piping, supply lines, waste lines and plumbing in or serving the Premises and all exhaust or other ductwork in or serving the Premises) free of Hazardous Materials other than Third Party Hazardous Materials(6) and otherwise released for unrestricted use and occupancy, including without limitation causing the Premises to be decommissioned in accordance with the regulations of the U.S. Nuclear Regulatory Commission and/or the Massachusetts Department of Public Health (the "MDPH") for the control of radiation and cause the Premises to be releases for

unrestricted use by the Radiation Control Program of the MDPH (the "**Surrender Plan**"). The Surrender Plan (i) shall be accompanied by a current list of (A) all local, state and federal licenses, permits and approvals held by or on behalf of any Tenant Party with respect to Hazardous Materials in, on, under, at or about the Premises, and (B) Tenant's Hazardous Materials, and (ii) shall be subject to the review and approval of Landlord's environmental consultant. In connection with review and approval of the Surrender Plan, upon request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning the use of and operations within the Premises as Landlord shall reasonably request. On or before the expiration of the Term (or within thirty (30) days

⁽⁶⁾ For purposes hereof, "Third Party Hazardous Materials" means Hazardous Materials, the presence of which Tenant demonstrates to Landlord's reasonable satisfaction results from the acts or omissions of third parties unrelated to the Tenant Parties.

after any earlier termination of this Lease during which period Tenant's use and occupancy of the Premises shall be governed by Section 21.3 below unless such termination is due to a Casualty or Taking), Tenant shall (i) perform or cause to be performed all actions described in the approved Surrender Plan, and (ii) deliver to Landlord a certification from a certified third party industrial hygienist reasonably acceptable to Landlord certifying that the Premises do not contain any Hazardous Materials other than Third Party Hazardous Materials and evidence that the approved Surrender Plan shall have been satisfactorily completed by a contractor acceptable to Landlord (the "Surrender Report"), and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the expiration of the Term (or, if applicable, the date which is thirty (30) days after any earlier termination of this Lease), free of Hazardous Materials other than Third Party Hazardous Materials and otherwise available for unrestricted use and occupancy as aforesaid. Landlord shall have the unrestricted right to deliver the Surrender Plan, the Surrender Report and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties. Such third parties and the Landlord Parties shall be entitled to rely on the Surrender Report. If Tenant shall fail to prepare a Surrender Plan or submit a Surrender Report based on the Surrender Plan approved by Landlord, or if Tenant shall fail to complete the approved Surrender Plan, or if such Surrender Plan, whether or not approved by Landlord, shall fail to adequately address the use of Hazardous Materials by any of the Tenant Parties in, on, at, under or about the Premises, (A) Landlord shall have the right to take any such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Property are surrendered in the condition required hereunder, the cost of which actions shall be reimbursed by Tenant as Additional Rent upon demand; and (B) if the Term shall have ended, unless and until Landlord elects to take such actions to assure that the Premises are surrendered in the condition required hereunder. Tenant shall be deemed to be a holdover tenant subject to the provisions of Section 21.3 below until the date on which Tenant delivers the Surrender Report (in the form required hereunder) to Landlord. Tenant's obligations under this Section 21.1(b) shall survive the expiration or earlier termination of the Term.

(c) No act or thing done by Landlord during the Term shall be deemed an acceptance of a surrender of the Premises, and no agreement to accept such surrender shall be valid, unless in writing signed by Landlord. Unless otherwise agreed by the parties in writing, no employee of Landlord or of Landlord's agents shall have any power to accept the keys of the Premises prior to the expiration or earlier termination of this Lease. The delivery of keys to any employee of Landlord or of Landlord's agents shall not operate as a termination of this Lease or a surrender of the Premises.

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(d) Notwithstanding anything to the contrary contained herein, Tenant shall, at its sole cost and expense, remove from the Premises, prior to the end of the Term, any item installed by or for Tenant and which, pursuant to Legal Requirements, must be removed therefrom before the Premises may be used by a subsequent tenant.

(e) Tenant hereby assigns to Landlord any warranties in effect on the last day of the Term with respect to any fixtures and Alterations installed in the Premises. Tenant shall provide Landlord with copies of any such warranties prior to the expiration of the Term (or, if the Lease is earlier terminated, within 5 days thereafter).

21.2 Abandoned Property. After the expiration or earlier termination hereof, if Tenant fails to remove any property from the Building or the Premises which Tenant is obligated by the terms of this Lease to remove within five (5) business days after written notice from Landlord, such property (the "<u>Abandoned Property</u>") shall be conclusively deemed to have been abandoned, and may either be retained by Landlord as its property or sold or otherwise disposed of in such manner as Landlord may see fit. If any item of Abandoned Property shall be sold, Tenant hereby agrees that Landlord may receive and retain the proceeds of such sale and apply the same, at its option, to the expenses of the sale, the cost of moving and storage, any damages to which Landlord may be entitled under Section 20 hereof or pursuant to law, and to any arrears of Rent.

21.3 Holdover. If any of the Tenant Parties holds over after the end of the Term, Tenant shall be deemed a tenant-atsufferance subject to the provisions of this Lease; provided that whether or not Landlord has previously accepted payments of Rent from Tenant, (i) Tenant shall pay Base Rent at 150% of the highest rate of Base Rent payable during the Term, (ii) Tenant shall continue to pay to Landlord all additional rent, and (iii) if such holdover continues for more than thirty (30) days, Tenant shall be liable for all damages, including without limitation lost business and consequential damages, incurred by Landlord as a result of such holding over, Tenant hereby acknowledging that Landlord may need the Premises after the end of the Term for other tenants and that the damages which Landlord may suffer as the result of Tenant's holding over cannot be determined as of the Execution Date. Nothing contained herein shall grant Tenant the right to holdover after the expiration or earlier termination of the Term.

22. MORTGAGEE RIGHTS.

22.1 Subordination. Tenant's rights and interests under this Lease shall be (i) subject and subordinate to any ground lease (including without limitation the Ground Lease), and to any mortgages, deeds of trust, overleases, or similar instruments covering the Premises, the Building and/or the Land and to all advances, modifications, renewals, replacements, and extensions thereof (each of the foregoing, a "<u>Mortgage</u>"), or (ii) if any Mortgagee elects, prior to the lien of any present or future Mortgage. Tenant further shall attorn to and recognize any successor landlord, whether through foreclosure or otherwise, as if the successor landlord were the originally named landlord. The provisions of this Section 22.1 shall be self-operative and no further instrument shall be required to effect such subordination or attornment; however, Tenant agrees to execute, acknowledge and deliver such instruments, confirming such subordination and attornment in such form as shall be requested by any such holder within fifteen (15) days of request therefor. Landlord shall use commercially reasonable efforts to cause any future Mortgage to execute a

commercially reasonable so-called subordination, non-disturbance and attornment agreement with respect to this Lease.

22.2 Notices. Tenant shall give each Mortgagee the same notices given to Landlord concurrently with the notice to Landlord, and each Mortgagee shall have a reasonable opportunity thereafter to cure a Landlord default, and Mortgagee's curing of any of Landlord's default shall be treated as performance by Landlord.

22.3 Mortgagee Liability. Tenant acknowledges and agrees that if any Mortgage shall be foreclosed, (a) the liability of the Mortgagee and its successors and assigns shall exist only so long as such Mortgagee or purchaser is the owner of the Premises, and such liability shall not continue or survive after further transfer of ownership; and (b) such Mortgagee and its successors or assigns shall not be (i) liable for any act or omission of any prior lessor under this Lease, provided, however, that the foregoing shall not release such Mortgagee and/or its successors or assigns from liability for any default of its obligations under the Lease occurring after the date on which such Mortgagee succeeds to Landlord's interest hereunder, including, without limitation, any maintenance obligations; (ii) liable for the performance of Landlord's covenants pursuant to the provisions of this Lease which arise and accrue prior to such entity succeeding to the interest of Landlord under this Lease or acquiring such right to possession; (iii) subject to any offsets or defense which Tenant may have at any time against Landlord; (iv) bound by any base rent or other sum which Tenant may have paid previously for more than one (1) month; or (v) liable for the performance of any covenant of Landlord under this Lease which is capable of performance only by the original Landlord.

23. QUIET ENJOYMENT. Landlord covenants that so long as there is no Event of Default hereunder, Tenant shall peaceably and quietly hold, occupy and enjoy the Premises during the Term from and against the claims of all persons lawfully claiming by, through or under Landlord subject, nevertheless, to the covenants, agreements, terms, provisions and conditions of this Lease, any matters of record or of which Tenant has knowledge and to any Mortgage to which this Lease is subject and subordinate, as hereinabove set forth.

24. NOTICES. Any notice, consent, request, bill, demand or statement hereunder (each, a "<u>Notice</u>") by either party to the other party shall be in writing and shall be deemed to have been duly given when either delivered by hand or by nationally recognized overnight courier (in either case with evidence of delivery or refusal thereof) addressed as follows:

If to Landlord:	620 Memorial Leasehold LLC c/o MIT Investment Management Company 238 Main Street, Suite 200 Cambridge, MA 02142 Attention: Steven C. Marsh
With copies to:	Goulston & Storrs 400 Atlantic Avenue Boston, MA 02110 Attention: Colleen P. Hussey, Esquire
and	
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	Colliers International
	336 Main Street
	Cambridge, MA 02142
	Attention: Kristina Descoteaux
if to Tenant:	Prior to the Term Commencement Date:
	Syros Pharmaceuticals, Inc.
	480 Arsenal Street, Suite 130
	Watertown, MA 02472
	Attention: Lisa Roberts
	Attention. Lisa Roberts
	From and after the Term Commencement Date:
	Syros Pharmaceuticals, Inc.
	620 Memorial Drive
	Cambridge, MA 02139
	Attention: Lisa Roberts
	Attention. Lisa Roberts
With copies to:	
	WilmerHale LLP
	60 State Street

Boston, MA 02109

Notwithstanding the foregoing, any notice from Landlord to Tenant regarding ordinary business operations (e.g., exercise of a right of

Attention: Paul Jakubowski, Esquire

access to the Premises, maintenance activities, invoices, etc.) may also be given by written notice delivered by facsimile to any person at the Premises whom Landlord reasonably believes is authorized to receive such notice on behalf of Tenant without copies as specified above, provided that no such notice shall be relied upon for purposes of determining the running of any periods with respect to any Event of Default hereunder. Either party may at any time change the address or specify an additional address for such Notices by delivering or mailing, as aforesaid, to the other party a notice stating the change and setting forth the changed or additional address, provided such changed or additional address is within the United States. Notices shall be effective upon the date of receipt or refusal thereof.

25. MISCELLANEOUS.

25.1 Separability. If any provision of this Lease or portion of such provision or the application thereof to any person or circumstance is for any reason held invalid or unenforceable, the remainder of this Lease (or the remainder of such provision) and the application thereof to other persons or circumstances shall not be affected thereby.

25.2 Captions. The captions are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope of this Lease nor the intent of any provisions thereof.

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25.3 Broker. Tenant and Landlord each warrants and represents that it has dealt with no broker in connection with the consummation of this Lease other than Cushman & Wakefield ("<u>Broker</u>"). Tenant and Landlord each agrees to defend, indemnify and save the other harmless from and against any Claims arising in breach of the representation and warranty set forth in the immediately preceding sentence. Landlord shall be solely responsible for the payment of any brokerage commissions to Broker.

25.4 Entire Agreement. This Lease, Lease Summary Sheet and Exhibits 1-8 attached hereto and incorporated herein contain the entire and only agreement between the parties and any and all statements and representations, written and oral, including previous correspondence and agreements between the parties hereto, are merged herein. Tenant acknowledges that all representations and statements upon which it relied in executing this Lease are contained herein and that Tenant in no way relied upon any other statements or representations, written or oral. This Lease may not be modified orally or in any manner other than by written agreement signed by the parties hereto.

25.5 Governing Law. This Lease is made pursuant to, and shall be governed by, and construed in accordance with, the laws of the Commonwealth of Massachusetts and any applicable local municipal rules, regulations, by-laws, ordinances and the like.

25.6 Representation of Authority. By his or her execution hereof, each of the signatories on behalf of the respective parties hereby warrants and represents to the other that he or she is duly authorized to execute this Lease on behalf of such party. Upon Landlord's request, Tenant shall provide Landlord with evidence that any requisite resolution, corporate authority and any other necessary consents have been duly adopted and obtained.

25.7 Expenses Incurred by Landlord Upon Tenant Requests. Tenant shall, upon demand, reimburse Landlord for all reasonable expenses, including, without limitation, legal fees, incurred by Landlord in connection with all requests by Tenant for consents, approvals or execution of collateral documentation related to this Lease, including, without limitation, costs incurred by Landlord in the review and approval of Tenant's plans and specifications in connection with proposed Alterations to be made by Tenant to the Premises or in connection with requests by Tenant for Landlord's consent to make a Transfer. Such costs shall be deemed to be additional rent under this Lease.

25.8 Survival. Without limiting any other obligation of Tenant which may survive the expiration or prior termination of the Term, all obligations on the part of Tenant to indemnify, defend, or hold Landlord harmless, as set forth in this Lease shall survive the expiration or prior termination of the Term.

25.9 Limitation of Liability. Tenant shall neither assert nor seek to enforce any claim against Landlord or any of the Landlord Parties, or the assets of any of the Landlord Parties, for breach of this Lease or otherwise, other than against Landlord's interest in the Building and in the uncollected rents, issues and profits thereof, and Tenant agrees to look solely to such interest for the satisfaction of any liability of Landlord under this Lease. This Section 25.9 shall not limit any right that Tenant might otherwise have to obtain injunctive relief against Landlord. Landlord and Tenant specifically agree that in no event shall any officer, director, trustee, employee or

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representative of Landlord or any of the other Landlord Parties ever be personally liable for any obligation under this Lease, nor shall Landlord or any of the other Landlord Parties be liable for consequential or incidental damages or for lost profits whatsoever in connection with this Lease, nor shall Tenant or any other Tenant Party or any officer, director, shareholder, trustee, employee, agent or representative of any of them be liable for consequential or incidental damages or for lost profits whatsoever in connection with this Lease except with respect to the potential liability of Tenant under Sections 17 or 21.3 hereof.

25.10 Binding Effect. The covenants, agreements, terms, provisions and conditions of this Lease shall bind and benefit the successors and assigns of the parties hereto with the same effect as if mentioned in each instance where a party hereto is named or referred to, except that no violation of the provisions of Section 13 hereof shall operate to vest any rights in any successor or assignee of Tenant.

25.11 Landlord Obligations upon Transfer. Upon any sale, transfer or other disposition of the Building, Landlord shall be entirely freed and relieved from the performance and observance thereafter of all covenants and obligations hereunder on the part of Landlord to be performed and observed, it being understood and agreed in such event (and it shall be deemed and construed as a covenant running with the land) that the person succeeding to Landlord's ownership of said reversionary interest shall thereupon and thereafter assume, and perform and observe, any and all of such covenants and obligations of Landlord, except as otherwise agreed in writing.

25.12 No Grant of Interest. Tenant shall not grant any security interest whatsoever in (a) any fixtures within the Premises or (b) any item paid in whole or in part by Landlord without the consent of Landlord.

25.13 No Air Rights. No rights to any view or to light or air over any property, whether belonging to Landlord or any other person, are granted to Tenant by this Lease. If at any time any windows of the Premises are temporarily darkened or the light therefrom is obstructed by reason of any repairs, improvements, maintenance or cleaning in or about the Property, the same shall be without liability to Landlord and without any reduction or diminution of Tenant's obligations under this Lease.

25.14 Financial Information. Tenant shall deliver to Landlord, within thirty (30) days after Landlord's reasonable request, Tenant's most recently completed balance sheet and related statements of income, shareholder's equity and cash flows statements (audited if available) certified by an officer of Tenant as being true and correct in all material respects. Any such financial information may be relied upon by Landlord and any actual or potential lessor, purchaser, or mortgagee of the Property or any portion thereof.

25.15 Confidentiality.

(a) Each party hereby covenants and agrees (1) to keep the contents of the Lease confidential; and (2) not to disclose or reveal the contents of the Lease to any person other than its Engaged Persons (hereinafter defined). In the event that either party is requested pursuant to, or required by, applicable law or regulation or by legal process to disclose all or any portion of

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the Lease, such party agrees that it will provide the other party with reasonable notice of such request or requirement in order to enable the other party to seek an appropriate protective order or other remedy, to resist or narrow the scope of such request or legal process, or to waive compliance, in whole or in part, with the terms of this Confidentiality Agreement. The other party shall respond in such a time and manner that does not put the disclosing party or any of its Engaged Persons at risk of violation of such law or regulation or legal process.

(b) In connection with the Lease, Landlord has delivered and/or will deliver to Tenant from time to time certain information about the Property, which may include, without limitation, master leases, environmental reports and other title, zoning, geotechnical, permitting, environmental and operational materials relating to the Property (such information whether furnished before or after the date hereof, whether oral or written, and regardless of the manner in which it is furnished, is collectively hereinafter referred to as the "Landlord's Proprietary Information"). Landlord's Proprietary Information does not include, however, information which (1) is or becomes generally available to the public other than as a result of a disclosure in violation of this Section 25.15 by Tenant or Tenant's Engaged Persons, as defined below; (2) was available to Tenant on a non-confidential basis prior to its disclosure by Landlord; or (3) becomes available to Tenant on a non-confidential basis from a person other than Landlord who is not to the knowledge of Tenant or Tenant's Engaged Persons otherwise bound by a confidentiality agreement with Landlord, or is otherwise not under an obligation to Landlord not to transmit the information to Tenant.

(i) Tenant hereby covenants and agrees (A) to keep all Landlord's Proprietary Information confidential; (B) not to disclose or reveal any Landlord's Proprietary Information to any person other than those persons, including without limitation its and its affiliates' employees, agents and representatives, whose duties and responsibilities reasonably require that Landlord's Proprietary Information be disclosed to them in connection with the Lease (such persons are hereinafter referred to as "**Tenant's Engaged Persons**"); (C) to cause Tenant's Engaged Persons to observe the terms of this Section 25.15; and (D) not to use any Landlord's Proprietary Information for any purpose other than in connection with the Lease.

(ii) In the event that Tenant is requested pursuant to, or required by, applicable law or regulation or by legal process to disclose any Landlord's Proprietary Information or any other information concerning the Property, Tenant agrees that it will provide Landlord with reasonable notice of such request or requirement in order to enable Landlord to seek an appropriate protective order or other remedy, to resist or narrow the scope of such request or legal process, or to waive compliance, in whole or in part, with the terms of this Section 25.15. In any such event Landlord shall respond in such a time and manner that does not put Tenant or any of its Engaged Persons at risk of violation of such law or regulation or legal process.

(iii) Without prejudice to the rights and remedies otherwise available at law or in equity, Tenant agrees that Landlord shall be entitled to seek equitable relief by way of injunction or otherwise if Tenant or any of Tenant's Engaged Persons breach or threaten to breach any of the provisions of this Section 25.15.

(c) In connection with the Lease, from time to time Tenant has delivered and/or will deliver to Landlord certain information about Tenant and/or its affiliates, including but not

limited to financial information and other information related to the business and properties of Tenant and/or its affiliates (such information whether furnished before or after the Effective Date hereof, whether oral or written, and regardless of the manner in which it is furnished, is collectively hereinafter referred to as "<u>Tenant's Proprietary Information</u>"). Tenant's Proprietary Information does not

include, however, information which (1) is or becomes generally available to the public other than as a result of a disclosure in violation of this Section 25.15 by Landlord or Landlord's Engaged Persons, as defined below; (2) was available to Landlord on a non-confidential basis prior to its disclosure by Tenant; or (3) becomes available to Landlord on a non-confidential basis from a person other than Tenant who is not to the knowledge of Landlord or Landlord's Engaged Persons otherwise bound by a confidentiality agreement with Tenant, or is otherwise not under an obligation to Tenant not to transmit the information to Landlord.

(i) Landlord hereby covenants and agrees (A) to keep all Tenant's Proprietary Information confidential; (B) not to disclose or reveal any Tenant's Proprietary Information to any person other than those persons, including without limitation its and its affiliates' employees, agents and representatives, whose duties and responsibilities reasonably require that Tenant's Proprietary Information be disclosed to them in connection with the Lease and/or Landlord's interest in the Property (such persons are hereinafter referred to as "Landlord's Engaged Persons"); (C) to cause Landlord's Engaged Persons to observe the terms of this Section 25.15; and (D) not to use any Tenant's Proprietary Information for any purpose other than in connection with the Lease and/or Landlord's interest in the Property.

(ii) In the event that Landlord is requested pursuant to, or required by, applicable law or regulation or by legal process to disclose any Tenant's Proprietary Information, Landlord agrees that it will provide Tenant with reasonable notice of such request or requirement in order to enable Tenant to seek an appropriate protective order or other remedy, to resist or narrow the scope of such request or legal process, or to waive compliance, in whole or in part, with the terms of this Section 25.15. In any such event Tenant shall respond in such a time and manner that does not put Landlord or any of its Engaged Persons at risk of violation of such law or regulation or legal process.

(iii) Without prejudice to the rights and remedies otherwise available at law or in equity, Landlord agrees that Tenant shall be entitled to seek equitable relief by way of injunction or otherwise if Landlord or any of Landlord's Engaged Persons breach or threaten to breach any of the provisions of this Section 25.15.

(d) Tenant will be responsible for any breach of the terms of this Section 25.15 by it and/or Tenant's Engaged Persons. Landlord will be responsible for any breach of the terms of this Section 25.15 by it and/or Landlord's Engaged Persons.

years.

The provisions of this Section 25.15 shall survive the expiration or earlier termination of the Lease for two (2)

[SIGNATURES ON FOLLOWING PAGE]

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IN WITNESS WHEREOF the parties hereto have executed this Lease as a sealed instrument as of the Execution Date.

LANDLORD

620 MEMORIAL LEASEHOLD LLC

(e)

By: /s/ Seth Alexander Name: Seth Alexander Title: President

TENANT

SYROS PHARMACEUTICALS, INC.

By: <u>/s/ Nancy Simonian</u> Name: Nancy Title: CEO

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EXHIBIT 1

LEASE PLAN

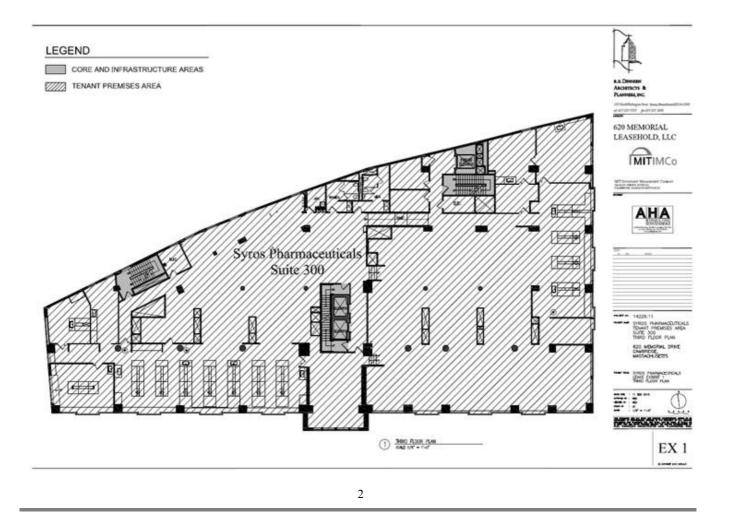


EXHIBIT 2

LEGAL DESCRIPTION

Parcel 1:

The land with the buildings thereon in Cambridge, Middlesex County, Massachusetts situated on the northerly side of Memorial Drive and the westerly side of Vassar Street, now known as and numbered 620 Memorial Drive, and shown as the parcel marked "AREA = 44,677 +1- SF" on a plan entitled "Plan of Land in Cambridge, MA Middlesex County", prepared by Beals and Thomas, Inc., dated January 28, 1994 recorded with the Middlesex South Deeds on February 17, 1994 as Plan No. 134 of 1994 and bounded and described according to said plan as follows:

SOUTHERLY	by Memorial Drive by two curved lines, measuring respectively, 4.62 feet and 196.73 feet;
WESTERLY	by land now or formerly of Massachusetts Institute of Technology LC No. 2495C, 143.97 feet;
NORTHWESTERLY and NORTHERLY	by the southeasterly and southerly lines of a strip of land marked "Railroad Way" on said plan, four lines, the third of which is a curved line, measuring respectively 30.28 feet, 66.70 feet, 105.51 feet and 70.51 feet;
SOUTHEASTERLY and EASTERLY	by Vassar Street and by two lines, the first of which is a curved line, measuring respectively, 84.20 feet and 148.20 feet; and
SOUTHEASTERLY	by the intersection of Vassar Street and Memorial Drive by a curved line, 23.50 feet.

Together with the benefit of and subject to the terms of, a Grant of Easement from the City of Cambridge to Charles River Building Limited Partnership dated January 9, 1997, and recorded on January 17, 1997, as Instrument No. 268 in Book 26997, Page 351.

Parcel 2:

A parcel of land on Memorial Drive, formerly Charles River Parkway, in Cambridge, Middlesex County, Massachusetts, shown as Lot 3 on a plan entitled "Subdivision Plan of Land in Cambridge" by W.T. Fairclough, dated June 23, 1953, filed for registration with the Middlesex County South Registry District of the Land Court as Plan No., 2495C with Certificate of Title No. 78992, bounded and described as follows:

EASTERLY:

SOUTHERLY:

by land formerly of Benjamin F. Brown et al, 143.97 feet; and

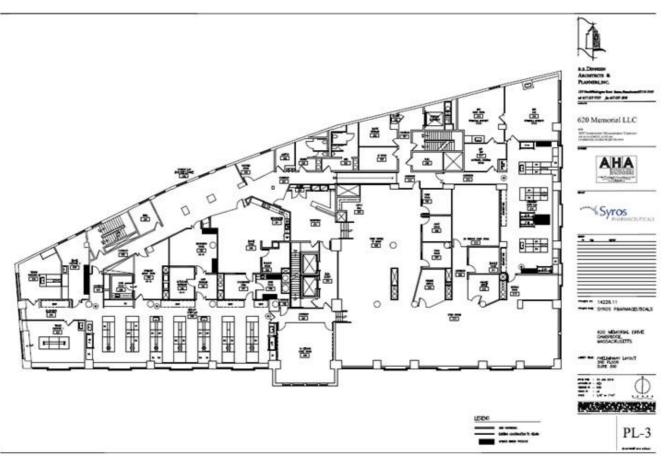
by Memorial Drive (Charles River Road as shown on said plan) 139.13 feet.

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EXHIBIT 3

LANDLORD'S WORK

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EXHIBIT 4

FORM OF LETTER OF CREDIT

BENEFICIARY:

[LANDLORD]

ACCOUNTEE/APPLICANT:

IRREVOCABLE STANDBY LETTER OF CREDIT NO.

ISSUANCE DATE:

MAXIMUM/AGGREGATE CREDIT AMOUNT: USD: \$.

< [TENANT]

LADIES AND GENTLEMEN:

under Irrevocable Standby Letter of Credit Number ," and (ii) including a Beneficiary's dated statement purportedly signed by an authorized signatory or agent reading: "This draw in the amount of U.S. Dollars (\$) under your Irrevocable Standby Letter of Credit No. represents funds due and owing to us pursuant to the terms of that certain lease by and between , a , as landlord, and , as tenant (the "Lease"), and/or any amendment to the Lease or any other agreement between such parties related to the Lease," and (iii) indicating whether payment should be made by wire transfer (including wiring instructions) or by certified check (including mailing address), accompanied by the original of this Letter of Credit and all amendments, if any, shall be returned to you unless fully utilized.

Unless otherwise stated, all correspondence, documents and sight drafts are to be sent via facsimile to () - with originals to follow by hand delivery with receipted delivery, nationally recognized overnight courier with receipted delivery or certified mail, return receipt requested to our counters at <a href="https://www.cellingenduction.celli

You shall have the right to make partial draws against this Letter of Credit, from time to time.

You shall be entitled to assign your interest in this Irrevocable Standby Letter of Credit from time to time to your lender(s) and/or your successors in interest without our approval and without charge. In the event of an assignment, we reserve the right to require reasonable evidence of such assignment as a condition to any draw hereunder.

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Except as otherwise expressly stated herein, this Letter of Credit is subject to the "International Standby Practices 1998" promulgated jointly by the Institute for International Banking Law and Practice and the International Chamber of Commerce, effective January 1, 1999.

This Letter of Credit shall expire at our office on , 20 (the "<u>Stated Expiration Date</u>"). It is a condition of this Letter of Credit that the Stated Expiration Date shall be deemed automatically extended without amendment for successive one (1) year periods from such Stated Expiration Date, unless at least sixty (60) days prior to such Stated Expiration Date (or any anniversary thereof) we shall send a written notice to you, with a copy to Goulston & Storrs, 400 Atlantic Avenue, Boston, MA 02110, Attention: Colleen P. Hussey and to the Accountee/Applicant, by hand delivery, nationally recognized overnight courier with receipted delivery or by certified mail (return receipt requested) that we elect not to consider this Letter of Credit extended for any such additional one (1) year period. In the event that this Letter of Credit is not extended for an additional period as provided above, you may draw the entire amount available hereunder.

If at any time prior to presentation of documents for payment hereunder, we receive a notarized certificate signed by one who purports to be a duly authorized representative on your behalf to execute and deliver such certificate, stating that this Letter of Credit has been lost, stolen, damaged or destroyed, we will mail you a "Certified True Copy" of this Letter of Credit, which shall be treated by us as an original.

In order to cancel this Letter of Credit prior to expiration, you must return this original Letter of Credit and any amendments hereto to our counters with a statement signed by you stating that the Letter of Credit is no longer required and is being returned to the issuing bank for cancellation. In addition, this Letter of Credit may be canceled prior to expiration upon our receipt of a dated statement purportedly signed by (i) an authorized signatory or agent of the Accountee/Applicant and (ii) an authorized signatory or agent of the beneficiary.

We hereby agree with the drawers, endorsers and bonafide holders that the drafts drawn under and in accordance with the terms and condition of this Letter of Credit shall be duly honored within two (2) business days after the date of presentment.

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EXHIBIT 5

ALTERATIONS CHECKLIST

Scope letter describing project, design/construction team, and appropriate vendors. Insurance certificate(s) for Contractors. Construction Documents (CDs) - Plans and Specifications - stamped by licensed AIA. Code Review by licensed code engineer incorporated in CDs and/or by stamped letter.

Code specific - accessibility. Code specific - egress paths/exits (numbers, locations, distance). Code specific - fire protection, sprinkler distribution, horns/strobes/signage locations.

Landlord Approved architect, MEPFP engineer, code engineer, structural engineer. Building permit application.

Signatures by Architect, Licensed Construction Supervisor.

Cost Affidavit with backup estimate from contractor.

Architect Affidavit. MEP Affidavit. FP Affidavit. Structural Affidavit. Construction Cost Affidavit. Structural Affidavit. Structural Affidavit.

Low Voltage Wiring Within Premises:

Insurance certificate(s) for Contractor, if applicable

If installer is employee, copy of valid government issued electrical license

Code Review by licensed code engineer

permit application as requested by Inspectional Services Department.

Signature by Licensed Professional (electrician)

Ethernet wiring within Premises:

Insurance certificate(s) for Contractor, if applicable

If installer is employee, copy of valid government issued electrical license (to the extent legally required)

Code Review by licensed code engineer

permit application as requested by Inspectional Services Department.

Signature by Licensed Professional (electrician) to the extent legally required

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EXHIBIT 6

TENANT'S HAZARDOUS MATERIALS

							Flammable			Amount unit (L, ml,
	Prefix	Chemical Name	Vendor	CAS	Notes	(F)	Class	other hazards	Size	g)
А	4-	Amino-2,2,6,6-	Sigma	36768-	Combustible,	167			5	g
1		tetramethylpiperidine	Aldrich	62-4	corrosive				25	
1		10058-F4	Sigma Aldrich	_	skin sensitiser, irritant	_			25	mg
1		10074-g5	Sigma Aldrich	413611- 93-5		_			25	mg
A	bis-	AAF-R110 substrate	Promega	—	Combustible, irritant	131			50	ul
А		AccuTaq LA DNA Polymerase	Sigma Aldrich	—	Combustible	—			500	units
А		Acetazolamide	Sigma Aldrich	59-66-5	Irritant	—			10	g
А		Acetic Acid	Sigma Aldrich	64-19-7		104	II		2.5	L
А		Acetone	Sigma Aldrich	67-64-1		1.4	1B		4	L
А		Acetonitrile	Sigma Aldrich	75-05-8		35.6	1B		4	L
А		Acetophenone	Sigma Aldrich	98-86-2	Combustible, irritant	169			5	ml
А	4-	Acetylphenylboronic acid	Sigma Aldrich	149104- 90-5	Irritant	—			25	g
А		Acriflavine	Sigma Aldrich	8048-52- 0	Irritant	—			25	g
А		Acryloyl Chloride, 97.0%,	Sigma Aldrich	814-68-6		57	1B		5	g
А		Actinomycin D	Sigma Aldrich	50-76-0	Toxic by ingestion	—			5	mg
A		Adenosine 5'- triphosphate disoium salt hydrate	Sigma Aldrich		Toxic, carcinogen				10	g
А		Albumin Standard	Thermo Fisher	—					2	ml
А		Allyl acetate	Sigma Aldrich	591-87-7	Flammable, toxic, irritant	52	1B		100	ml
А		Aluminum Chloride	Sigma	7446-70-	Teratogen	_			5	g

			Aldrich	0				
А	а-	Amantin	Sigma Aldrich	23109- 05-9	Highly toxic		1	mg
А	7-	Amino-3,4-dihydro- 1H-isoquinoline-2- carboxylic acid tert- butyl ester	Sigma Aldrich		Toxic		250	mg
А	4-	Amino-1-Boc- piperidine	Sigma Aldrich	87120- 72-7	Irritant	—	5	g
А	5-	Amino-2- Methoxybenzoic acid, 97%	Sigma Aldrich	3403-47- 2		_	1	g
A	5-	Amino-2- Methylbenzoic acid, 97%	Sigma Aldrich	2840-04- 2		_	1	g
A	6-	Amino2- azaspiro[3.3]heptane- 2-carboxylic acid tert- butyl ester	Synthonix	1211586- 09-2			1	g
А	2-	Amino-3,5,6- Trimethyl-4 3H)- pyrimidinone	Sigma Aldrich		Harmful		1	g
A	2-	Amino-4- bromobenzoic acid	Sigma	20776- 50-5		_	1	g
					2			

Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
А	2-	Amino-7- azaspiro[3.5]nonane-7- carboxylic acid tert- butyl ester	Aldrich Synthonix	1239319- 82-4					1	g
А	4-	Aminobenzaldehyde	Sigma Aldrich	556-18-3		—			250	mg
А	3-	Aminobenzoic acid	Sigma Aldrich	99-05-8		302	IIIB		100	g
А	4-	Aminobenzoic acid	Sigma Aldrich	150-13-0	Irritant	—			100	g
А	4-	aminocyclohexanone	Sigma Aldrich	—	Harmful, irritant	—			100	mg
А	4-(2-	Aminoethyl)benzoic acid hydrochloride	Sigma Aldrich	60531- 36-4	Irritant				1	g
А	1 - (2-	Aminoethyl)- Pyrolidine	Sigma Aldrich	7154-73- 6	Combustible	117	II		1	g
А	5-	Aminoisatoic Anhydride	Sigma Aldrich	169037- 24-5	Sensitizer	—			—	—
A	Trans- 4-		Sigma	1197-18- 8	Irritant				50	g
А	2-	Aminomethyl)benzoic acid hydrochloride	Sigma Aldrich	10017- 39-7				possible sensitizer	250	mg
А	4-	Aminomethyl)Benzoic Acid, 97%	Sigma Aldrich	56-91-7		—			5	g
А	4-	Aminopyridine	Sigma Aldrich	504-24-5	Toxic, irritant	—			25	g
А	3-	Aminorhodanine	Sigma Aldrich	1438-16- 0	Toxic				10	g
A	N-(-	Aminospiro[3.3]hept- 6-yl)carbamic acid butyl-ester	Synthonix	1239589- 52-6						
A		Ammonia solution	Sigma Aldrich	7664-41- 7	Flammable, toxic, corrosive	43			—	—
А		Ammonium bicarbonate	Sigma Aldrich	1066-33- 7					500	g
А		Ammonium carbonate	Sigma Aldrich	506-87-6	Harmful	—			100	g
А		Ammonium chloride	Sigma Aldrich	12125- 02-9		—			1	kg
А		Ammonium chloride	Fisher	12125-	Irritant	—			500	g

			02-9					
А	Ammonium hydroxide	Fisher	7664-41- 7	Corrosive	—		2.5	ml
А	Ammonium molybdate	Sigma Aldrich	13106- 76-8	Irritant	—		100	g
Α	Ammonium phosphomolybdate hydrate		54723- 94-3	GHS - Skin irritation, eye irritation, specific target organ toxicity				
А	Ampicillin sodium salt	Sigma Aldrich	69-52-3	Skin and respiratory sensitizer			25	g
A	Aniline	Sigma Aldrich	62-53-3	Combustible, toxic, skin sensitizer, carcinogen, mutagen	158	IIIA	5	Ml
А	Anthranilamide	Sigma Aldrich	88-68-6	Skin sensitizer, irritant	388		100	g
А	Anthranilic acid	Sigma	118-92-3		—		25	g
				3				

					Flashpoir	ıtFlammabl	e]	Bottle	e Amount unit (L, m
Index Pref	ix Chemical Name	Vendor	CAS	Notes	(F)	Class	other hazards	Size	g)
А	Anti-AXL, antibody produced in rabbit	Aldrich Sigma	56-81-5	Irritant	_		-		
		Aldrich							
А	Antibodies in Phosphate	Thermo Fisher		—					_
A	Anti-CREB3L2, antibody produced in rabbit	Sigma Aldrich	56-81-5	Irritant					
А	Anti-EXT1, antibody produced in rabbit	Sigma Aldrich	—	Skin irritant	—		-		
А	Anti-HGF (ab2) antibody produced in rabbit	Sigma Aldrich		Skin irritant					
А	Anti-MAX, antibody produced in rabbit	Sigma Aldrich	—		—		-		_
А	Anti-NTN4, anitbody produce in rabbit	Sigma Aldrich	56-81-5				-		—
А	Anti-PRKAG2, antibody produced in rabbit	Sigma Aldrich	56-81-5	Irritant					
А	Anti-PTAFR antibody produced in rabbit	Sigma Aldrich	56-81-5	Irritant					
А	Anti-SDC1, antibody produced in rabbit	Sigma Aldrich	56-81-5		—		-		—
А	Anti-TMEM27, antibody produced in rabbit	Sigma Aldrich	56-81-5						
А	ApoTox-Glow Triplex Assay, 10ml	Promega	aKit		_			10	ml
A L(+))- Arabinose	Acros Organic	87-72-9 s	Irritant			-		
А	ATX Ponceau S red staining solution	•	5965-	Harmful	—			1	L
A 5-	Aza - 2' -deoxycyt idine	Sigma Aldrich	2353- 33-5	Irritant, teratogen, mutagen	—		:	5	mg
В	BCA Protein Assay Kit	Thermo Fisher	Kit	C	—			25	KU
В	Benzonase Nuclease	Sigma Aldrich	9025- 65-4		—		:	25	KU
В	Benzyl bromide, reagent grade 98%	Sigma Aldrich	100-39-	Combustible	187	IIIA	:	25	g
В	Benzyl Isocyanide, 98%	Sigma Aldrich		Combustible	174	IIIA		1	g
В	Benzylamine	Sigma Aldrich	100-46-	Combustible harmful, corrosive	e,149	II	lachrymator	100	g
В	Benzylhydrazine dihydrochloride	Sigma	20570-	Irritant	_		:	5	g

			Aldrich	96-1					
В	N-	2 , , ,	0		Combustible	189	IIIA	100	mg
		diamine trifluoroacetate salt solution	Aldrich	84-0					
В		BIS (((Trifluoromethyl)Sulfinyl)Oxy)	Sigma						_
		Zinc	Aldrich						
В	[1,1'	-Bis(diphenylphosphino)ferrocene)dichloro	Sigma	95464-	Carcinogen				
		palladium (II)	Aldrich	05-4					
В		Blotting grade blocker	Bio-Rad	9000-		_			_
				71-9					
В	1-	boc-3-(amino)azetidine	Sigma		Toxic	_			
				4					

Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class other hazard		Amount unit (L, ml, g)
			Aldrich						
В	1-	Boc-3- (aminomethyl)piperdine	Sigma Aldrich	162167- 97-7	harmful, irritant	>230	IIIB	100	mg
В		Boc-5-Ava-OH	Sigma Aldrich	27219- 07-4	Irritant	235	IIIB	—	—
В	4-(Boc- amino)benzylamine	Sigma Aldrich	220298- 96-4	Harmful, skin sensitizer	—		500	mg
В	3-(Boc-amino)propyl bromide	Sigma Aldrich	83948- 53-2	Irritant			500	mg
В	N-	Boc-m- phenylenediamine	Sigma Aldrich	68621- 88-5		—		5	g
В	N-	Boc-M- Phenyleneduanbem >98.0%	Sigma Aldrich					5	g
В	1-	Boc-piperidine-4- carboxaldehyde	Sigma Aldrich	137076- 22-3	Irritant	—		—	—
В	1-	Boc-piperzine	Sigma Aldrich	57260- 71-6		235	IIIB	—	—
В	N-	Boc-Pyrrolidine-3- Carboxylic Acid	Sigma Aldrich	59378- 75-5	Irritant			1	g
В		Boric Acid	Sigma Aldrich	10043- 35-3	Teratogen (testes)			500	g
В		Boron Tribromide, 1.0M Solution In	Sigma Aldrich	10294- 33-4	Carcinogen, corrosive, fatal if inhaled	_		25	ml
В		Boron Trifluoride Diethly Etherate	Sigma Aldrich	109-63-7	Combustible, corrsive	118	II	100	ml
В		Bovine Serum Albumin, 2mg/ml	Bio-Rad	mixture		—			_
В	2-	Bromo-1,3- Dimethylbenzene, 98%	Sigma Aldrich	576-22-7	Combustible	165	IIIA	5	g
В	4-	Bromo-2 Chloropyridine, 97%	Sigma Aldrich	73583- 37-6		225	IIIB	5	g
В	5-	Bromo-2'- Deoxyuridine	Sigma Aldrich					1	g
В	5-	Bromo-2- hydrazinopyridine	Sigma Aldrich	77992- 44-0	Toxic, irritant	—		1	g
В	6-	Bromo-2-Naphthol, 97%	Sigma Aldrich	239-279- 0				25	g
В	1-	Bromo-3- chloropropane	Sigma Aldrich		Combustible Liquid, Harmful by ingestion.	113	II	200	ml
В		Bromoacetic acid	Sigma Aldrich	79-08-3	Toxic, respiratory sensitizer, corrosive	235		100	g
В		Bromoacetyl chloride		22118- 09-8	GHS- corrosive, eye damage, specific target organ toxicity			25	ml
В	2-	Bromobenzoic acid	Sigma Aldrich	88-65-3		—		25	g

В	3-	Bromobenzoic acid	Sigma Aldrich	585-76-2	_	25	G
В	5	Bromodeoxyuridine	Sigma Aldrich			1	g
В	2	Bromoethylamine hydrobromide	Sigma Aldrich	2576-47- Irritant 8	_	25	g
				5			

Indox	Ducfiv	Chamical Nama	Vendor	CAS	Notes		Flammable Class			Amount unit (L, ml,
B	Prefix	Chemical Name Bromomethyl acetate	Sigma		Combustible	(F) 135	II	other hazards	<u>– Size</u>	g)
2			Aldrich	6	comoustion	100				5
В	2-	Bromomethyl) Acrylic Acid, 98%	Sigma Aldrich	72707- 66-5	Corrosive	_			1	g
В	4-	Bromomethyl)benzoic acid	Sigma Aldrich	6232- 88-8	Irritant, lachrymator	_			25	g
В	3-	Bromomethyl)benzonitrile	Sigma Aldrich	28188- 41-2	corrosive	_				g
В	4-	Bromomethyl)benzonitrile	Sigma Aldrich	17201- 43-3	respiratory sensitizer, corrosive	—			10	g
В	4-	Bromomethyl)phenylboronic acid	Sigma Aldrich	68162- 47-0	Irritant	_			1	g
В	3	Bromopropionic acid	Sigma Aldrich	590-92- 1	Corrosive	151			100	g
В	Ν	Bromosuccinimide reagent plus 99%	Sigma Aldrich	128-08- 5	Corrosive	_			5	g
		Bromotripyrrolidinophosphonium								
В		hexafluorophosphate	Sigma Aldrich	51-2	Corrosive	—			1	g
В		Buffer Solution, pH 4, pH 7, pH 10	Fisher	mixture		—			—	g
В	1	Butanol	Sigma Aldrich	71-36-3	Flammable	95	1C		100	ml
В		Butanol, 99+%	Sigma Aldrich	75-65-0	Flammable	52	1B		100	ml
В		Butyl 1-Piperazinecarboxydate, 97%	Sigma Aldrich						1	g
В	Tert	Butyl Chloroacetate, 97%	Sigma Aldrich	107-59- 5	Combustible, Corrosive	117	II		25	g
					Combustible, organic peroxide, corrosive,					
В	Tert	Butyl Hydroperoxide, 5.0-6.0M	Sigma Aldrich	75-91-2	mutagen	109	II		25	ml
					Flammable, pyrophoric, corrosive,					
В	n-	Butyllithium Solution, 1.6 M in Hexane	Sigma Aldrich	109-72- 8	reporductive hazard	-15	1B		25	ml
В	3	Butyn-1-ol	Sigma Aldrich	927-74- 2	Flammable, irritant	97			5	g
С		Cacodylic acid, sodium salt trihydrate	Acros Organics	6131- 99-3	Toxic	—				—
С		Caffeic Acid	Sigma Aldrich	331-39- 5	Carcinogen, teratogen	—			2	g
С		Caffeine		58-08-2	GHS- Acute toxicity				5	g
С		Calcium Chloride Anhydrous	Sigma Aldrich	10043- 52-4					500	mg
С	1,1'	Carbonyldimidazole, Reagent Grade	Sigma Aldrich		Corrosive	—			—	—
С		Caspase-Glo 3/7 Substrate	Promega	125572- 95-4	Irritant	212			—	_
С		Cefixime Trihydrage	Sigma Aldrich		sensitizer	—			100	mg
С		Celastrol	Sigma	34157- 83-0	Toxic by ingestion	_			10	mg

ndex	Prefix	Chemical Name	Vendor Aldrich	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, n g)
С		Celite 545, Filter aid	Sigma Aldrich	mixture		—			1	kg
C		Cerium(IV) sulfate	Sigma Aldrich	13590- 82-4	Irritant	—			25	g
2		Cesium Carbonate	Sigma Aldrich	534-17-8					50	g
2		Chloramphenicol	Sigma Aldrich	56-75-7	Carcinogen				25	g
	2	Chloro -4- Nitrobenzoic Acid 98%	Sigma Aldrich	99-60-5		_			100	g
2	4	Chloro-3-nitrobenzoic acid, 98%	Sigma Aldrich	96-99-1		—			5	g
2	3	Chloro-6- hydrazinopyridazine	Sigma Aldrich	17284- 97-8	Harmful, skin sensitizer, irritant	—			1	g
2		Chloroacetyl Chloride, 98%	Sigma Aldrich	79-04-9	Corrosive	212	IIIB		5	g
2		Chloroform	Sigma Aldrich	67-66-3	Carcinogen, irritant	—			4	L
2	5	Chloroindole-3- Carboxaldehyde, 98%	Sigma Aldrich	827-01-0					5	g
2		Chloromethyl pivalate	Sigma Aldrich	18997- 19-8	Combustible	104	II		25	g
2		Chlorosulfonyl isocyanate	Acros Organics	1189-71- 5	water reactive	230	IIIB		5	ml
2		Chlorotrimethylsilane	Sigma Aldrich	75-77-4	Flammable, Corrosive	-0.4	1B		100	ml
2		Chlorox Germicidal Bleach	Clorox	7681-52- 9	Corrosive				—	
-		Cholera toxin from Vibrio Cholerae	sigma Aldrich	9012-63- 9	Fatal in contact with skin	_			2	mg
2		Chromium(0) hexacarbonyl	Sigma Aldrich	13007- 92-6	Toxic	—			10	g
		CiDehol 70 Wipes	Decon Labs	_		—			—	—
		Cinnamoyl chloride	Sigma Aldrich	102-92-1	Corrosive	235	IIIB		5	g
		Citraconic anhydride	Sigma Aldrich	616-02-4	Toxic by skin absorbtion, irritant	214			25	g
2		Clean-Blot IP Detection Kit	Thermo Fisher	Kit		—			—	—
2		CleanSolutions- Waterbath	Akron Biotech	52-51-7	Irritant	—			—	—
2		Copper (I) iodide	Sigma Aldrich	7681-65- 4	Irritant	—			50	g
2		Copper (II) Acetate 98%	Sigma Aldrich	142-71-2	Irritant				25	g
2		Copper(II) iodide	Sigma Aldrich	7681-65- 4					—	_
2		Copper(II) sulfate pentahydrate	Sigma Aldrich	7758-99- 8	Toxic				5	g
2		Copper, Bare copper wire	Arcor	7440-50- 8		—				—
					7					

Index	Prefix	Chemical Name	Vendor electronics	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards		Amount unit (L, ml, g)
С		Crontonyl chloride	Sigma Aldrich	625-35-4	Flammable, corrosive, carcinogen	95	1C		5	g

С		Crotonic acid 98%	Sigma Aldrich	107-93-7	Corrosive	190	IIIA	500	g
С		Curcumin	Sigma Aldrich	458-37-7	Irritant	—		5	g
С		Cyanoacetamide	Sigma Aldrich	107-91-5	Irritant	419	IIIB	100	G
С		Cyanoacetic acid	Sigma Aldrich	372-09-8	Corrosive	225	IIIB	25	g
С		Cyanogen Bromide, Reagent Grade 97%	Sigma Aldrich	506-68-3	Toxic, corrosive	—		5	g
С	4-	Cyanophenylacetic acid	Sigma Aldrich	5462-71- 5	Harmful, irritant			1	g
С		Cyanuric chloride	Sigma Aldrich	108-77-0	Toxic, skin sensitizer, corrosive			250	g
С		Cyclohexyl Isocyanide, 98%	Sigma Aldrich	931-53-3	Combustible, toxic	171	IIIA	1	g
С		Cyclosporin A	Sigma Aldrich	59865- 13-3	Carcinogen, Teratogen	—		5	mg
С		Cysteamine	Sigma Aldrich	60-23-1	Irritant	—		10	g
С	L-	Cysteine hydrochloride monohydrate	Sigma Aldrich	7048-04- 6	Irritant	_		100	g
С		Cytosine B-D- arabinofuranoside	Sigma Aldrich	147-94-4	Skin sesitizer	_		—	_
D		Danazol	Sigma Aldrich	17230- 88-5	Toxic, TOE Pituitary, Teratogen			100	mg
D		Diacylglycerol Kinase Inhibitor II	Sigma Aldrich	120166- 69-0	Irritant	—		1	mg
D	1,11-	Diamino-3,6,9- Trioxaundecane, > +9&	Sigma Aldrich	929-75-9	Irritant			100	mg
D	2,3-	Diaminobenzoic acid	Sigma Aldrich	603-81-6	Irritant			1	g
D	3,4-	Diaminobenzoic acid	Sigma Aldrich	619-05-6	Irritant	—		25	g
	(1R,2R)- (-)-								
D	1,2- (1S,2S)-	Diaminocyclohexane	Sigma Aldrich	20439- 47-8	Corrosive	158	IIIA	1	g
	(+)-								
D	1,2-	Diaminocyclohexane	Sigma Aldrich	21436- 03-3	Corrosive	158	IIIA	1	g
D	cis-1,2-	Diaminocyclohexane	Sigma Aldrich	1436-59- 5	Combustible, corrosive	158	IIIA	1	g
D	trans- 1,4-	Diaminocyclohexane	Sigma Aldrich	2615-25- 0	harmful, corrosive	160	IIIA	25	g
D	2,4-	Diaminotoluene	Sigma Aldrich	95-80-7				50	g
D	cis-	Diammineplatinum(II) dichloride	Sigma	15663- 27-1	Toxic, carcinogen, eye damage			1	g

Indov	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
Index	TTCHX		Aldrich	CAS	Tiotes	(1)	<u>C1433</u>	other nazarus	SILC	5/
D	2,4-	Dichloro-5- (trifluoromethyl)pyrimidine	sigma Aldrich	3932- 97-6	Toxic by ingestion, irritant	200	IIIB		1	g
D	2,4-	Dichloro-5- fluoropyrimidine	Sigma Aldrich	2927- 71-1	Harmful, corrosive	223	IIIB		1	g
D	2,4-	Dichloro-5- methoxypyrimidine	Sigma Aldrich	1780- 31-0	Corrosive	235	IIIB		5	g
D	2,4-	Dichloro-5- methylpyrimidine	Sigma Aldrich	19646- 07-2	Harmful by ingestion, irritant	—			5	g
D	1,2-	Dichloroethane,	Sigma	107-06-	Flammable,	55	1B		100	ml

		Anhydrous, 99.8%	Aldrich	2	carcinogen					
D	2,3-	Dichloromaleic anhydride	Sigma Aldrich	1122- 17-4	Irritant	—			5	g
D		Dichloromethane	Sigma Aldrich	75-09-2	Carcinogen, toxic, irritant	—			4	L
D	2,6-	Dichloropyridine, 98%	Sigma Aldrich	2402- 78-0	Toxic	—			100	g
D	2,4-	Dichloropyrimidine, 98%	Sigma Aldrich	3934- 20-1	Irritant	—			10	g
D	N,N'-	Dicyclohexylcarbodiimide	Sigma Aldrich	538-75- 0	Toxic, corrosive	235	IIIB		—	—
D		Diethyl 1,3- acetonedicarboxylate	Sigma Aldrich	105-50- 2	Combustible	160			50	g
D		Diethyl azodicarboxylate solution	Sigma Aldrich	1972- 28-7	Combustible, teratogen	106			25	g
D		Diethyl ether	Sigma Aldrich	60-29-7	Flammable, harmful, irritant	-40	1A	BP 93 deg F	1	L
					Flammable, skin sensitizer, respiratory					
D		Diethylamine	Sigma Aldrich	109-89- 7	sensitizer	-9			1	L
		Diethylamino)-2-Butenoic Acid								
D	4-(Hydrochloride	Sigma Aldrich	98548- 81-3	Irritant	—			—	_
D	3,4-	Dihydroxybenzaldehyde, 97%	Sigma Aldrich	205- 377-7	Irritant	—			5	g
D	3,4-	Dihydroxybenzoic Acid	Sigma Aldrich	99-50-3	Irritant	—			25	g
					Flammable, water reactive, corrosive,					
D		Diisobutylaluminum hydride solution	Sigma Aldrich	1191- 15-7	carcinogen	1			100	ml
D	N,N'-	Diisopropylcarbodiimide	Sigma Aldrich	693-13- 0	Flammable, sensitizer	88	1C		25	g
D	N,N-	Diisopropylethylamine	Sigma Aldrich	7087- 68-5	Flammable, toxic, corrosive	51	1B		100	ml
D	N,O-	Dimehtylhydroxylamine hydrochloride	Sigma Aldrich	6638- 79-5	Irritant	—			5	g
D	2,4-	Dimethoxy-3- Hydroxybenzaldehyde	Sigma Aldrich						50	mg
D	1,2-	Dimethoxyethane, Anhydrous, 99.5%	Sigma	110-71- 4	Flammable, teratogen	41	1B		100	ml
					0					

Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
D		Dimethyl sulfoxide	Aldrich Sigma Aldrich	67-68-5	Combustible	189	IIIA		500	ml
D	N,N-	Dimethylacetamide, Anhydrous, 99.8%	Sigma Aldrich	127-19- 5	Combustible, Irritant, toxic, teratogen	158	IIIA		100	ml
D	3,3-	Dimethylacryloyl chloride	Sigma Aldrich	3350- 78-5	Combustible, corrosive	124	II		5	g
D		Dimethylamine, 2.0M solution in Tetra-	Sigma Aldrich	124-40- 3	Flammable, irritant, carcinogen	33	1B	Compressed gas	100	ml
D	4-(Dimethylamino)pyridine	Sigma Aldrich	1122- 58-3	Toxic, irritant	230	IIIB		25	g
		Dimethylaminopropyl)- N-								
D	N-(3-	ethylcarbodiimide hydrochloride	Sigma Aldrich	25952- 53-8	Irritant	_				_

D	2,6-	Dimethylbenzoic acid	Sigma	632-46-	Irritant	_		5	g
D	N,N-	Dimethylbenzylamine	Aldrich Sigma	2 103-83-	Combustible,	127		100	ml
D	N,N-	Dimethylformamide	Aldrich Sigma Aldrich	3 68-12-2	corrosive Combustible, harmful, irritant, teratogen	136	ΙΙ	100	ml
D	2,4-	Dimethylglutaric acid	Acros Organics	2121- 67-7	Irritant			—	—
D	2,4-	Dimethylpyrrole	Sigma Aldrich	625-82- 1	Irritant	>235	IIIB	1	G
D	1,4-	Dioxane	Sigma Aldrich	123-91- 1	Flammable, Carcinogen, may form explosives	54	1B	100	ml
D		Diphenyl phosphoryl azide	Sigma Aldrich	26386- 88-9	Toxic	234	IIIB	25	g
D		Di-tert-butyl dicarbonate	Sigma Aldrich	24424- 99-5	Flammable, toxic, irritant, skin sensitizer	99	1C	100	g
D	5,5'-	Dithiobis(2- nitrobenzoic acid)	Sigma Aldrich	69-78-3	Irritant	—		25	g
D	2,2'-	Dithiodipyridine	Sigma Aldrich	2127- 03-9	Irritant	—		—	—
D	1,4-	Dithio-DL-Threitol	Sigma Aldrich					—	—
D		DL-Dithiothreitol	Sigma Aldrich	3483- 12-3	Toxic, irritant	235	IIIB	—	_
D		DNA Plasmid Vectors							_
D		Dowex 50WX8 hydrogen form	Sigma Aldrich	69011- 20-7	Irritant	—		500	g
D		Doxorubicin hydrochloride	Sigma Aldrich	25316- 40-9	Harmful, irritant, carcinogen	—		1	mg
D		Dri-Contrad	Decon Labs			_			_
D		Drierite	Arcor	_	_				_
D		D-Tube Dialyzer Mini, MWCO 6-8 kDa	EMD Biosciences						
D		Dulbecco's Modified Eagle's Medium	Sigma Aldrich	_	Irritant	—		—	—
D		Durac Liquid fill for	H-B	67-64-1	Flammable	-4		_	_

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Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards		Amount unit (L, ml, g)
			Instrument							
D		DURAC Plus Liquid	H-B Instrument	67-64-1	Flammable	-4	1B		—	_
Е		EfferSan Multipurpose disinfecting tablets	Activon							
E		Ethanol	Sigma Aldrich	64-17-5	Flammable, irritant, carcinogen	57	1B		100	ml
Е		Ethanol 200 Proof	Fisher	64-17-5	Flammable, irritant, carcinogen	54	1B		4	L
Е		Ethanol SDA1, Anydrous	Fisher	64-17-5	Flammable	57	1B			_
Е		Ethanolamine	Sigma Aldrich	141-43-5	Combustible, corrosive	187			25	ml
Е	2-	Ethoxyethanol 99%	Sigma Aldrich	110-80-5	Combustible, teratogen	108	II		1	L
Е		Ethyl 2- methylacetoacetate	Sigma Aldrich	609-14-3	Combustible	145			100	g
Е		Ethyl acetate	Sigma Aldrich	141-78-6	Flammable, irritant	27	1B		4	L
Е		Ethyl chloroformate	Sigma Aldrich	541-41-3	Flammable, toxic, corrosive	50	1B		100	g

Ε		Ethyl isocyanate		109-90-0	GHS- Flammable liquids, acute toxicity, skin irritation, eye irritation, respiratory sensitisation, specific target organ toxicity	14 F				
E		Ethylene Glycol, ReagentPlus, >=99%	Sigma Aldrich	107-21-1	teratogen	232	IIIB		4	L
Е		Ethylenediaminetetraacetic acid	Sigma Aldrich	60-00-4	Irritant	_			100	ml
Е	N-	Ethylmaleimide	Sigma Aldrich	128-53-0	Toxic, corrosive	_			1	g
	5- {(4-	Ethylphenyl)methylene] - 2-thioxo-4-thiazolidinone	Sigma Aldrich							
	1-	Ethynylcylohexene	Sigma Aldrich	931-4-7	Flammable	84	1B	lachrymator	—	—
		Europium(III) nitrate pentahydrate	Sigma Aldrich	63026- 01-7	Oxidizer, irritant				1	g
		EZ-Link TFPA-PEG Biotin	Thermo Fisher	—	—				—	—
		FLAG M Purification Kit	Sigma Aldrich	—					—	—
		Flavopiridol Hydrochloride Hydrate	Sigma Aldrich	131740- 09-5	Harmful	—			5	g
		Fluorescein	Sigma Aldrich	2321-07- 5	Irritant	—			100	g
	4-	Fluoro-3-nitrobenzoic acid, 98%	Sigma Aldrich	453-71-4	Harmful, irritant	—			5	g
	6-	Fluoroindole-3- carboxaldehyde	Sigma Aldrich	2795-41- 7	Irritant	—			25	g
	1,(2-	Fluoropheyl)piperazine	Sigma Aldrich	1011-15- 0	Irritant	235			10	ml
		Formic Acid	Sigma Aldrich	64-18-6	Combustible, harmful, corrosive	118	II		500	ml

Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
	3-	Formyl-1H-Indole-5- Carbonitrile, 97%	Sigma Aldrich	17380- 18-6	Harmful, skin sensitiser, irritant	_			1	g
	3-	Formylphenylboronic acid	Sigma Aldrich	87199- 16-4	Corrosive	_			5	g
	4-	Formylphenylboronic acid	Sigma Aldrich	87199- 17-5	Corrosive	—			5	g
		FuGENE HD Transfection Reagent	Promega	64-17-5	Flammable, carcinogen	70			_	—
G		G 418 disulfate salt	Sigma Aldrich	_	Sensitizer	—			1	g
G		Gemcitabine hydrochloride	Sigma Aldrich	122111- 03-9	Reproductive hazard	—			10	mg
G		GenElute Plasmid Minipret Kit	Sigma Aldrich	Kit	Toxic, Corrosive	_			—	—
G		GF-AFC substarte	Promega		Combistble	131				_
G		Glycerol	Sigma Aldrich	56-81-5		320	IIIB		1	—
G		Glyoxilic acid monohydrate	Sigma Aldrich	563-96-2	skin sensitiser, irritant	230	IIIB			_
G		GSK2801	Sigma Aldrich	—	Harmful	—			5	g
G		GSK343	Sigma	1346704-	Harmful				5	mg

			Aldrich	33-3					
G		Guanidine hydrochloride	Sigma Aldrich	50-01-1	Irritant	—		500	G
Н		Halt Protease Phosphatase Inhibitor Cocktail	Thermo Fisher		Toxic				
Н		Hematoxylin		517-28-2					_
Н		Heptamethyleneimine	Sigma Aldrich	1121-92- 2	Flammable	84	1B	1	g
Н		Hexamethylenediamine	Sigma Aldrich	124-09-4	Corrosive	176	IIIA	100	g
Н		Hexane	Sigma Aldrich	110-54-3	Flammable, irritant, reproductive hazard	-15	1B	4	L
Н		hexane, Mixture of Isomers, Chromasolv	Sigma Aldrich	110-54-3	Flammable, teratogen	-9	1B	4	L
Н	2.5-	Hexanedione	Sigma Aldrich	110-13-4	Combustible, irritant	174	IIIA	—	_
Н		HisPur Cobalt Resin	Thermo Fisher	7791-13- 1	Flammable	90	1C	—	—
Н		HIS-Select Nickel Affinity Gel	Sigma Aldrich	64-17-5	Flammable	90	1C		_
Η		Histoprep 70% Dehydrant		64-17-5 7732-18- 5 67-56-1 67-63-0	Flammable, irritant, reproductive hazard	69.8 F		1	gallon
Н		hydralzine hydrochloride	Sigma Aldrich	304-20-1	Toxic, irritant, Teratogen	_		5	g
Η		Hydrazine	Sigma Aldrich	302-01-2	Combustible, carcinogen, toxic, corrosive	126	Π	50	g
Н	2-	Hydrazinopyrazine	Sigma	54608- 52-5	Harmful, irritant	_		1	g
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Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
Н	2-	Hydrazinopyridine	Aldrich Sigma	4930-	Irritant	230	IIIB		1	g
			Aldrich	98-7		200				5
Н	4-	Hydrazinopyridine hydrochloride	Sigma Aldrich	52834- 40-9	Harmful, irritant	—			250	mg
Н	2-	Hydrazinyl-5- trifluoromethylpyridine	Sigma Aldrich	_	Toxic, irritant	—			1	g
Н		Hydrochloric Acid, 37%	Sigma Aldrich	7647- 01-0	Corrosive	—			500	ml
Н		Hydrocortisone	Sigma Aldrich	50-23-7	Teratogen	_			1	g
Н		Hydrogen chloride, 4N solution in 1,4-dioxane	Acros Organics	7647- 01-0	Flammable, peroxide former	62.6	1B		100	ml
Н		Hydrogen peroxide solution	Sigma Aldrich	7722- 84-1	Oxidizer, corrosive	_			500	ml
Н	3-	hydroxy-2,4- dimethyoxybenzaldehyde	Sigma Aldrich	32246- 34-7	Harmful, skin sensitiser, irritant	_			_	_
Η	4-	Hydroxybenzaldehyde	Sigma Aldrich	123-08- 0	Irritant	—			50	g
Н	4-(2-	hydroxyethoxy)benzaldehyde	Sigma Aldrich	—	Skin sensitizer, irritant	—			250	mg
Н	4-(2-	Hydroxyethyl)morpholine, ReagentPlus	Sigma Aldrich	62240-2	Irritant	208	IIIB		5	g
Н		Hydroxylamine solution	Sigma Aldrich	7803- 49-8	Harmful, skin sensitizer, irritant	—			250	ml

Н	(Z)- 4-	Hydroxytamoxifen	Sigma Aldrich	68047- 06-3	Toxic, Teratogen	_		5	g
		Igepal CA-630	Sigma Aldrich	9036- 19-5	Irritant	—		100	ml
	1-[2- (1H-	imidazol-1- yl)pheyl]methyanamine	Sigma Aldrich	—	Irritant	—		100	mg
		Imidazole	Sigma Aldrich	288-32- 4	Harmful, corrosive, teratogen	>275	IIIB	100	g
	2-	Imidazolecarboxaldehyde	Sigma Aldrich	10111- 08-7	Irritant	—		1	g
	4-	Imidazolecarboxaldehyde	Sigma Aldrich	3034- 50-2	Irritant	—		1	g
	5-	Iodoisatin	Sigma Aldrich	20780- 76-1	Harmful, skin sensitizer, irritant	—		5	g
		Iodotrimethylsilane	Sigma Aldrich	16029- 98-4	Corrosive, reacts violently with water	—		5	g
		Iron(III) acetylacetonate	Sigma Aldrich	14024- 18-1	Irritant	—		10	g
		Iron(III) chloride	Sigma Aldrich	7702- 08-2	Corrosive to metals, irritant	—		5	g
		Isatin	Sigma Aldrich	91-56-5	Irritant	—		5	g
		Isoniazid	Sigma Aldrich	54-85-3	Harmful, irritant	—		5	g
		Isonicotinic Acid, 99%	Sigma	55-22-1	Irritant 13	_		5	g

Flashpoint Flammable Bottle Amount unit (L, ml, Index Prefix **Chemical Name** Vendor CAS Notes (**F**) Class other hazards Size **g**) Aldrich Isophthalic Acid Sigma 121-91-5 500 g Aldrich 10 Isopropyl B-D-1-Sigma 123-91-1 carcinogen, g thiogalactopyranoside Aldrich irritant Isopropylamine > = Flammable, 1B 25 Sigma 75-31-0 0 ml 99.5% Aldrich harmful, corrosive 920-39-8 Flammable, 25 Isopropylmagnesium Sigma -22 ml Aldrich bromide solution Corrosive, Carcinogen Itaconic Anhydride, Sigma 2170-03- Harmful, 25 g Powder, 95% Aldrich 8 irritant 9012-90-J JumpStart Sigma REDAccuTaq LA Aldrich 2 **DNA** Polymerate Κ Sigma 25389-Reproductive Kanamycin solution, 94-0 from Steptomyces Aldrich hazard kanamyceticus Κ 25389-Kanamycin solution, Sigma Reproductive Aldrich 94-0 from Steptomyces hazard kanamyceticus N-L Lauroylsarcosine Sigma 137-16-6 Highly 100 g Aldrich sodium salt Toxic, irritant L LB Agar Kanamycin-Sigma 50, Plates Aldrich L Leflunomide 75706-Toxic, 25 Sigma Mg Aldrich 12-6 irritant L Lithium Aluminum Sigma 16853-Flammable, 1 1B 100 ml hydride solution Aldrich 85-3 water reactive, corrosive, carcinogen, may form explosive

					peroxides					
L		Lithium bromide	Sigma Aldrich	7550-35- 8	Harmful	_		10	0	g
L		Lithium Chloride Solution	Sigma Aldrich	7447-41- 8	Harmful, irritant	—		50	0	ml
L		Lithium Hydroxide, Reagent Grade, >98%	Sigma Aldrich	1310-65- 2	Toxic, Corrosive			10	0	g
L		Luperox ® A70S, Benzoyl peroxide 70%	Sigma Aldrich	94-36-0	Organic peroxide, skin senstiser, irritant	—		50	0	g
М		Magnesium	Sigma Aldrich	7439-95- 4	Flammable solid	_				_
М		Magnesium acetate solution	Sigma Aldrich	142-72-3		—		10	0	ml
М		Magnesium sulfate	Sigma Aldrich	7487-88- 9	—			50	0	g
М		Magnesium sulfate, anyhydrous	Fisher	7487-88- 9	Irritant	—		_		_
Μ		Maleic Anhydride, Powder, 95%	Sigma Aldrich	108-31-6	Toxic, skin and respirator sensitiser, corrosive, irritant			25		g
М	3-	Maleimidopropionic Acid, 97%	Sigma Aldrich					25	0	mg
М	N-	Maleoyl- 3-alanine	Sigma Aldrich	7423-55- 4	Irritant	—				—
М		Malonic acid, reagent plus, 99%	Sigma Aldrich	141-82-2	Toxic, harmful, irritant	342	IIIB	10	0	g
М		Manganese II) sulfate monohydrate	Sigma	10034- 96-5	Damage to lungs, nerves with repeated			10	0	g
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Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
			Aldrich		exposure					
М	2-	Mercaptoethanol	Sigma Aldrich	60-24-2	Combustible, toxic, mutagen, stench	154	IIIA		100	ml
М		Methanesulfonamide, >97.0% CHN	Sigma Aldrich	3144-09- 0	Irritant	—			10	g
М		Methanesulfonic acid	Sigma Aldrich	75-75-2	Corrosive	372			100	ml
М		Methanol	Sigma Aldrich	67-56-1	Flammable, toxic, irritant	50	1 B		4	L
М	2-	Methoxy-4-Nitrobenzoic Acid, 98%	Sigma Aldrich	2597-56- 0	Target Organ liver	—			5	g
М	2-	Methoxy-5-Nitroaniline, 98%	Sigma Aldrich	99-59-2	female reproductive system				100	g
М	2-	Methoxyestradiol	Sigma Aldrich	362-07-2	Toxic, reproductive hazard				5	mg
М	(2-	Methoxyethyl)methylamine	Sigma Aldrich	38256- 93-8	flammable, skin sensitizer	35			5	g
М	2-	Methoxyethylamine	Sigma Aldrich	109-85-3	Flammable, corrosive	54			50	ml
М	5-	Methoxyindole-3- carboxaldehyde	Sigma Aldrich	10601- 19-1	Irritant	—			1	g
М	4-	Methoxyphenylacetic Acid, Reagent Plus	Sigma Aldrich	104-01-8	Harmful, irritant				5	g
М	(S)- (+)-a-	Methoxy-a- trifluoromethylphenylacetyl	Sigma Aldrich	20445- 33-4	Combustible, corrosive	192	IIIA			

		chloride							
М	1-	Methyl -2 Pyrrolidinone Anhydrous, 99&	Sigma Aldrich	872-50-4	Combustible, irritant, teratogen	196	IIIA	100	ml
М		Methyl 2-aminopyridine-4- carboxylate	sigma Aldrich	6937-03- 7	Irritant	_		1	g
М	1-	Methyl 2-iodoterephthalate	Sigma Aldrich	299173- 24-3	Toxic, irritant	_		1	g
М		Methyl 3-bromopropionate	Sigma Aldrich	3395-91- 3	Combustible, irritant	167		5	g
М		Methyl 3-formylbenzoate	Sigma Aldrich	52178- 50-4	Harmful	—		5	g
М		Methyl 3- Isocyanatobenzoate, 97%	Sigma Aldrich	41221- 47-0	respiratory sensitiser	235	IIIB	1	g
М	3-	Methyl -4 Nitrobenzoic Acid, 99%	Sigma Aldrich	3113-71- 1	Irritant	—		25	g
М		Methyl bromoacetate	Sigma Aldrich	96-32-2	Combustible, corrosive	147		25	g
М		Methyl cyanoacetate, 99%	Sigma Aldrich	105-34-0	Irritant	235	IIIB	25	g
М	2-(2-	Methyl-1 H-imidazol-1- yl)benzoic acid	Maybridge	159589- 71-6	Harmful, irritant	—		1	g
М	N-	Methyl-1,3- Propanediamne, 98%	Sigma Aldrich	6291-84- 5	Combustible, highly toxic, corrosive	104	ΙΙ	25	g
М	4-	Methyl-3-Nitrobenzoic acid, 99%	Sigma Aldrich	96-98-0	Harmful	—		25	g
М	N-	Methyl-4-piperdinol	Sigma Aldrich	106-52-5	Irritant	234			

Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
М		Methylamine solution	Sigma Aldrich	74-89-5	Flammable, harmful, corrosive, carcinogen	-29	1B			
М	3-	Methylamino)benzoic acid, 97%	Sigma Aldrich	51524- 84-6	Harmful	—			1	g
М	4-	Methylamino)benzoic acid, 97%	Sigma Aldrich	10541- 83-0	Harmful, skin sensitiser	—			10	g
М	2-	Methylamino)ethanol	Sigma Aldrich	109-83- 1	Combustible, corrosive	169			25	ml
М	2-	methylcarboxy)pyridine- 5-boronic acid	Sigma Aldrich	—	Irritant	—			100	mg
М	2-	Methylindole, 98%	Sigma Aldrich	95-20-5	Irritant	286	IIIB		25	g
М		Methylmagnesium bromide solution	Sigma Aldrich	75-16-1	Flammable, water reactive, corrosive	—			25	ml
М	1-	Methylpiperazine	Sigma Aldrich	109-01- 3	Combustible, toxic, corrosive	102	II		5	g
М	2-	Methyltetrahydrofuran	Sigma Aldrich	96-47-9	Flammable	10.4			100	mg
М	4-	Methylthiophene-2- boronic acid	Sigma Aldrich	—	Irritant	—			250	mg
М		Methysergide maleate salt	Sigma Aldrich	129-49- 7	Toxic	—			2	mg
М		Mexiletine hydrochloride	Sigma Aldrich	5370- 01-4	Harmful	—			25	g
М		MG-132 Inhibitor	Promega	—	Combutible, harmful	131			—	—
М		Mineral oil	Alfa Aesar	8020- 83-5		450	IIIB		—	—
		Mission Control Vector Purified DNA Turbo								
М		GFP	Sigma Aldrich		Irritant					_

М	Molecular Sieves, 4 A	Sigma Aldrich	70955- 01-0	Irritant	—		—	_
М	Molybdenum hexacarbonyl	Acros Organics	13939- 06-5	Toxic	—		50	g
М	Molybdenum(V) chloride	Sigma Aldrich	10241- 05-1	Corrosive	—		25	g
М	Molybdenum(VI) oxide	Sigma Aldrich	131-27- 5	Irritant, carcinogen	—		100	g
М	Molybdenum(VI) tetrachloride oxide	Sigma Aldrich	13814- 75-0	Corrosive	—		5	g
М	Molybdenumhexacarbonyl	Sigma Aldrich	13939- 06-5	Highly toxic	—		50	g
М	Monoclonal Anti-A- Tubulin, Clone DM 1A	Sigma Aldrich						
М	MOPS	Sigma Aldrich	1132- 61-2	Irritant	230		250	g
Μ	Morpholine 99%	Sigma Aldrich	110-91- 8	Flammable, harmful, toxic, corrosive	88	1C	5	ml
М	Mucochloric acid	Sigma Aldrich	87-56-9	Toxic, skin sensitizer, corrosive	212	IIIB	100	g
М	Myra A hydrochloride	Sigma	_	Harmful	_		5	mg

Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
			Aldrich							
N		Nano-Glo Luciferase Assay Buffer	Promega	—	Suspected carcinogen and teratogen	—				_
Ν		Nano-Glo Substrate	Promega	—	Flammable	70			—	
N	[1,8]	Naphthyrdine-2- carbaldehyde	Maybridge	64379- 45-9	Irritant	—			—	—
N		Neomycin Sulfate	Fisher	1405- 10-3	Irritant	—			—	—
		NE-PER Nuclear & Cytoplasmic Extraction								
N		reagents	Thermo Fisher	Kit		—			—	—
					Carcinogen, toxic, harmful, skin sensitiser,					
Ν		Nickel II) Sulfate, anhydrous 99.9%	Sigma Aldrich	7786- 81-4	irritant, teratogen, mutagen	—				—
N		Nitric Acid	Sigma Aldrich	7697- 37-2	Oxidizer, corrosive	—			2.5	1
N	3-	Nitro-1,8-Naphthalic Anhydride	Sigma Aldrich	3027- 38-1	Irritant	—			5	g
N	3-	Nitrobenzoyl Chloride, 98%	Sigma Aldrich	121-90- 4	Toxic, corrosive	230	IIIB		25	g
N	4-	Nitrobenzoyl Chloride, 98%	Sigma Aldrich	122-04- 3	Corrosive	216	IIIB		—	—
Ν	4-	Nitrobenzyl bromide	Sigma Aldrich	100-11- 8	Corrosive	_			25	g
Ν		Nitromethane	Sigma Aldrich	72-52-5	Flammable, carcinogen, harmful	97	1C		100	ml
N	4-	Nitrophenyl Chlorformate 97%	Acros Organics	7693- 46-1	Corrosive	—			—	—
N		Nocodazole	Sigma Aldrich	31430- 18-9	Teratogen, mutagen	—			—	—
N		Nonidet P 40 Substitute	Sigma Aldrich	9016- 45-9	Irritant	235			1	L
N		NSC308848	Sigma Aldrich	69408- 82-8	Harmful	—			5	mg
0		Octylphenyl- polyethylene glycol	Sigma Aldrich						_	—

0	ONE-Glo luciferase assay buffer	Promega	76836- 02-7	carcinogen	_		—	_
0	Oxalyl Chloride, Reagent Grade, 98%	Sigma Aldrich	79-37-8	Toxic, Corrosive	_		25	g
Р	Palladium on acitvated Charcoal	Sigma Aldrich	7440- 05-3	Irritant	—		10	g
				GHS- flammable liquid, skin irritation, eye irritation, germ cell mutagenicity, carcinogenicity, reproductive toxicity,				
	PAP pen for immunostaining - 5mm tip		106-94- 5	specific target organ toxicity, acute aquatic				
Р	width		8032- 32-4	toxicity, chronic aquatic toxicity	160 F			—
Р	Paraformaldehyde	Sigma Aldrich	30525- 89-4	Flam solid, Toxic, skin sensitizer, carcinogen	158	IIIA	1	Kg
Р	Pentafluorophenol	Sigma	771-61- 9	Irritant	162	IIIA	10	g

Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
			Aldrich							
Р	1,10-	Phenanthroline 99+%	Sigma Aldrich	66-71-7	Toxic	—			5	g
Р		Phenol	Sigma Aldrich	108-95-2	Toxic, corrosive, mutagen	174			_	-
		Phenol-chloroform- isoamyl alcohol			Combustible, carcinogen, toxic, corrosive,					
Р		mixture	Sigma Aldrich	mixture	mutagen	174	IIIA		100	ml
					GHS - flammable liquids, acute toxicity, skin					
					corrosion, serious eye damage, respiratory					
					sensitisation, skin sensitisation, acute					
Р		Phenyl isocyanate		103-71-9	aquatic toxicity, chronic aquatic toxicity	124 F			—	_
Р	p-	Phenylenediamine	Sigma Aldrich	106-50-3	Toxic,skin sensitiser, irritant	230	IIIB		100	g
Р		Phenylsilane	Sigma Aldrich	694-53-1	flammable, water reactive	46			1	g
Р		Phosphatase inhibitor cocktail 3 (DMSO)	Sigma Aldrich	67-68-5	Combustible	189	IIIA			
Р		Phosphomolybdic acid		51429-	GHS -					

	hydrate		74-4	Oxidizing solids, skin corrosion, serious eye damage				
Р	Phosphorous (V) oxychloride, reagent plus	Sigma Aldrich	10025- 87-3	Highly toxic, corrosive			250	g
Р	Phosphorus trichloride	Sigma Aldrich	7719-12- 2	Corrosive, contact with water — toxic gas	—		250	g
Р	Phosphotungstic acid hydrate		12501- 23-4	GHS- skin corrosion, serious eye damage			_	_
Р	Pierce 660nm Protein Assay	Thermo Fisher	67-56-1		>212		_	—
Р	Piperidine	Sigma Aldrich	110-89-4	Flammable, toxic, corrosive	61	1B	100	ml
Р	Piperonal	Sigma Aldrich	120-57-0	Irritant	>235	IIIB	25	g
Р	Platinum(IV) oxide	Sigma Aldrich	1314-15- 4	Oxidizer, irritant	—		250	g
Р	Plumbagin, from Plumbago indica	Sigma Aldrich	481-42-5	Toxic, Corrosive	—		100	mg
Р	Pluronic F-127, Protein grade detergent	EMD	9003-11- 6		—		—	_
Р	PMA (phorbol 12- myristate 13-acetate)	Sigma Aldrich	16561- 29-8	Irritant	—		10	mg
Р	Potassium bis(trimethylsilyl)amide solution		40949- 94-8	Flammable, Corrosive, Carcinogen	-2		25	mL
Р	Potassium carbonate	Sigma Aldrich	584-08-7	Harmful, irritant	_		500	g
Р	Potassium chloride	Sigma Aldrich	7447-40- 7		_		250	mL
Р	Potassium cyanide	Sigma	151-50-8	Toxic	_		25	g
				18				

Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
			Aldrich							
Р		Potassium hydroxide	Sigma Aldrich	1310-58- 3	Toxic, corrosive				500	g
Р		Potassium hydroxide solution	Sigma Aldrich	1310-58- 3	Corrosive	—			—	—
Р		Potassium iodate	Sigma Aldrich	7758-05- 6	Oxidizer, teratogen	—			100	g
Р		Potassium permanganate	Sigma Aldrich	7722-64- 7	Oxidizer, harmful	—			25	g
Р		Potassium Phosphate Tribasic, reagent gr	Sigma Aldrich	7778-53- 2	Irritant				500	g
Р		Potassium phosphate, monobasic	Fisher	7778-77- 0	Irritant	—			1-	—
Р	5a	Pregnane-3,20-dione (allo)	Sigma Aldrich	566-65-4	Teratogen	—			500	mg
Р	2	Propanol	Sigma Aldrich	67-63-0	Flammable, irritant	57	1B		4	L
Р	2	Propanol	Fisher	67-63-0	Flammable	54				—
Р		Propylphosphonic anhydride solution	Sigma Aldrich	68957- 94-8, 141-78-6	Flammable, corrosive	25			10	mL
Р		Protocol 10% Neutral Buffered Formalin	Thermo Fisher		carcinogen, irritant	200				
Р		Pyrazole	Sigma Aldrich	288-13-1	Irritant	—			5	g
Р		Pyridine	Sigma Aldrich	110-86-1	Flammable, harmful, carcinogen	63	1B		5	g

Р	2	Pyridinecarboxaldehyde	Sigma Aldrich	1121-60- 4	Combustible, toxic, mutagen	171	IIIA	25	g
Р	3	Pyridinecarboxaldehyde	Sigma Aldrich	500-22-1	flammable, irritant	95	1C	25	g
Р	4	Pyridinecarboxaldehyde	Sigma Aldrich	872-85-5	Combustible, irritant	180	IIIA	25	g
Р	4	Pyridoxic Acid	Sigma Aldrich	82-82-6	Irritant	—		500	mg
Р		Pyrodoxamine Dihydrochloride	Sigma Aldrich	524-36-7	Irritant	—		—	—
Р	3	Pyrrolidinamine	Sigma Aldrich	—	Irritant	—		1	g
Р		Pyruvic acid	Sigma Aldrich	127-17-3	Combustive, corrosive	180		25	g
Q		Quick Start Bradford Protein Assay Kit 1	Bio-Rad	mixture		—		—	—
R		Rhodanine	Sigma Aldrich	141-84-4	Toxic, irritant	—		25	g
R		Ribonuclease A solution	Sigma Aldrich	56-81-5		—		—	_
R		RIPA Buffer	Sigma Aldrich	9036-19- 5	Irritant	—		500	mL
R		Ritanserin	Sigma Aldrich	87051- 43-2	Irritant			25	mg
S		SAHA	Sigma Aldrich	149647- 78-9	reproductive hazard, mutagen			5	mg
					19				

CAS	Notes	Flashpoint (F)
90-02-8	Combustible,	171
	toxic,	
	corrosive,	
	mutagen	
14808-	carcinogen	
60-7		
111-19-3	Toxic,	235

Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
S		Salicylaldehyde	Sigma Aldrich	90-02-8	Combustible, toxic, corrosive, mutagen	171	IIIA		100	g
S		Sand, 50-70 mesh	Sigma Aldrich	14808- 60-7	carcinogen	—			500	g
S		Sebacoyl chloride	Sigma Aldrich	111-19-3	Toxic, Corrosive	235	IIIB		50	g
S		Secureline Lab Marker	Fisher	—					—	—
S		Selenium dioxide	Sigma Aldrich	7446-08- 4	Toxic	—			5	g
S		SeqPlex DNA Amplification Kit	Sigma Aldrich	—		—			—	_
S		SeqPlex Enhanced DNA amplification kit	Sigma Aldrich							
S		Silica gel	Sigma Aldrich	112926- 00-8		—			100	g
S		Silica gel	Acros Organics	7631-86- 9		—			100	g
S		Silver Nitrate	Sigma Aldrich	7761-88- 8	Oxidizer, corrosive	—			100	g
S		Slide-A-Lyzer Dialysis Products	Thermo Fisher	—		—			—	—
S		Sodim <i>tert</i> - butoxide	Sigma Aldrich	865-48-5	Unstable reactive, corrosive	57	1B	Unstable reactive	5	g
S		Sodium Azide	Sigma Aldrich	26628- 22-8	Toxic, rapidly absorbs through skin			may react with lead and copper to form highly explosive metal azides	100	g
S		Sodium borohydride	Sigma Aldrich	16940- 66-2	Water reactive, toxic,	_			25	g

				corrosive				
S	Sodium butyrate	Sigma Aldrich	156-54-7	Irritant, mutagen	—		250	mg
S	Sodium carbonate	Fisher	497-19-8	Irritant	—		—	—
S	Sodium chloride	Fisher	7647-14- 5		—		—	—
S	Sodium Cyanide, ACS Reagent, > 95%	Sigma Aldrich	143-33-9	Highly toxic	—		100	g
S	sodium cyanoborohydride	Sigma Aldrich	25895- 60-7	Flammable solid, highly toxic, corrosive	—		10	g
S	Sodium deoxycholate	Sigma Aldrich	302-95-4	Harmful, irritant			100	g
S	Sodium dodecyl sulfate	Sigma Aldrich	151-21-3	Flammable solid, harmful, irritant	356	IIIB	1	kg
S	Sodium ethoxide	Sigma Aldrich	141-52-6	Unstable reactive, corrosive	86		100	g
S	Sodium ethoxide solution	Sigma Aldrich	141-52-6	flammable, toxic, corrosive, carcinogen	48		100	mL
S	Sodium hydride 60%	Sigma Aldrich	8012-95- 1	Water reactive, irritant, carcinogen	_		100	g
S	Sodium hydroxide	Sigma Aldrich	1310-73- 2	Corrosive	—		500	g

						Flashpoint	Flammable		Bottle	Amount unit (L, ml,
Index	Prefix	Chemical Name	Vendor	CAS	Notes	(F)	Class	other hazards		g)
S		Sodium hydroxide solution	Sigma Aldrich	1310- 73-2	Corrosive	_			100	mL
S		Sodium Iodide	Sigma Aldrich	7681- 49-4	Toxic, irritant	_			_	_
S		Sodium Methoxide	Sigma Aldrich	124-41- 4	Corrosive	91			100	g
S		Sodium methoxide solution	Sigma Aldrich	124-41- 4	Flammable, Corrosive, Reacts violently with water	52			25	mL
S		Sodium n-Dodecyl sulfate, 20% solution (w/v)	EMD	151-21- 3	Irritant					
S		Sodium phosphate dibasic anyhyrous	Fisher	7558- 79-4	Irritant	—			500	g
S		Sodium phosphotungstate hydrate		312696- 30-3	Acute toxicity, skin irritation, eye irritation, specific target organ toxicity					
S		Sodium tetraborate		1330- 43-4	Eye irritation, reproductive toxicity, acute aquatic toxicity, chronic aquatic toxicity				100	g
S		Sodium	Sigma	56553-	Water				25	g
			U							

a		Triacetoxyborohydride	Aldrich	60-7	reactive					
S		Sparkleen 1	Fisher		Corrosive, irritant	_				—
S		Succinic anhydride	Sigma Aldrich	108-30- 5	Harmful, irritant	—				—
S		Sulfo-NHS-Biotin	Thermo Fisher	119616- 38-5	Irritant	—			—	—
S		Sulfuric acid, 95-98%	Sigma Aldrich	7664- 93-9	Highly toxic, irritant, corrosive	_			2.5	L
Т		TCEP Solution	Thermo Fisher	51805- 45-9	Corrosive	—			—	_
Т		Terephthalic acid, 98%	Sigma Aldrich	100-21- 0	Irritant	—			100	g
Τ		Tetrabutylammonium bromide		1643- 19-2	GHS- skin irritant, eye irritant, specific target organ toxicity				100	g
Т	2,4,5,6-	Tetrachloropyrimidine	Sigma Aldrich	1780- 40-1	Irritant			lachrymator	25	g
Т		Tetrahydrofuran	Sigma Aldrich	109-99- 9	Flammable, irritant, carcinogen	1.4	1B	may for explosive peroxides	100	ml
Т	1,1,3,3-	Tetramethoxypropane	Sigma Aldrich	102-52- 3	Combustible	129			100	ml
Т	N,N,N',N'-	Tetramethylethylenediamine	Sigma Aldrich	110-18- 9	Flammable, toxic, corrosive	68	1B			_
Т	(±)-	Thalidomide	Sigma Aldrich	50-35-1	Teratogen, reproductive hazard				100	mg
Т	2-	Thiazolecarboxaldehyde	Sigma Aldrich	10200- 59-6	Combustible	154	IIIA		1	g
Т	5-	Thiazolecarboxaldehyde	Sigma Aldrich	1003- 32-3	Skin sensitizer, irritant	208	IIIB		1	g
Т		Thionyl Chloride		7719- 09-7	Toxic, corrosie, water reactive				100	ml
Т		Tin(II) chloride 98%	Sigma Aldrich	7772- 99-8	Harmful, corrosive				100	g
					21					

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Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards		Amount unit (L, ml, g)
Т		Titanium(IV) ispropoxide	Sigma Aldrich	546-68- 9	Combutible, irritant	113			25	ml
Т		Toluene	Sigma Aldrich	108-88- 3	Flammable, irritant, teratogen	40	1B		1	L
Т	p-	Toluenesulfonic acid monohydrate	Sigma Aldrich	6192- 52-5	Corrosive	_			100	g
Т	p-	Toluenesulfonyl chloride	Sigma Aldrich	98-59-9	Irritant	262	IIIB		100	g
Т	p-	Tolunitrile	Sigma Aldrich	104-85- 5	Irritant, respiratory sensitizer	—			250	ml
Т		Trans-Blot Transfer Medium 0.2, 0.45 micron	Bio-Rad	9004- 70-0	Flammable solid	212				
Т		Trans-crotonyl chloride, tech 90%	Sigma Aldrich						5	g
Т		Tri(o-tolyl)phosphine	Sigma Aldrich	6163- 58-2	Irritant	_				_
Т	2,4,6-	Trichloro-5-methylpyrimidine	Sigma Aldrich	1780- 36-5	Corrosive, lachrymator	—			5	g
Т	2,4,6-	Trichloropyrimidine	Sigma Aldrich	3764- 01-0	Harmful, irritant,	235			5	g

					lachymator				
Τ		Triethylamine	Sigma Aldrich	121-44- 8	Flammable, harmful, toxic, corrosive	5	1B	100	ml
Т		Trifluoroacetic acid	Sigma Aldrich	76-05-1	Delayed organ effects, corrosive	_		100	ml
Т	3,4,5-	Trifluorobenzaldehyde	sigma Aldrich	132123- 54-7	Toxic, irritant, teratogen	230	IIIB	5	ml
Т		Trifluoromethanesulfonmide, 95%	Sigma Aldrich	82113- 65-3	Corrosive			5	g
Т	2'-(Trifluoromethyl)acetophenone	Sigma Aldrich	17408- 14-9	Combustible	183		—	—
Т	3'-(Trifluoromethyl)acetophenone	Sigma Aldrich	349-76- 8	Combustible, irritant	174			
Т	3,4,5-	Trihydroxybenzaldehyde monohydrate	Sigma Aldrich	2077- 42-88-9	Irritant			5	ml
Т	2,4,6-	Trihydroxybenzaldehyde, >97%	Sigma Aldrich	487-70- 7	Irritant	—		5	g
Т	2,3,4-	Trihydroxybenzaldehyde, 97%	Sigma Aldrich	2144- 08-3	Irritant	—		5	g
Т	2,3,4-	Trihydroxybenzoic acid 97%	Sigma Aldrich	610-02- 6	Irritant	—		5	g
Т		Triisopropylsilane, 99%	Sigma Aldrich	6485- 79-6	Combustible, irritant	100	П	100	ml
Τ		Trimethylaluminum solution	Sigma Aldrich	75-24-1	Flammable, water reactive, corrosive, teratogen	39		25	ml
Т	(Trimethylsilyl)Diazomethane, 2.0 M In	Sigma Aldrich	18107- 18-1	Flammable, highly toxic, irritant, carcinogen	-31	1B	25	ml
Т		Trimethylsulfonium iodide	Sigma Aldrich	2181- 42-2	Irritant			25	g
Т		Triphenylphosphine	Sigma Aldrich	603-35- 0	Harmful, skin sensitizer	_		100	g
Т		Triruthenium dodecacarbonyl	Sigma	15243- 33-1	Harmful	_		1	g

Index	Prefix	Chemical Name	Vendor	CAS	Notes	Flashpoint (F)	Flammable Class	other hazards	Bottle Size	Amount unit (L, ml, g)
			Aldrich							
Т		Tris Hydrochloride Buffer, pH 7.5 1M	Mediatech	1185- 53-1		_			—	_
Т		Tris Hydrochloride Buffer, pH 8.0 1M	Mediatech	1185- 53-1		—			—	—
Т		Tris(2- carboxyethyl)phospine hydrochloride	Sigma Aldrich	51805- 45-9	Corrosive				10	g
Т	10X	Tris/Glycine Buffer	Bio-Rad	77-86-1		_				—
Т		Tri-tert-Butylphosphine, 98%	Sigma Aldrich	13716- 12-6	pyrophoric, corrosive	1	1B	pyrophoric solid	1	g
Т		Triton X 100	Sigma Aldrich	9002- 93-1	Harmful, irritant	484	IIIB		100	ml
Т		Trizma base	Sigma Aldrich	77-86-1	Irritant	—			—	_
Т		Trt-diamino-PEG-NH2	EMD	_		_				
Т		Tungsten hexacarbonyl	Sigma Aldrich	14040- 11-0	Toxic	—			10	g
V	(±)-	Verapamil hydrochloride	Sigma Aldrich	152-11- 4	toxic	—			1	g
V		Vinylmagnesium bromide solution	Sigma Aldrich	1826- 67-1	Flammable, water reactive,	1.4			100	ml

				corrosive, carcinogen			
W	Water	Fisher	7732- 18-5		-	25	L
X	Xylenes		1330- 20-7	GHS- Flammable liquids, acute toxicity, acute aquatic toxicity, chronic aquatic toxicity	77 F	2.5	ml
Х	Xylenes, mixed isomers with ethylbenzene	Fisher	1330- 20-7	Flammable	78	1	gal
Z	Zinc cyanide	Sigma Aldrich	557-21- 1	Highly toxic	_	5	g
Z	Zinc trifluoromethanesulfinate	Sigma Aldrich	39971- 65-8	Irritant	—	—	—
				23			

irritant.

EXHIBIT 7

RULES AND REGULATIONS

To the extent of any conflict between these Rules and Regulations and the body of the Lease, the body of the Lease shall govern.

- 1. Tenant and its employees shall not in any way obstruct the sidewalks, halls, stairways, or elevators of the Building, and shall use the same only as a means of passage to and from their respective offices.
- 2. Corridor doors, when not in use, shall be kept closed.
- 3. No animals, except seeing eye dogs, shall be brought into or kept in, on or about the Premises.
- 4. The restroom fixtures shall be used only for the purpose for which they were constructed and no rubbish, ashes, or other substances of any kind shall be thrown into them. Tenant will bear the expense of any damage resulting from misuse.
- 5. Tenant shall not place any additional lock or locks on any exterior door in the Building or on any door in the Building core within the Premises, including doors providing access to the telephone and electric closets and the slop sink, without Landlord's prior written consent; provided, however, that Tenant shall have control of all keys to doors within the Premises, but will provide Landlord with a master copy of same. At Landlord's option, all keys shall be surrendered to Landlord at the expiration or earlier termination of the Lease.
- 6. Landlord reserves the right to exclude or expel from the Building any persons who, in the judgment of Landlord, is intoxicated under the influence of liquor or drugs, or shall do any act in violation of the rules and regulations of the Building.
- 7. Landlord reserves the right to close and keep locked all entrance and exit doors of the Building during the hours Landlord may deem advisable for the adequate protection of the property. Use of the Building and the leased Premises before 8 AM or after 6 PM, or any time during Sundays or legal holidays shall be allowed only to persons with a key/card key to the Premises or guests accompanied by such persons. At these times, all occupants and their guests must sign in at the concierge when entering and exiting the Building. Any persons found in the Building after hours without such keys/card keys are subject to the surveillance of building staff.
- 8. Tenant shall not, without the prior written consent of Landlord (which consent will not be unreasonably withheld, conditioned or delayed), perform improvements or alterations within the Building or the Premises if the work has the potential of disturbing the fireproofing which has been applied on the surfaces of the structural deck.
- 9. Landlord and Tenant shall mutually agree on the termite and pest extermination service to control termites and pests in the Premises. Except as included in Landlord's services, tenants shall bear the cost and expense of such extermination services.

10. Tenant shall not install, operate or maintain in the Premises or in any other area of the Building, any electrical equipment which does not bear the U/L (Underwriters Laboratories) or IEC (International Electrotechnical Conference) seal of approval, or which would overload the electrical system or any part thereof beyond its capacity for proper, efficient and safe operation as reasonably

determined by Landlord, taking into consideration the overall electrical system, the capacities reserved to Tenant in 11. the Lease, and the present and future requirements therefor in the Building. Tenant shall not use more than Tenant's Building Share of telephone lines available to service the Building, unless Tenant provides its own conduits and service at its sole expense. Landlord shall notify Tenant, at the time of Landlord's review and approval of the plans for Tenant's Work or for any future Alterations, if any work set forth therein will result in the use of more than Tenant's Building Share of telephone lines.

- 11. Tenant shall not operate or permit to be operated on the Premises any coin or token operated vending machine or similar device (including, without limitation, telephones, lockers, toilets, scales, amusement devices and machines for sale of beverages food, candy, cigarettes or other goods), except for those vending machines or similar devices which are for the sole and exclusive use of Tenant's employees.
- 12. Bicycles and other vehicles are not permitted inside or on the walkways outside the Building, except in those areas specifically designated by Landlord for such purposes.
- Landlord may from time to time adopt appropriate systems and procedures for the security or safety of the Building, its occupants, entry and use, or its contents, provided that Tenant shall have access to the Building 24 hours per day, 7 days a week, 365 days a year. Tenant, Tenant's agents, employees, contractors, guests and invitees shall comply with Landlord's reasonable requirements relative thereto.
- 14. Canvassing, soliciting, and peddling in or about the Building is prohibited. Tenant shall cooperate and use reasonable efforts to prevent the same.
- 15. At no time shall Tenant permit or shall Tenant's agents, employees, contractors, guests, or invitees smoke in any Common Area of the Building.
- 16. Tenant shall, at its sole cost and expense, keep any garbage, trash, rubbish and refuse in vermin-proof containers within the interior of the Premises until removed.
- 17. Landlord and Tenant shall mutually agree on those areas outside the Premises, if any, where lab coats are not allowed.
- 18. Lab operators carrying any lab related materials may only travel in Tenant's freight elevator or stairwells within the Premises. If such freight elevator is down, announcements will be sent from Landlord's property manager designating use of another elevator. At no time should any lab materials travel in passenger elevators.
- 19. Any dry ice brought into the Building must be delivered through Tenant's freight elevator only.

20. All nitrogen tanks must travel in Tenant's freight elevator and should never be left unmanned outside of the Premises

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EXHIBIT 8

LANDLORD'S SERVICES

- · On-site bicycle parking
- · Shower facilities in the Building
- To the extent capacity is available beyond base Building requirements (such available capacity, "Lessee Capacity"), Landlord's sole obligation for either providing emergency generators or providing emergency back-up power to Tenant shall be to: (i) provide an emergency generator for use of one or more tenants in the Building, including Tenant (the "Back-up Generator") with Tenant's Share of the Lessee Capacity (Tenant hereby acknowledging that Tenant's equipment to be connected to the Back-Up Generator collectively shall use no more than Tenant's Share of the Lessee Capacity), and (ii) maintain the Back-up Generator uses more than Tenant's Share of the Lessee Capacity), and (ii) maintain the Back-Up Generator uses more than Tenant's Share of the Lessee Capacity, Tenant shall, upon Landlord's demand, disconnect from the Back-Up Generator such equipment as may be necessary to reduce Tenant's use to equal or be less than Tenant's Share of the Lessee Capacity. Landlord shall provide reasonable prior notice of any planned period of replacement, repair or maintenance of the Back-up Generator and within one (1) business day after Landlord learns that the Back-up Generator is not operational, however Landlord shall have no obligation to provide Tenant with an alternative back-up Generator will be operational at all times or that emergency power will be available to the Premises when needed. So long as Landlord is not in default of its obligations under this paragraph, in no event shall Landlord be liable to Tenant or any other party for any damages of any type suffered by Tenant or any other person in the event that any emergency generator or back-up power.

Subsidiaries of the Registrant

Syros Securities Corporation, a Massachusetts corporation.