UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2019

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission file number: 001-37813

SYROS PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**45-3772460**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
620 Memorial Drive, Suite 300 Cambridge, Massachusetts	**02139**
(Address of Principal Executive Offices)	**(Zip Code)**

(617) 744-1340

(Registrant's Telephone Number, Including Area Code)

(Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☒
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Number of shares of the registrant's common stock, $0.001 par value, outstanding on April 26, 2019: 42,434,780

TABLE OF CONTENTS

Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q, or Quarterly Report, contains forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, contained in this Quarterly Report, 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 Quarterly Report are based upon information available to us as of the date of this Quarterly Report 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 and expand clinical trials of our product candidates and our expectations for the timing, quantity and quality of information to be reported from our clinical trials of SY-1425 and SY-1365;
- our plans to progress SY-5609 through investigational new drug-enabling studies and initiate clinical development;
- 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, seek approval for, manufacture and commercialize our current and future product candidates;
- our plans to develop and seek approval of companion diagnostic tests for use in identifying patients who may benefit from treatment with our products and product candidates;
- our expectations regarding the potential benefits of our gene control platform and our approach;
- our ability to enter into, and the terms and timing of, any collaborations, license agreements, or other arrangements;
- whether our collaboration with Incyte Corporation, or Incyte, will yield any validated targets, whether Incyte will exercise any of its options to exclusively license intellectual property directed to such targets, and whether and when any of the target validation fees, option exercise fees, milestone payments or royalties under the Incyte collaboration will ever be paid;
- the potential benefits of any future collaboration;
- developments relating to our competitors and our industry;
- the impact of government laws and regulations;
- the timing of and our ability to file new drug applications and 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 our current cash, cash equivalents and marketable securities and the period of time in which such capital will be sufficient to fund our planned operations; and
- our estimates regarding expenses, future revenue, capital requirements and need for additional financing.

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 Quarterly Report. We have included important factors in the cautionary statements included in this Quarterly Report, 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 Quarterly Report 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.

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements (unaudited)

SYROS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)
(unaudited)

	March 31, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 22,129	$ 49,886
Marketable securities	53,737	49,793
Prepaid expenses and other current assets	1,259	1,417
Restricted cash, current portion	638	638
Total current assets	77,763	101,734
Property and equipment, net	3,897	3,861
Other long-term assets	1,103	881
Restricted cash, net of current portion	3,376	290
Right-of-use – Operating lease	1,308	—
Right-of-use – Financing lease	981	—
Total assets	$ 88,428	$ 106,766
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 2,632	$ 3,309
Accrued expenses	9,086	13,893
Deferred revenue, current portion	1,848	1,926
Deferred rent, current portion	—	392
Financing and capital lease obligations, current portion	221	9
Operating lease obligation, current portion	1,192	—
Total current liabilities	14,979	19,529
Deferred rent, net of current portion	—	353
Deferred revenue, net of current portion	7,900	8,276
Financing and capital lease obligations, net of current portion	766	22
Operating lease obligation, net of current portion	765	—
Commitments and contingencies (See Note 8)		
Stockholders' equity:		
Preferred stock, $0.001 par value; 10,000,000 shares authorized at March 31, 2019 and December 31, 2018; 0 shares issued and outstanding at March 31, 2019 and December 31, 2018	—	—
Common stock, $0.001 par value; 200,000,000 shares authorized at March 31, 2019 and December 31, 2018; 33,766,941 and 33,765,864 shares issued and outstanding at March 31, 2019 and December 31, 2018, respectively	34	34
Additional paid-in capital	297,982	296,100
Accumulated other comprehensive gain (loss)	8	(3)
Accumulated deficit	(234,006)	(217,545)
Total stockholders' equity	64,018	78,586
Total liabilities and stockholders' equity	$ 88,428	$ 106,766

See accompanying notes to unaudited condensed consolidated financial statements.

SYROS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except share and per share data)
(unaudited)

	Three Months Ended March 31,	
	2019	**2018**
Revenue	$ 454	$ 370
Operating expenses:		
Research and development	12,562	11,116
General and administrative	4,865	4,075
Total operating expenses	17,427	15,191
Loss from operations	(16,973)	(14,821)
Other income, net	512	358
Net loss	$ (16,461)	$ (14,463)
Net loss applicable to common stockholders		
Net loss per share applicable to common stockholders - basic and diluted	$ (0.49)	$ (0.48)
Weighted-average number of common shares used in net loss per share applicable to common stockholders - basic and diluted	33,766,333	30,335,164

See accompanying notes to unaudited condensed consolidated financial statements.

SYROS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)
(unaudited)

	Three Months Ended March 31,	
	2019	**2018**
Net loss	$ (16,461)	$ (14,463)
Other comprehensive gain:		
Unrealized holding gains on marketable securities	11	8
Comprehensive loss	$ (16,450)	$ (14,455)

See accompanying notes to unaudited condensed consolidated financial statements.

SYROS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF SHAREHOLDER'S EQUITY
(in thousands, except share data)
(unaudited)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Gain (Loss)	Accumulated Deficit	Stockholders' Equity
	Number of Shares	Par Value				
Balance at December 31, 2017	26,423,375	$ 26	$ 220,606	$ (42)	$ (155,266)	$ 65,324
Exercise of stock options	58,773	—	242	—	—	242
Issuance of common stock pursuant to Stock Purchase Agreement, net of issuance costs of $100	793,021	1	7,647	—	—	7,648
Issuance of common stock in underwritten public offer, net of issuance costs of $3.3 million	4,816,753	5	42,659	—	—	42,664
Issuance of common stock through private placement	144,505	—	1,380	—	—	1,380
Stock-based compensation expense	—	—	1,696	—	—	1,696
Other comprehensive loss	—	—	—	8	—	8
Net loss	—	—	—	—	(14,463)	(14,463)
Balance at March 31, 2018	32,236,427	$ 32	$ 274,230	$ (34)	$ (169,729)	$ 104,499
Balance at December 31, 2018	33,765,864	$ 34	$ 296,100	$ (3)	$ (217,545)	$ 78,586
Exercise of stock options	1,077	—	3	—	—	3
Stock-based compensation expense	—	—	1,879	—	—	1,879
Other comprehensive gain	—	—	—	11	—	11
Net loss	—	—	—	—	(16,461)	(16,461)
Balance at March 31, 2019	$ 33,766,941	$ 34	$ 297,982	$ 8	$ (234,006)	$ 64,018

SYROS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Three Months Ended March 31,	
	2019	**2018**
Operating activities		
Net loss	$ (16,461)	$ (14,463)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	517	388
Amortization of financing right-of-use asset	15	—
Loss on disposal of fixed assets	1	—
Stock-based compensation expense	1,879	1,696
Net amortization of premiums and discounts on marketable securities	(296)	(69)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	158	(519)
Other long-term assets	(14)	3
Accounts payable	(610)	(562)
Accrued expenses	(4,966)	(669)
Deferred revenue	(454)	11,882
Operating lease asset and liabilities	(96)	—
Deferred rent and lease incentive	—	(87)
Net cash used in operating activities	(20,327)	(2,400)
Investing activities		
Purchases of property and equipment	(591)	(152)
Purchases of marketable securities	(33,638)	(2,486)
Maturities of marketable securities	30,000	15,000
Net cash (used in) provided by investing activities	(4,229)	12,362
Financing activities		
Payments on financing and capital lease obligations	(40)	(44)
Proceeds from issuance of common stock through employee benefit plans	3	242
Proceeds from issuance of common stock in public offerings and private placements, net of issuance costs	—	51,969
Payment of offering costs	(78)	—
Net cash (used in) provided by financing activities	(115)	52,167
(Decrease) increase in cash, cash equivalents and restricted cash	(24,671)	62,129
Cash, cash equivalents and restricted cash (See Note 6)		
Beginning of period	50,814	32,688
End of period	$ 26,143	$ 94,817
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 8	$ 1
Non-cash investing and financing activities		
Property and equipment received but unpaid as of period end	$ 230	$ 6
Assets acquired under financing lease	$ 996	$ —
Offering costs incurred but unpaid as of period end	$ 129	$ 67

See accompanying notes to unaudited condensed consolidated financial statements.

1. Nature of Business

Syros Pharmaceuticals, Inc. (the "Company"), a Delaware corporation formed in November 2011, is a biopharmaceutical company pioneering an understanding of the non-coding regulatory region of the genome to advance a new wave of medicines that control the expression of genes.

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 and discovery activities. If the Company is unable to raise capital when needed or on favorable terms, it would be forced to delay, reduce, eliminate or out-license certain of its research and development programs or future commercialization rights to its product candidates.

The Company has incurred significant annual net operating losses in every year since its inception. It expects to continue to incur significant and increasing net operating losses for at least the next several years. The Company's net losses were $62.3 million, $54.0 million and $47.7 million for the years ended December 31, 2018, 2017 and 2016, respectively. As of March 31, 2019, the Company had an accumulated deficit of $234.0 million. The Company has not generated any revenues from product sales, has not completed the development of any product candidate and may never have a product candidate approved for commercialization. The Company has financed its operations to date primarily through the sale of equity securities. The Company has devoted substantially all of its financial resources and efforts to research and development and general and administrative expense to support such research and development. The Company's 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 the Company's stockholders' equity and working capital. In April 2019, the Company raised $70.0 million in gross proceeds from issuance of equity securities in two concurrent public offerings (See Note 10). The Company believes that its cash, cash equivalents and marketable securities of $75.9 million as of March 31, 2019, and the $70.0 million of gross proceeds raised in the April 2019 public offerings, will be sufficient to allow the Company to fund its current operating plan for a period of at least 12 months past the issuance date of these unaudited interim condensed consolidated financial statements.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company's unaudited interim condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). Any reference in these notes to applicable guidance is meant to refer to the authoritative U.S. GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") of the Financial Accounting Standards Board ("FASB"). Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted from this report, as is permitted by such rules and regulations. Accordingly, these financial statements should be read in conjunction with the financial statements as of and for the year ended December 31, 2018 and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018 filed with the Securities and Exchange Commission ("SEC") on March 7, 2019.

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited financial statements except as noted below with respect to the adoption of ASC 842. In the opinion of the Company's management, the accompanying unaudited interim condensed consolidated financial statements contain all adjustments that are necessary to present fairly the Company's financial position as of March 31, 2019, the results of its operations for the three months ended March 31, 2019 and 2018, statements of shareholder's equity for three months ended March 31, 2019 and 2018, and statements of cash flows for the three months ended March 31, 2019 and 2018. Such adjustments are of a normal and recurring nature. The results for the three months ended March 31, 2019 are not necessarily indicative of the results for the year ending December 31, 2019, or for any future period.

Principles of Consolidation

The accompanying condensed consolidated financial statements include the accounts of Syros Pharmaceuticals, Inc. and its wholly owned subsidiaries, Syros Securities Corporation, a Massachusetts corporation formed by the Company in December 2014 to exclusively engage in buying, selling and holding securities on its own behalf, and Syros Pharmaceuticals (Ireland) Limited, an Irish limited liability company formed by the Company in January 2019. All intercompany transactions and balances have been eliminated in consolidation.

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 estimates, which include, but are not limited to, estimates related to revenue recognition, stock-based compensation expense, accrued expenses and income taxes. Actual results may differ from those estimates or assumptions.

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.

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 generally consist of money market funds that invest in U.S. Treasury obligations, as well as overnight repurchase agreements, are stated at fair value. The Company maintains its bank accounts at one major financial institution.

Fair Value of Financial Instruments

ASC 820, *Fair Value Measurement* ("ASC 820"), established a fair value hierarchy for instruments measured at fair value that distinguishes 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 condensed consolidated balance sheets for cash and cash equivalents, prepaid expenses, other current assets, accounts payable, accrued expenses and deferred revenue approximate their fair values, due to their short-term nature.

Revenue Recognition

To date the Company's only revenue has consisted of collaboration and license revenue. The Company has not generated any revenue from product sales and does not expect to generate any revenue from product sales for the foreseeable future. For the three months ended March 31, 2019, the Company recognized approximately $0.5 million of revenue and for the three months ended March 31, 2018, the Company recognized approximately $0.4 million of revenue, in each case attributable to its target discovery collaboration with Incyte Corporation ("Incyte").

The Company recognizes revenue in accordance with ASC 606, *Revenue from Contracts with Customers* ("ASC 606"). ASC 606 applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps:

(i) identify the contract(s) with a customer;

(ii) identify the performance obligations in the contract;

(iii) determine the transaction price;

(iv) allocate the transaction price to the performance obligations in the contract; and

(v) recognize revenue when (or as) the entity satisfies a performance obligation.

The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of ASC 606, the Company assesses the goods or services promised within each contract and determines those that are performance obligations, and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

From time to time, the Company may enter into agreements that are within the scope of ASC 606. The terms of these arrangements typically include payment to the Company of one or more of the following: non-refundable, up-front license fees; development, regulatory and commercial milestone payments; and royalties on net sales of licensed products. Each of these payments results in license and collaboration revenues, except for revenues from royalties on net sales of licensed products, which will be classified as royalty revenues.

The Company analyzes its collaboration arrangements to assess whether they are within the scope of ASC 808, *Collaborative Arrangements* ("ASC 808"), to determine whether such arrangements involve joint operating activities performed by parties that are both active participants in the activities and exposed to significant risks and rewards dependent on the commercial success of such activities. This assessment is performed throughout the life of the arrangement based on changes in the responsibilities of all parties in the arrangement. For collaboration arrangements within the scope of ASC 808 that contain multiple elements, the Company first determines which elements of the collaboration are deemed to be within the scope of ASC 808 and those that are more reflective of a vendor-customer relationship and therefore within the scope of ASC 606. For elements of collaboration arrangements that are accounted for pursuant to ASC 808, an appropriate recognition method is determined and applied consistently, generally by analogy to ASC 606. For those elements of the arrangement that are accounted for pursuant to ASC 606, the Company applies the five-step model described above.

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 product candidates. Research and development costs include salaries and benefits, materials and supplies, external research, preclinical and clinical development expenses, stock-based compensation expense and facilities costs. Facilities costs primarily include the allocation of rent, utilities, depreciation and amortization.

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 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 acquired research and development in the period in which they are incurred.

Stock-Based Compensation Expense

The Company accounts for its stock-based compensation awards in accordance with ASC 718,*Compensation—Stock Compensation* ("ASC 718"). ASC 718 requires all stock-based payments to employees and directors, including grants of restricted stock units and stock option awards, to be recognized as expense in the condensed consolidated statements of operations based on their grant date fair values. Effective January 1, 2019, grants of restricted stock units and stock option awards to other service providers, referred to as non-employees, are measured based on the grant-date fair value of the award and expensed in the Company's condensed consolidated statement of operations over the vesting period. Through December 31, 2018, grants of restricted stock unit and stock option awards to non-employees were 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. Prior to June 30, 2016, the Company was a private company and, therefore, lacks Company-specific historical and implied volatility information. As a result, the Company estimates its expected stock volatility based on the historical volatility of a publicly traded set of peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded stock price. The expected term of the Company's stock options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. Through December 31, 2018, the expected term of stock options granted to non-employees is equal to the contractual term of the option award. Effective January 1, 2019, the expected term of stock options to non-employees can be determined using either the contractual term of the option award or the "simplified" method. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future. The Company uses the value of its common stock to determine the fair value of restricted stock awards.

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. The Company accounts for forfeitures as they occur instead of estimating forfeitures at the time of grant. 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 non-employees, effective January 1, 2019, comparable with employees, the related expense is recognized on a straight-line basis and is no longer subject to remeasurement at the end of each reporting period. Through December 31, 2018, stock-based compensation expense for awards to non-employees was recognized over the vesting period during which services were rendered by such non-employees and at the end of each financial reporting period prior to vesting, the fair value of these awards was 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.

Net Loss per Share

Basic net earnings per share applicable to common stockholders is calculated by dividing net earnings applicable to common stockholders by the weighted average shares outstanding during the period, without consideration for common stock equivalents. Diluted net earnings 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, warrants 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 March 31,	
	2019	**2018**
Stock options	4,616,395	3,753,025
Unvested restricted stock	1,078,824	—
Total	5,695,219	3,753,025

Income Taxes

The Company accounts for income taxes in accordance with ASC Topic 740, *Income Taxes.* 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.

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.

Recent Accounting Pronouncements

In April 2019, the FASB issued ASU No. 2019-04,*Codification Improvements to Topic 326 Financial Instruments – Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825* ("ASU 2019-04"). ASU 2019-04 clarifies the accounting treatment for the measurement of credit losses under ASC 236 and provides further clarification on previously issued updates including ASU 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities* and ASU 2016-01, *Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. ASU 2019-04 is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted. The Company is currently in the process of evaluating the new standard but does not anticipate ASU 2014-09 will have a material impact on its condensed consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13,*Fair Value Measurements (Topic 820)* ("ASU 2018-13"), which provides for changes to the disclosure requirements for recurring and nonrecurring fair value measurements under Topic 820. ASU 2018-13 is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2019. Provisions of ASU 2018-13 including changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty are required to be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. All other amendments in ASU 2018-13 should be applied retrospectively to all periods presented upon their effective date. Early adoption is permitted upon issuance of ASU 2018-13. The Company is currently in the process of evaluating the new standard but does not anticipate ASU 2018-13 will have a material impact on its condensed consolidated financial statements and related disclosures.

Recently Adopted Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02,*Leases (Topic 842)* ("ASC 842"), which applies to all leases and requires lessees to record most leases on the balance sheet but recognize expense in a manner similar to the previous standard. ASC 842 is effective for fiscal years beginning after December 15, 2018 and interim periods within those years and, as such, is effective starting January 1, 2019 for the Company. Entities are required to use a modified retrospective approach of adoption for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Full retrospective application is prohibited. The modified retrospective approach includes a number of optional practical expedients primarily focused on leases that commenced before the effective date of ASC 842, including continuing to account for leases that commence before the effective date in accordance with previous guidance, unless the lease is modified. In July 2018, the FASB issued ASU No. 2018-11, *Leases* : *Targeted Improvements*, which clarifies ASC 842 and provides companies with an optional transition method. The optional transition method allows for companies to adopt ASC 842 as of the January 1, 2019 adoption date and record a cumulative catch-up to related earnings during the period of adoption. The Company adopted ASC 842 on January 1, 2019 and elected to use the practical expedients and therefore the Company is only presenting right-of-use assets and lease liabilities as of the adoption date and additionally elected to not reassess the classification of leases executed prior to the January 1, 2019 adoption date. The primary effect of the new standard, as of the adoption date, is the recording of a right-of-use asset and lease liability for the current operating lease for its office and laboratory facility. As of the January 1, 2019 adoption date, the Company recorded (i) a lease liability of $2.2 million, of which $1.1 million was classified as short-term and $1.1 million as long-term, which represents the present value of remaining lease payments, as of the adoption date, discounted using an incremental borrowing rate of 10% and (ii) a right-of-use asset of approximately $1.5 million classified as long-term, which represents a corresponding amount to the lease liability of $2.2 million adjusted for deferred rent of approximately $0.7 million. The Company also had two immaterial capital leases that, as of the adoption date, are classified as financing leases, with the underlying assets recorded as part of property and equipment, net, in the Company's condensed consolidated balance sheets.

In June 2018, the FASB issued ASU No. 2018-07,*Compensation -Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting* ("ASU 2018-07"). ASU 2018-07 aims to simplify the accounting for share-based payments to nonemployees by aligning it to the accounting for share-based payments to employees including determining the fair value of the award on the date of grant and recognizing the stock-based compensation expense as of the respective vesting date. The new standard also requires companies to elect to either measure the awards to nonemployees over an estimated expected term or contractual term as well as elect to estimate forfeitures or account for forfeitures as incurred. ASU 2018-07 is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2018. Early adoption is permitted. ASU 2018-07 is to be adopted using a modified retrospective approach with a cumulative catch-up to retained earnings recorded for equity-classified awards for

which a measurement date has not been established as of the date of adoption. The Company adopted ASU 2018-07 effective January 1, 2019, and the adoption of the new standard did not have a material impact on the Company's condensed consolidated financial statements and related disclosures.

3. Agreements with Incyte Corporation

In January 2018, the Company and Incyte entered into a Target Discovery, Research Collaboration and Option Agreement (the "Collaboration Agreement"). Under the Collaboration Agreement, the Company is using its proprietary gene control platform to identify novel therapeutic targets with a focus on myeloproliferative neoplasms, and Incyte has received options to obtain exclusive worldwide rights to intellectual property resulting from the collaboration for the development and commercialization of therapeutic products directed to up to seven validated targets. Incyte will have exclusive worldwide rights to develop and commercialize any therapies under the collaboration that modulate those validated targets.

In January 2018, the Company also entered into a Stock Purchase Agreement with Incyte (the "Stock Purchase Agreement") whereby, for an aggregate purchase price of $10.0 million, Incyte purchased 793,021 shares of the Company's common stock at $12.61 per share. Under the terms of the Stock Purchase Agreement, the shares were purchased at a 30% premium over the volume-weighted sale price of the shares of the Company's common stock over the fifteen (15) trading day period immediately preceding the date of the Stock Purchase Agreement.

Collaboration Agreement

Under the terms of the Collaboration Agreement, Incyte paid the Company $10.0 million in up-front consideration, consisting of $2.5 million in cash and $7.5 million in pre-paid research funding (the "Prepaid Research Amount"). The Company's activities under the Collaboration Agreement are subject to a joint research plan and, subject to certain exceptions, Incyte is responsible for funding the Company's activities under the research plan, including amounts in excess of the Prepaid Research Amount. Under the Collaboration Agreement, the Company is required to use commercially reasonable efforts to conduct the research services over a period commencing on the effective date of the Collaboration Agreement and ending upon the completion of specified target validation activities (the "Research Term").

The Company is eligible to receive target selection milestone payments, which extend the period of time in which the options are exercisable, and option exercise fees of up to an aggregate of $54.0 million if Incyte selects the maximum number of targets for validation and exercises its options to obtain exclusive rights to collaboration intellectual property for therapeutic products directed to all seven validated targets. Should any therapeutic product be developed by Incyte against a target as to which Incyte has exercised its option to obtain exclusive rights to collaboration intellectual property, the Company will be eligible to receive milestone payments and, if approved and commercialized, royalty payments from Incyte. For each of the seven validated targets, the Company would become eligible to receive from Incyte a total of up to $50.0 million in development and regulatory milestone payments. If products arising from the collaboration are approved, the Company would become eligible to receive from Incyte, for each validated target, a total of up to $65.0 million in commercial milestone payments. Upon approval and commercialization of any therapeutic product resulting from the collaboration, the Company would become eligible to receive low single-digit royalties on net sales of such product.

The term of the Collaboration Agreement began on January 8, 2018 and, unless terminated by a party early, will continue until all royalty obligations for products arising from the collaboration expire. The Collaboration Agreement may be terminated by Incyte for convenience on sixty (60) days' prior written notice to the Company, or by the Company on thirty (30) days' written notice in the event Incyte or one of its affiliates or sublicensees challenges the validity or enforceability of certain patent rights controlled by the Company. The Collaboration Agreement may also be terminated by either of the parties on thirty (30) days' prior written notice in the event of an uncured material breach of the Collaboration Agreement by the other party or immediately in the case of certain bankruptcy events. If the Collaboration Agreement is terminated by Incyte for material breach, then the Company shall refund any unexpended Prepaid Research Amount. Incyte's right to terminate for convenience and each party's right to terminate for uncured material breach may be exercised either with respect to the Collaboration Agreement in its entirety or, as applicable, in relation to the relevant validated target and associated therapeutic products.

Collaboration Revenue

The Company analyzed the Collaboration Agreement to assess whether it is within the scope of ASC 808. As it was determined that the arrangement did not involve joint operating activities performed by parties that are both active participants in the activities and exposed to significant risks and rewards dependent on the commercial success of such activities, the Company concluded that the Collaboration Agreement was not within the scope of ASC 808. The Company assessed the Collaboration Agreement and concluded that it represents a contract with a customer within the scope of ASC 606.

The Company has identified a single performance obligation which includes (i) a research license that Incyte retains as long as there remains an unexercised option (the "Research License") and (ii) research and development services provided during the Research Term (the "Research Services"). The Collaboration Agreement includes options to (x) obtain additional time to exercise the license options for certain targets designated as definitive validation targets and (y) obtain license rights to each validated target, both of which were not considered by the Company's management to be material rights, and therefore not performance obligations, at inception. The Company's management believes the options do not provide a material right to the customer that it would receive without entering into the contract principally because the option fees are at least equal to the standalone selling price for the underlying goods. The Research License is not considered distinct as Incyte cannot benefit from the Research License without the Research Services that are separately identifiable in the contract. The Research License only allows Incyte to evaluate the targets developed as part of the conduct of the Research Services under the research plan or conduct work allocated to them during the Research Term. Incyte cannot extract any benefit from the Research License without the Research Services, including the provision of data package information, performed by the Company. As such, these two promises are deemed inputs to a combined output (the delivery of data package allowing Incyte to make an option exercise decision) and are bundled into a single performance obligation (the "Research License and Research Service Performance Obligation").

At inception, the total transaction price was determined to be $12.3 million, which consisted of a $2.5 million upfront non-refundable and non-creditable payment, the $7.5 million Prepaid Research Amount and $2.3 million in premium paid on the equity investment made pursuant the Stock Purchase Agreement. The Collaboration Agreement also provides for development and regulatory milestones that are only payable subsequent to the exercise of an option and were therefore excluded from transaction price at inception. The Company intends to re-evaluate the transaction price at the end of each reporting period and as uncertain events are resolved or other changes in circumstances occur. There were no changes to the transaction price during the three months ended March 31, 2019.

ASC 606 requires an entity to recognize revenue only when it satisfies a performance obligation by transferring a promised good or service to a customer. A good or service is considered to be transferred when the customer obtains control. As the Research License and Research Services represent one performance obligation, the Company has determined that it will satisfy its performance obligation over a period of time as services are performed and Incyte receives the benefit of the services, as the overall purpose of the arrangement is for the Company to perform the services.

The Company is recognizing revenue related to the Research License and Research Services Performance Obligation as the underlying services are performed using an input measure over the period the Company expects to complete the performance obligation. The Company measures proportional performance based on an input method using actual costs incurred relative to the total estimated costs of the Research Services.

During the three months ended March 31, 2019 and 2018, the Company recognized $0.5 million and $0.4 million of revenue, respectively, that was previously deferred under the Collaboration Agreement. As of March 31, 2019, the Company has deferred revenue outstanding under the Collaboration Agreement of approximately $9.7 million, of which $1.8 million and $7.9 million were classified as current and long-term, respectively, on the Company's condensed consolidated balance sheets.

The following table presents the changes in deferred revenue for the three months ended March 31, 2019 (in thousands):

Three months ended March 31, 2019	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Deferred revenue	$ 10,202	$ —	$ 454	$ 9,748

4. Cash, Cash Equivalents and Marketable Securities

Cash equivalents are highly liquid investments that are readily convertible into cash with original maturities of three months or less when purchased. Marketable securities consist of securities with original maturities greater than 90 days when purchased. The Company classifies these marketable securities as available-for-sale and records them at fair value in the accompanying condensed consolidated balance sheets. Unrealized gains or losses are included in accumulated other comprehensive gain (loss). Premiums or discounts from par value are amortized to other income over the life of the underlying security.

Cash, cash equivalents and marketable securities consisted of the following at March 31, 2019 and December 31, 2018 (in thousands):

March 31, 2019	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash and Cash equivalents:				
Cash and money market funds	$ 22,129	$ —	$ —	$ 22,129
Marketable Securities:				
U.S. treasury obligations	53,729	8	—	53,737
Total:	$ 75,858	$ 8	$ —	$ 75,866

December 31, 2018	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash and Cash equivalents:				
Cash and money market funds	$ 34,886	$ —	$ —	$ 34,886
Overnight repurchase agreements	15,000	—	—	15,000
Marketable Securities:				
U.S. treasury obligations	49,796	—	(3)	49,793
Total:	$ 99,682	$ —	$ (3)	$ 99,679

Although available to be sold to meet operating needs or otherwise, securities are generally held through maturity. The cost of securities sold is determined based on the specific identification method for purposes of recording realized gains and losses. During the three months ended March 31, 2019, there were no realized gains or losses on sales of investments, and no investments were adjusted for other-than-temporary declines in fair value.

As of March 31, 2019 and December 31, 2018, all marketable securities had maturities of less than twelve months when purchased.

At March 31, 2019, the Company did not hold any securities that were in an unrealized loss position. As a result, the Company determined it did not hold any investments with an other-than-temporary impairment as of March 31, 2019.

5. Fair Value Measurements

Assets measured at fair value on a recurring basis as of March 31, 2019 and December 31, 2018 were as follows (in thousands):

Description	March 31, 2019	Active Markets (Level 1)	Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Cash and cash equivalents:				
Cash and money market funds	$ 22,129	$ 22,129	$ —	$ —
Marketable securities:				
U.S. treasury obligations	53,737	53,737	—	—
	$ 75,866	$ 75,866	$ —	$ —

Description	December 31, 2018	Active Markets (Level 1)	Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Cash and cash equivalents:				
Cash and money market funds	$ 34,886	$ 34,886	$ —	$ —
Overnight repurchase agreements	15,000	—	15,000	—
Marketable securities:				
U.S. treasury obligations	49,793	49,793	—	—
	$ 99,679	$ 84,679	$ 15,000	$ —

6. Restricted Cash

At March 31, 2019, the Company had $4.0 million in restricted cash, of which $0.6 million was classified as short-term and $3.4 million as long-term.

In connection with the execution of the 2019 Lease (See Note 8), the Company was required to provide the landlord with a letter of credit in the amount of $3.1 million that will expire 95 days after expiration or early termination of the 2019 Lease. The Company will have the right, under certain conditions, to reduce the amount of the letter of credit to $2.1 million in October 2023. The $3.1 million letter of credit is classified as long-term restricted cash on the Company's condensed consolidated balance sheet as of March 31, 2019.

At December 31, 2018, the Company had $0.9 million in restricted cash, of which $0.6 million was classified as short-term and $0.3 million as long-term.

In August 2018, the Company entered into a manufacturing agreement with a third party for manufacturing services related to one of its product candidates. In accordance with the terms of the manufacturing agreement, the Company was required to provide a letter of credit in the amount of $0.6 million. The letter of credit will expire on September 30, 2019 and is classified as short-term on the Company's condensed consolidated balance sheets as of March 31, 2019.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the condensed consolidated balance sheets that sum to the total of the amounts shown in the condensed consolidated statement of cash flows as of March 31, 2019, December 31, 2018, March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2019	December 31, 2018	March 31, 2018	December 31, 2017
Cash and cash equivalents	$ 22,129	$ 49,886	$ 94,334	$ 32,205
Restricted cash, current portion	638	638	193	193
Restricted cash, net of current portion	3,376	290	290	290
Total cash, cash equivalents and restricted cash	$ 26,143	$ 50,814	$ 94,817	$ 32,688

7. Accrued Expenses

Accrued expenses consisted of the following as of March 31, 2019 and December 31, 2018 (in thousands):

	March 31, 2019	December 31, 2018
External research and preclinical development	$ 6,782	$ 10,119
Employee compensation and benefits	1,331	2,985
Professional fees	787	618
Facilities and other	186	171
	$ 9,086	$ 13,893

8. Commitments and Contingencies

Operating Leases

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. The Company has an option to extend the 2015 Lease for five additional years. The 2015 Lease has escalating rent payments and the Company records rent expense on a straight-line basis over its term, including any rent-free periods. The 2015 Lease includes certain lease incentives in the form of tenant allowances. Prior to the adoption of ASC 842, the Company capitalized these 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 are being amortized over the expected lease term. Effective January 1, 2019, upon the adoption of ASC 842, the Company recorded an operating lease right-of use asset and operating lease liability of $1.5 million and $2.2 million, respectively.

On January 8, 2019, the Company entered into a lease (the "2019 Lease") with respect to approximately 52,859 square feet of space in Cambridge, Massachusetts for a lease term commencing in January 2019 and ending in February 2030. The Company has the option to extend the lease term for one additional ten (10) year period.

In connection with the execution of the 2019 Lease, the Company was required to provide the landlord with a letter of credit in the amount of $3.1 million (See Note 6).

The Company determined that the 2019 Lease's commencement date, for purposes of applying ASC 842 accounting guidance, did not occur as of March 31, 2019, and therefore no balances related to the 2019 Lease, pursuant to ASC 842, were recorded on the condensed consolidated balance sheet as of March 31, 2019.

Financing Lease

In March 2019, the Company entered into an equipment lease agreement (the "Equipment Lease") that has a 48 month-term. At the end of the term, the Company has the right to return the leased equipment, extend the lease, or buy the equipment at then-current fair market value of the equipment. The Company accounts for the Equipment Lease as a financing lease under ASC 842 and recorded a financing lease right-of-use asset and a corresponding financing lease liability of approximately $1.0 million.

The following is a maturity analysis of the annual undiscounted cash flows reconciled to the carrying value of the operating and financing lease liabilities as of March 31, 2019 (in thousands):

	Operating	Financing/Capital
Nine months ending December 31, 2019	$ 995	$ 228
Year ended December 31, 2020	1,130	304
Year ended December 31, 2021	—	300
Year ended December 31, 2022	—	299
Year ended December 31, 2023	—	51
Total minimum lease payments	$ 2,125	$ 1,182
Less imputed interest	168	195
Total minimum lease payments	$ 1,957	$ 987

The following table outlines the total lease cost for the Company's operating and financing leases as well as weighted average information for these leases as of March 31, 2019 (in thousands):

	March 31, 2019
Lease cost:	
Operating lease cost	$ 54
Financing lease cost:	
Amortization of right-of-use asset	$ 15
Interest on lease liabilities	$ 8
Total financing lease cost	$ 23
Other information:	
Cash paid for amounts included in the measurement of liabilities - operating	$ 330
Weighted-average remaining lease term (in years) - operating lease	1.5
Weighted-average discount rate - operating lease	10.0 %
Operating cash flows from financing lease	$ 48
Weighted-average remaining lease term (in years) - financing lease	4.0
Weighted-average discount rate - financing lease	9.47 %

The Company recorded rent expense of $0.2 million for operating leases for each of the three months ended March 31, 2019 and 2018.

Following the adoption of ASC 842, the Company has a right-of-use asset and lease liability that resulted in recording a new temporary tax difference upon adoption of ASC 842 as the Company is now recognizing right-of-use assets and related lease liabilities for the first time and those assets and liabilities have no corresponding tax basis. The Company does not expect the adoption of ASC 842 to have an impact on the Company's tax expenses and benefits as any deferred tax assets or deferred tax liabilities will be offset with the Company's full valuation allowance.

License Agreements

TMRC Co. Ltd.

In September 2015, the Company entered into an exclusive license agreement with TMRC Co. Ltd. ("TMRC") to develop and commercialize tamibarotene in North America and Europe for the treatment of cancer. This agreement was amended and restated in April 2016.

In exchange for this license, the Company agreed to a non-refundable upfront payment of $1.0 million, for which $0.5 million was paid in September 2015 upon execution of the agreement, and the remaining $0.5 million was paid in May 2016. Under the agreement, the Company is also obligated to make payments upon the successful achievement of clinical and regulatory milestones totaling approximately $13.0 million per indication, defined as a distinct tumor type. In September 2016, the Company paid $1.0 million to TMRC for a development milestone achieved upon the successful dosing of the first patient in its Phase 2 clinical trial of SY-1425. In addition, the Company is obligated to pay TMRC a single-digit percentage royalty, on a country-by-country and product-by-product basis, on net product sales of SY-1425 using know-how and patents licensed from TMRC in North America and Europe for a defined royalty term.

The Company also entered into a supply management agreement with TMRC under which the Company agreed to pay TMRC a fee for each kilogram of SY-1425 active pharmaceutical ingredient that is produced. No payments were made under the supply management agreement during the three months ended March 31, 2019 and 2018.

9. Stock-Based Payments

2016 Stock Incentive Plan

The 2016 Stock Incentive Plan (the "2016 Plan") was adopted by the board of directors on December 15, 2015 and approved by the stockholders on June 17, 2016, and became effective on July 6, 2016 upon the closing of the Company's initial public offering ("IPO"). The 2016 Plan replaced the 2012 Equity Incentive Plan (the "2012 Plan"). Any options or awards outstanding under the 2012 Plan remained outstanding and effective. Under the 2016 Plan, the Company may grant incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock, restricted stock units and other stock-based awards. The number of shares of the Company's common stock reserved for issuance under the 2016 Plan automatically increases on the first day of each calendar year, through the 2025 calendar

year, in an amount equal to the least of (i) 1,600,000 shares of common stock, (ii) 4.0% of the outstanding shares of common stock as of such date, or (iii) such lesser amount as specified by the board of directors. This number is subject to adjustment in the event of a stock split, stock dividend or other change in the Company's capitalization. For the calendar year beginning January 1, 2019, the number of shares reserved for issuance under the 2016 Plan was increased by 1,350,634 shares. At March 31, 2019, 2,223,902 shares remained available for future issuance under the 2016 Plan. Under the 2016 Plan, stock options may not be granted at less than fair value on the date of grant.

2016 Employee Stock Purchase Plan

The 2016 Employee Stock Purchase Plan (the "2016 ESPP") was adopted by the board of directors on December 15, 2015 and approved by the stockholders on June 17, 2016, and became effective on July 6, 2016 upon the closing of the IPO. The number of shares of the Company's common stock reserved for issuance under the 2016 ESPP automatically increases on the first day of each calendar year through the 2025 calendar year, in an amount equal to the least of (i) 1,173,333 shares of the Company's common stock, (ii) 1.0% of the total number of shares of the Company's common stock outstanding on the first day of the applicable year, and (iii) an amount determined by the Company's board of directors. For the calendar year beginning January 1, 2019, the number of shares reserved for issuance under the 2016 ESPP was increased by 337,658 shares. At March 31, 2019, 1,422,414 shares remained available for future issuance under the 2016 ESPP.

Stock Options

Terms of stock option agreements, including vesting requirements, are determined by the board of directors, subject to the provisions of the 2016 Plan. Stock option awards granted by the Company generally vest over four years, with 25% vesting on the first 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 has granted stock options to management for which vesting accelerates upon the achievement of performance-based criteria. Milestone events are specific to the Company's corporate goals, including but not limited to certain clinical development milestones and the Company's ability to execute on its corporate development and 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. The Company did not record any additional stock-based compensation expense related to the achievement of performance-based milestones during the three months ended March 31, 2019. As of March 31, 2019, there was $1.0 million of unrecognized stock-based compensation expense related to the performance-based stock options granted to management, with an expected recognition period of 3.5 years.

The Company has granted options to purchase 75,000 shares of common stock to an advisor that vest upon the achievement of performance-based criteria. As of March 31, 2019, no such performance-based criteria had been achieved. As of March 31, 2019, there was $0.3 million of unrecognized compensation cost related to this option, with a remaining contractual period of 7.5 years.

A summary of the status of stock options as of December 31, 2018 and March 31, 2019 and changes during the three months ended March 31, 2019 is presented below:

	Shares	Weighted Average Exercise Price	Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2018	3,732,643	$ 9.88	7.9	$ 1,694
Granted	953,800	6.78		
Exercised	(1,077)	2.86		
Cancelled	(68,971)	11.71		
Outstanding at March 31, 2019	4,616,395	$ 9.21	8.2	$ 6,335
Exercisable at March 31, 2019	1,726,979	$ 8.82	7.0	$ 3,362

The intrinsic value of stock options exercised during thethree months ended March 31, 2019 and 2018 was $4,800 and $0.7 million, respectively.

As of March 31, 2019, there was $18.6 million of total unrecognized compensation cost related to non-vested stock options granted to employees, excluding those stock option grants subject to the achievement of performance milestones, which is expected to be recognized over a weighted-average period of 3.1 years.

Restricted Stock Units

From time to time, upon approval by the Company's board of directors, certain employees have been granted restricted stock units with time-based vesting criteria. The majority of these restricted stock units vest annually over a four-year term with 25% vesting on each anniversary of the grant date. Those restricted stock units granted to the Company's executive officers during the quarter ended March 31, 2019, vest in full on March 31, 2022. The fair value of restricted stock units is calculated based on the closing sale price of the Company's common stock on the date of grant.

A summary of the status of restricted stock units as of December 31, 2018 and March 31, 2019 and changes during the three months ended March 31, 2019 is presented below:

	Shares	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2018	—	$ —
Granted	1,082,124	6.71
Vested	—	—
Forfeited	(3,300)	6.71
Outstanding at March 31, 2019	1,078,824	$ 6.71

As of March 31, 2019, there was $6.9 million of unrecognized stock-based compensation expense related to outstanding restricted stock units, with an expected recognition period of 3.4 years.

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:

	Three Months Ended March 31,	
	2019	2018
Weighted-average risk-free interest rate	2.54 %	2.41 %
Expected dividend yield	— %	— %
Expected option term (in years)	6.08	6.08
Volatility	91.68 %	90.20 %

The weighted-average grant date fair value per share of options granted in the three months ended March 31, 2019 and 2018 was $5.16 and $7.93, respectively.

The following table summarizes the stock-based compensation expense for stock options and restricted stock units granted to employees and non-employees recorded in the Company's condensed consolidated statements of operations:

	Three Months Ended March 31,	
	2019	2018
Research and development	$ 697	$ 565
General and administrative	1,182	1,131
Total stock-based compensation expense	$ 1,879	$ 1,696

Due to an operating loss, the Company does not record tax benefits associated with stock-based compensation or option exercises. Tax benefits will be recorded when realized.

10. Subsequent Events

On April 9, 2019, the Company completed two concurrent underwritten public offerings of the Company's securities, which together resulted in gross proceeds to the Company of $70.0 million, before underwriting discounts and commissions and estimated offering expenses payable by the Company of approximately $4.6 million. In one of the public offerings, the Company sold 8,667,333 shares of its common stock and accompanying Class A warrants (the "Warrants") to purchase 1,951,844 shares of the Company's common stock, at a combined price to the public of $7.50 per common share and accompanying Warrant. In the other public offering, the Company sold 666 shares of its Series A convertible preferred stock (the "Series A Stock"), and accompanying Warrants to purchase 166,500 shares of the Company's common stock, at a combined public offering price of $7,500 per share and accompanying Warrant. Each Warrant is immediately exercisable at an exercise price of $8.625 per share, subject to adjustment in certain circumstances, and will expire on October 10, 2022.

Each share of Series A Stock is convertible into 1,000 shares of common stock at any time at the holder's option, except that such conversion is prohibited if, as a result of such conversion and subject to certain exceptions, the holder, together with its affiliates and attribution parties, would own more than 9.99% of the Company's issued and outstanding common stock. Shares of Series A Stock generally have no voting rights. Shares of Series A Stock will be entitled to receive dividends equal to (on an as-if-converted-to-common stock basis), and in the same form and manner as, dividends actually paid on shares of common stock.

Item 2. Management's Di scussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and the audited financial information and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2018 that we filed with the Securities and Exchange Commission, or SEC, on March 7, 2019, or the 2018 10-K.

Our actual results and timing of certain events may differ materially from the results discussed, projected, anticipated, or indicated in any forward-looking statements. We caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate, may differ materially from the forward-looking statements contained in this Quarterly Report. In addition, even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this Quarterly Report, they may not be predictive of results or developments in future periods.

The following information and any forward-looking statements should be considered in light of risks identified under the caption "Risk Factors" in the 2018 10-K.

We caution readers not to place undue reliance on any forward-looking statements made by us, which speak only as of the date they are made. We disclaim any obligation, except as specifically required by law and the rules of the SEC, to publicly update or revise any such statements to reflect any change in our expectations or in events, conditions or circumstances on which any such statements may be based, or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements.

Overview

We are a biopharmaceutical company pioneering the understanding of the non-coding regulatory region of the genome to advance a new wave of medicines that control the expression of genes. We have built a proprietary platform that is designed to systematically and efficiently analyze this unexploited region of DNA to identify and drug novel targets linked to genomically defined patient populations. Because gene expression is fundamental to the function of all cells, we believe that our gene control platform has broad potential to create medicines that achieve profound and durable benefit across a range of diseases. We are currently focused on developing treatments for cancer and diseases resulting from mutations of a single gene, also known as monogenic diseases, and building a pipeline of gene control medicines.

Our lead product candidates are:

- SY-1425, a selective retinoic acid receptor alpha, or RARα, agonist that is currently being evaluated in combination with azacitidine, a hypomethylating agent frequently used to treat acute myeloid leukemia, or AML, patients in a Phase 2 clinical trial in genomically defined subsets of patients with AML;
- SY-1365, a selective inhibitor of cyclin-dependent kinase 7, or CDK7, that is currently being evaluated in a Phase 1 clinical trial in patients with advanced solid tumors, including multiple ovarian and breast cancer patient populations as a single agent and in combination with standard-of-care therapies; and
- SY-5609, a novel CDK7 inhibitor that can be administered orally, which is being evaluated in investigational new drug application, or IND, enabling preclinical studies.

Our ongoing Phase 2 clinical trial is assessing the safety and efficacy of SY-1425 in combination with azacitidine in a cohort of approximately 25 newly diagnosed AML patients who are not suitable candidates for standard chemotherapy. All patients enrolled or to be enrolled in this cohort of the trial in support of our primary efficacy analyses have been or will be prospectively selected using our proprietary *RARA* or *IRF8* biomarkers. In addition, to support the development of a commercial companion diagnostic test for SY-1425, we are evaluating SY-1425 in combination with azacitidine in a cohort of approximately 25 newly diagnosed AML patients who are not suitable candidates for standard chemotherapy and who are biomarker-negative.

At the American Society of Hematology Annual Meeting held in December 2018, or ASH 2018, we reported data from these cohorts of the Phase 2 clinical trial as of an October 29, 2018 data cut-off, and we continue to enroll and follow patients in the trial. As of the data cut-off, 11 biomarker-positive and eight biomarker-negative patients had been enrolled in the trial. Of the biomarker-positive patients, ten were evaluable for safety and eight were also evaluable for clinical responses. Of the biomarker-negative patients, seven were evaluable for safety and six were evaluable for clinical responses. We reported at ASH 2018 that SY-1425 in combination with azacitidine had been generally well-tolerated, with no evidence of increased toxicities, and that adverse events had been consistent with what has previously been seen with SY-1425 and azacitidine as single agents in AML. We also reported that the aggregate rate of complete response and complete response with incomplete blood count recovery, as defined by Revised International Working Group, or IWG, criteria, as of the data cut-off was 50% and the overall response rate using IWG criteria was 63%, in each case in response-evaluable patients enrolled in the biomarker-positive cohort of the trial. Most of the initial responses reported were seen at the end of the first treatment cycle. Single-agent azacitidine has shown response rates of 18-29% in newly-diagnosed AML patients who are not suitable candidates for chemotherapy, with initial responses generally occurring after four cycles of treatment in most patients who respond. We also reported at ASH 2018 an overall response rate of 17% as of the data cut-off in response-evaluable patients enrolled in the biomarker-negative cohort. While data from this cohort are less mature (because enrollment in this cohort started later than the biomarker-positive cohort), we believe that the difference in the observed overall response rates as of the cut-off date supports the potential predictive value of the*RARA* and *IRF8* biomarkers for identifying patients most likely to respond to SY-1425. We expect to complete enrollment in the biomarker-positive cohort of the trial in mid-2019 and to report updated clinical data in the second half of 2019. We also plan to expand this trial in the third quarter of 2019 to include an assessment of the safety and efficacy of SY-1425 in combination with azacitidine in approximately 25 biomarker-positive patients with relapsed or refractory AML,and expect to report initial data on these patients in 2020.

We also reported data at ASH 2018 from a pilot cohort of our Phase 2 clinical trial of SY-1425 evaluating the safety and efficacy of SY-1425 in combination with daratumumab, an anti-CD38 antibody approved for the treatment of multiple myeloma, in biomarker-positive patients with relapsed or refractory AML or higher-risk myelodysplastic syndrome, or MDS. Specifically, we reported that SY-1425 in combination with daratumumab was generally well tolerated with no evidence of increased toxicities, and that, while eight of nine evaluable patients had increased CD38 expression in myeloid blast cells, this expression increased to levels exceeding those of a multiple myeloma cell line in only two of those patients one of whom had a response. In January 2019, we reported that we made a portfolio prioritization decision not to pursue further development of SY-1425 in combination with daratumumab beyond completion of this pilot cohort, which is closed to further enrollment.

In September 2018, we opened the expansion portion of our Phase 1 clinical trial evaluating the safety and clinical activity of SY-1365 in multiple ovarian cancer populations as a single agent as well as in combination with carboplatin, a chemotherapeutic agent, following completion of the dose-escalation portion of the trial. The high-grade serous ovarian cancer populations being evaluated include a 24-patient cohort evaluating SY-1365 as a single agent in patients who have relapsed after three or more prior therapies and a 24-patient cohort evaluating SY-1365 in combination with carboplatin in patients who relapsed after one or more prior therapies but who may still benefit from additional platinum-based treatment. We are also evaluating SY-1365 as a single agent in a cohort of approximately 12 patients with relapsed ovarian clear cell cancer. We are also evaluating SY-1365 in combination with fulvestrant, a hormonal medicine, in approximately 12 patients with hormone-receptor positive, or HR+, HER2-negative metastatic breast cancer who have previously been treated with a CDK4/6 inhibitor plus an aromatase inhibitor. In addition, we are evaluating the mechanism of action of SY-1365 as a single agent in approximately 30 patients with any solid tumor accessible for biopsy. We plan to report initial clinical data from the expansion portion of our Phase 1 clinical trial in the fourth quarter of 2019. We expect these data to include initial safety assessments from the cohort evaluating SY-1365 in combination with carboplatin, initial safety and efficacy assessments from the cohort evaluating SY-1365 in patients who have relapsed after three or more prior therapies, and initial mechanism of action, safety and efficacy assessments in patients with any solid tumor accessible for biopsy. We expect to report initial data from the other cohorts of the trial, including the recurrent ovarian clear cell cancer cohort, in 2020.

In November 2018, we reported data as of October 15, 2018 from the dose-escalation portion of the Phase 1 clinical trial of SY-1365 at the EORTC-NCI-AACR Molecular Targets and Cancer Therapeutics Symposium, which demonstrated proof-of mechanism at tolerable doses in patients with advanced solid tumors. Specifically, we reported that SY-1365 demonstrated dose-dependent effects on CDK7 occupancy and downstream gene expression changes in blood cells. In addition, we reported that adverse events occurring in the dose-escalation portion of the trial were predominantly low-grade, reversible and generally manageable and that a maximum tolerated dose was not defined. We

also reported that clinical activity per Response Evaluation Criteria in Solid Tumors 1.1 criteria was observed in seven of the 19 patients (37%) who were evaluable for clinical responses, including one patient with relapsed ovarian clear cell cancer in her fourth relapse who had a confirmed partial response after two cycles of treatment at an 80 mg/m^2 twice weekly dose. This patient remained in a partial response at an assessment after six cycles of treatment. Six additional patients had stable disease lasting between 50 and 127 days. Most of these patients received doses of SY-1365 equal to or greater than 32 mg/m^2. Based on these data, we initiated the expansion cohorts of the Phase 1 clinical trial at 53 and 80 mg/m^2, and we are exploring once and twice weekly treatment regimens.

In November 2018, we designated SY-5609 as a development candidate to enter IND-enabling preclinical studies. We expect to complete these studies during 2019 in order to support potential initiation of a Phase 1 clinical trial of SY-5609 in oncology patients in early 2020.

We currently have several other programs in our preclinical and discovery pipeline, including a CDK12/13 inhibitor program, a program directed to inhibitors of a macrophage target in immuno-oncology, and discovery programs related to a gene control target to treat sickle cell disease and in the field of cancer. We have and are continuing to use our gene control platform in collaboration with third parties to identify and validate targets in diseases beyond our current areas of focus. To this end, we entered into a target discovery, research collaboration and option agreement with Incyte Corporation, or Incyte, in January 2018 under which we are using our platform to identify novel therapeutic targets with a focus on myeloproliferative neoplasms.

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 and clinical development 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 the sale of equity securities. From inception through March 31, 2019, we raised an aggregate of $288.7 million from such transactions.

Since inception, we have incurred significant operating losses. Our net losses were $16.5 million and$14.5 million for the three months ended March 31, 2019 and 2018, respectively. As of March 31, 2019, we had an accumulated deficit of $234.0 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:

- continue our planned clinical development activities with respect to SY-1425, SY-1365, and SY-5609;
- develop and seek approval of companion diagnostic tests for use in identifying patients who may benefit from treatment with our products and product candidates;
- initiate and continue research, preclinical and clinical development efforts for our research and 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 and add operational, financial and management information systems, including personnel and systems to support our product development and commercialization efforts and help us comply with our obligations as a public company; and
- add equipment and physical infrastructure to support our research and development programs.

Financial Operations Overview

Revenue

To date, our revenue has consisted of collaboration and license revenue and 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 the three months ended March 31, 2019 and 2018, we recognized approximately $0.5 million and $0.4 million of revenue, respectively, all of which was attributable to our target discovery collaboration with Incyte.

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 the development of product candidates, which include:

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

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.

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

The following table summarizes our external research and development expenses by program, as well as expenses not allocated to programs, for the three months ended March 31, 2019 and 2018 (in thousands):

	Three Months Ended March 31,	
	2019	2018
SY-1425 external costs (1)	$ (220)	$ 2,009
SY-1365 and other CDK7 program external costs (1)	4,381	3,351
Other research and platform program external costs	2,972	1,684
Employee-related expenses, including stock-based compensation	4,504	3,096
Facilities and other expenses	925	976
Total research and development expenses	$ 12,562	$ 11,116

(1) The results in the three months ended March 31, 2019, include a credit of $1.9 million and $1.2 million in total due to a change in estimate of costs incurred over the life of the SY-1425 and SY-1365 clinical trials, respectively, through March 31, 2019.

We expect our research and development expenses will increase for the foreseeable future as weseek 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 activities related to preparation of an IND and minimally efficacious dose studies in animals, where applicable and required, under the requirements of the U.S. Food and Drug Administration, or FDA, or another regulatory authority;
- approval of INDs for our product candidates to commence planned or future clinical trials;
- successful enrollment in, and completion of, clinical trials;
- successful data from our clinical programs that support an acceptable benefit-risk profile of our product candidates in the intended populations;
- successful development, and subsequent clearance or approval, of companion diagnostic tests for use in identifying 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. We also anticipate that we will incur increased accounting, audit, legal, compliance and director and officer insurance costs, as well as investor and public relations expenses, associated with operating as a public company.

Other Income, Net

Other income, net, consists of interest income on our cash and cash equivalents, interest, amortization of premiums and discounts on our investments in marketable securities, net of interest expense related to our 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.

We believe that our most critical accounting policies are those relating to revenue recognition, accrued research and development expenses and stock-based compensation, and there have been no significant changes to our accounting policies discussed in our Annual Report on Form 10-K for the year ended December 31, 2018 that we filed with the SEC on March 7, 2019, other than the adoption of ASC 842 discussed in the notes to the unaudited condensed consolidated financial statements as of March 31, 2019.

Results of Operations

Comparison of three months ended March 31, 2019 and 2018

The following table summarizes our results of operations for the three months ended March 31, 2019 and 2018, together with the changes in those items in dollars (in thousands):

	Three Months Ended March 31,			
	2019	2018	Dollar Change	% Change
Statements of Operations Data:				
Revenue	$ 454	$ 370	$ 84	23 %
Operating expenses:				
Research and development	12,562	11,116	1,446	13 %
General and administrative	4,865	4,075	790	19 %
Total operating expenses	17,427	15,191	2,236	15 %
Other income, net	512	358	154	43 %
Net loss	$ (16,461)	$ (14,463)	$ 1,998	14 %

Revenue

For the three months ended March 31, 2019 and 2018, we recognized approximately $0.5 million and $0.4 million of revenue, respectively, all of which was attributable to our target discovery collaboration agreement with Incyte.

Research and Development Expense

Research and development expense increased by approximately $1.4 million, or 13%, from $11.1 million for the three months ended March 31, 2018 to $12.6 million for the three months ended March 31, 2019. The following table summarizes our research and development expenses for the three months ended March 31, 2019 and 2018, together with the changes to those items in dollars (in thousands):

	Three Months Ended March 31,			
	2019	2018	Dollar Change	% Change
External research and development	$ 6,237	$ 6,675	$ (438)	(7) %
Employee-related expenses, excluding stock-based compensation	3,807	2,530	1,277	50 %
Stock-based compensation	697	566	131	23 %
Consulting, licensing and professional fees	896	369	527	143 %
Facilities and other expenses	925	976	(51)	(5) %
Total research and development expenses	$ 12,562	$ 11,116	$ 1,446	13 %

The change in research and development expense was primarily attributable to activities associated with advancing our lead clinical programs, SY-1425 and SY-1365, and preclinical programs as well as enhancing our internal capabilities, including the following:

- a decrease of approximately $0.4 million, or 7%, for external research and development costs, primarily due to the change in estimate of clinical trial costs for SY-1425 and SY-1365, offset by increases in research and development costs associated with the continued advancement of our existing clinical trials and advancement of our preclinical programs, including the advancement of SY-5609 toward IND enabling studies;
- an increase of approximately $1.3 million, or 50%, for increased personnel related expenses, including increased salary and benefits, primarily due to our increased headcount;
- an increase of approximately $0.1 million, or 23%, for stock-based compensation expense, also primarily due to our increased headcount; and
- an increase of approximately $0.5 million, or 143%, in consulting, licensing and professional fees primarily due to increased professional fees in support of our SY-1425 and SY-1365 clinical trials and our other pre-clinical programs.

General and Administrative Expense

General and administrative expense increased by approximately $0.8 million, or 19%, from $4.1 million for the three months ended March 31, 2018 to $4.9 million for the three months ended March 31, 2019. The change in general and administrative expense was primarily attributable to an increase in employee-related costs, including salary, benefits and stock-based compensation.

Other Income, Net

Other income, net, consists of interest income on our cash and cash equivalents, interest and amortization of premiums and discounts on marketable securities, net of interest expense related to our equipment financing arrangements. The increase in other income from the three months ended March 31, 2018 to the three months ended March 31, 2019 is due to a higher level of investment in marketable securities.

Liquidity and Capital Resources

Sources of Liquidity

We funded our operations from inception through March 31, 2019, primarily through the sale of equity securities and research agreements with third parties, including our collaboration with Incyte.

On July 20, 2017, we filed a universal shelf registration statement on Form S-3 with the SEC to register for sale from time to time up to $225.0 million of common stock, preferred stock, debt securities, warrants and/or units in one or more registered offerings. The shelf registration statement was declared effective on July 31, 2017. Further, in July 2017, we entered into an at-the-market sales agreement with Cowen & Co., or Cowen, pursuant to which we may offer and sell shares of our common stock having an aggregate offering price of up to $50.0 million through Cowen pursuant to such universal shelf registration statement. As of March 31, 2019, we had $32.8 million remaining for issuance under the sales agreement.

As of March 31, 2019, $161.8 million of securities remained available for issuance under the shelf registration agreement.

As of March 31, 2019, we had cash, cash equivalents and marketable securities of approximately $75.9 million.

In April 2019, we raised $70.0 million in gross proceeds from the issuance of equity securities in two concurrent public offerings before deducting underwriting discounts and commissions and estimated offering expenses payable by us of approximately $4.6 million.

Cash Flows

The following table provides information regarding our cash flows for the three months ended March 31, 2019 and 2018 (in thousands):

	Three Months Ended March 31,	
	2019	2018
Net cash (used in) provided by:		
Operating activities	$ (20,327)	$ (2,400)
Investing activities	(4,229)	12,362
Financing activities	(115)	52,167
Net (decrease) increase in cash, cash equivalents and restricted cash	$ (24,671)	$ 62,129

Net Cash Used in Operating Activities

The use of cash in both 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 $20.3 million during the three months ended March 31, 2019 compared to $2.4 million for the three months ended March 31, 2018. The increase in cash used in operating activities in the three months ended March 31, 2019 compared to the three months ended March 31, 2018 was primarily due to proceeds received in January 2018 upon entry into the Incyte target discovery collaboration.

Net Cash (Used in) Provided by Investing Activities

Net cash used in investing activities was $4.2 million during the three months ended March 31, 2019 compared to net cash provided by investing activities of $12.4 million during the three months ended March 31, 2018. The decrease in cash provided by in investing activities was primarily due to the net purchases of marketable securities of $3.6 million during the three months ended March 31, 2019 as compared net maturities of marketable securities of $12.5 million during the three months ended March 31, 2018.

Net Cash (Used in) Provided by Financing Activities

Net cash used in financing activities was $0.1 million during the three months ended March 31, 2019 compared to net cash provided by financing activities of $52.2 million for the three months ended March 31, 2018. Cash used in financing activities for the three months ended March 31, 2019 was primarily due to payments under our financing and capital lease obligations, as well as payments for financing costs in anticipation of the April 2019 financing. Net cash provided by financing activities for the three months ended March 31, 2018 was primarily comprised of net proceeds of $42.8 million from the sale of our common stock in an underwritten public offering in February 2018, $1.4 million in proceeds from a private placement of our common stock in February 2018, $7.7 million in proceeds attributable to the equity investment made by Incyte in connection with entry into our target discovery collaboration and $0.2 million from the exercise of employee stock options, offset by payments under our capital lease obligations.

Funding Requirements

We expect our expenses to increase in connection with our ongoing activities, particularly as we continue clinical trials of SY-1425 and SY-1365, advance additional product candidates such as SY-5609 through preclinical development and into clinical trials, seek to develop companion diagnostic tests for use with our product candidates, initiate new research and preclinical development projects 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, 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 favorable terms, we would be forced to delay, reduce, eliminate, or out-license our research and development programs or future commercialization rights to our product candidates.

We believe that our cash, cash equivalents and marketable securities as of March 31, 2019, together with the net proceeds from the public offerings completed in April 2019, will enable us to fund our planned operating expense and capital expenditure requirements to the end of the first quarter of 2021. Our future capital requirements will depend on many factors, including:

- the scope, progress, timing, costs and results of clinical trials of SY-1425 and SY-1365 and any associated companion diagnostic tests, as well as the scope, progress, timing, costs and results of IND-enabling studies of SY-5609;
- research and preclinical development efforts for any future product candidates that we may develop;
- the number of future product candidates that we pursue and their development requirements;
- our ability to enter into and the terms and timing of any collaborations, licensing agreements or other arrangements;
- whether our target discovery collaboration with Incyte will yield any validated targets, whether Incyte will exercise any of its options to exclusively license intellectual property directed to such targets, and whether and when any of the target validation fees, option exercise fees, milestone payments or royalties under the collaboration agreement with Incyte will ever be paid;
- 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, operate as a public company, 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, the ownership interests of our common stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. 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 and Commitments

During the three months ended March 31, 2019 there were no material changes to our contractual obligations and commitments described under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2018 that we filed with the SEC on March 7, 2019, other than as set forth below.

In January 2019, we entered into a lease agreement with respect to approximately 52,859 square feet of space at 35 CambridgePark Drive, Cambridge, Massachusetts for a lease term commencing in January 2019 and ending in February 2030. We have the option to extend the lease term for one additional ten (10) year period. The following table summarizes our contractual obligations related to lease as of payment due date by period at March 31, 2019 (in thousands):

	Payments due by period				
(in thousands)	**Total**	**Less than 1 year**	**1 to 3 years**	**3 to 5 years**	**More than 5 years**
Operating lease payments	41,312	297	7,334	7,780	25,901
Total	$ 41,312	$ 297	$ 7,334	$ 7,780	$ 25,901

All other contractual obligations related to our operating and financing leases are discussed in Note 8 to our unaudited condensed consolidated financial statements included elsewhere in this report.

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 SEC rules.

Item 3. 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 money market funds and marketable securities and are invested in U.S. treasury or government obligations. However, because of the short-term nature of the duration of our portfolio and the low-risk profile of our investments, we believe an immediate 10% change in market interest rates would not be expected to have a material impact on the fair market value of our investment portfolio or on our financial condition or results of operations.

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 March 31, 2019, we did not have significant 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 three months ended March 31, 2019 and 2018.

Item 4. Controls and Procedures

Management's Evaluation of our Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is (1) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (2) accumulated and communicated to our management, including our principal executive and principal financial officer, as appropriate to allow timely decisions regarding required disclosure. Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives.

Our management, with the participation of our Chief Executive Officer, who serves as our Principal Executive Officer, and our Chief Financial Officer, who serves as our Principal Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2019, the end of the period covered by this Quarterly Report on Form 10-Q. Based upon such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of such date.

Changes in Internal Control over Financial Reporting

Effective January 1, 2019, we adopted the provisions of ASC 842,*Leases.* As part of the adoption of this standard, we reviewed our control procedures and have modified certain of our processes to ensure compliance with the new standard.

Other than the foregoing, during the three months ended March 31, 2019, there were no changes in our internal control over financial reporting that occurred during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1A. Risk Factors.

There have been no material changes in our risk factors from those previously disclosed in Part I, Item 1A, "*Risk Factors*" in our Annual Report on Form 10-K for the year ended December 31, 2018, as filed with the SEC on March 7, 2019.

Item 6. Exhibits.

Exhibit No.	Description of Exhibit
3.1	Restated Certificate of Incorporation of the Registrant, including the Certificate of Designation of Preferences, Rights and Limitation of Series A Convertible Preferred Stock of the Registrant. Filed herewith.
3.2	Amended and Restated By-Laws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-37813) filed on July 6, 2016).
4.1	Form of Class A Warrant (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K (File No. 001-37813) filed on April 8, 2019).
4.2	Form of Series A Convertible Preferred Stock Certificate (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K (File No. 001-37813) filed on April 8, 2019).
10.1	Underwriting Agreement relating to the Registrant's offering of its common stock, dated April 5, 2019, by and among the Registrant, Cowen and Company, LLC and Piper Jaffray & Co., as representatives of the several underwriters identified therein (incorporated by reference to Exhibit 1.1 to the Registrant's Current Report on Form 8-K (File No. 001-37813) filed on April 8, 2019).
10.2	Underwriting Agreement relating to the Registrant's offering of its Series A convertible preferred stock, dated April 5, 2019, by and among the Registrant, Cowen and Company, LLC and Piper Jaffray & Co., as representatives of the several underwriters identified therein (incorporated by reference to Exhibit 1.2 to the Registrant's Current Report on Form 8-K (File No. 001-37813) filed on April 8, 2019).
10.3	Lease, dated January 8, 2019 between the Company and DIV 35 CPD, LLC (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 001-37813) filed on January 11, 2019).
31.1	Certification of principal executive officer pursuant to Rule 13a-14(a) promulgated under the Securities Exchange Act of 1934, as amended.
31.2	Certification of principal financial officer pursuant to Rule 13a-14(a) promulgated under the Securities Exchange Act of 1934, as amended.
32.1	Certification of principal executive officer pursuant to Rule 13a-14(b) promulgated under the Securities Exchange Act of 1934, as amended, and Section 1350 of Chapter 63 of Title 18 of the United States Code.
32.2	Certification of principal financial officer pursuant to Rule 13a-14(b) promulgated under the Securities Exchange Act of 1934, as amended, and Section 1350 of Chapter 63 of Title 18 of the United States Code.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Label Linkbase Document
101.PRE	XBRL Taxonomy Presentation Linkbase Document

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Syros Pharmaceuticals, Inc.

Date: May 1, 2019

By: /s/ Joseph J. Ferra Jr.
Joseph J. Ferra Jr.
Chief Financial Officer (Principal Financial Officer)

Exhibit 3.1

RESTATED CERTIFICATE OF INCORPORATION

OF

SYROS PHARMACEUTICALS, INC.

(originally incorporated on November 9, 2011 under the name LS22, Inc.)

FIRST: The name of the Corporation is Syros Pharmaceuticals, Inc.

SECOND: The address of the Corporation's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle, 19801. The name of its registered agent at that address is The Corporation Trust Company.

THIRD: The nature of the business or purposes to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is 210,000,000 shares, consisting of (i) 200,000,000 shares of Common Stock, $0.001 par value per share ("Common Stock"), and (ii) 10,000,000 shares of Preferred Stock, $0.001 par value per share ("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. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights of the holders of the Preferred Stock of any series as may be designated by the Board of Directors upon any issuance of the Preferred Stock of any series.

2. Voting. The holders of the Common Stock shall have voting rights at all meetings of stockholders, each such holder being entitled to one vote for each share thereof held by such holder; provided, however, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Certificate of Incorporation (which, as used herein, shall mean the certificate of incorporation of the Corporation, as amended from time to time, including the terms of any certificate of designations of any series of Preferred Stock) 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 as a class with the holders of one or more other such series, to vote thereon pursuant to this Certificate of Incorporation. 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 the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of the State of Delaware.

3. Dividends. Dividends may be declared and paid on the Common Stock from funds lawfully available therefor as and when determined by the Board of Directors and subject to any preferential dividend or other rights of any then outstanding Preferred Stock.

4. Liquidation. Upon the dissolution or liquidation of the Corporation, whether voluntary or involuntary, holders of Common Stock will be entitled to receive all assets of the Corporation available for distribution to its stockholders, subject to any preferential or other rights of any then outstanding Preferred Stock.

B. PREFERRED STOCK.

Preferred Stock may be issued from time to time in one or more series, each of such series to have such terms as stated or expressed herein and in the resolution or resolutions providing for the issue of such series adopted by the Board of Directors of the Corporation as hereinafter provided. Any shares of Preferred Stock which may be redeemed, purchased or acquired by the Corporation may be reissued except as otherwise provided by law.

Authority is hereby expressly granted to the Board of Directors from time to time to issue the Preferred Stock in one or more series, and in connection with the creation of any such series, by adopting a resolution or resolutions providing for the issuance of the shares thereof and by filing a certificate of designations relating thereto in accordance with the General Corporation Law of the State of Delaware, to determine and fix the number of shares of such series and such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including without limitation thereof, dividend rights, conversion rights, redemption privileges and liquidation preferences, as shall be stated and expressed in such resolutions, all to the full extent now or hereafter permitted by the General Corporation Law of the State of Delaware. Without limiting the generality of the foregoing, the resolutions providing for issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to any other series of Preferred Stock to the extent permitted by law.

The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares then outstanding) by the affirmative vote of the holders of a majority of the voting power of the capital stock of the Corporation entitled to vote thereon, voting as a single class, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of the State of Delaware.

FIFTH: Except as otherwise provided herein, the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

SIXTH: In furtherance and not in limitation of the powers conferred upon it by the General Corporation Law of the State of Delaware, and subject to the terms of any series of Preferred Stock, the Board of Directors shall have the power to adopt, amend, alter or repeal the By-laws of the Corporation by the affirmative vote of a majority of the directors present at any regular or special meeting of the Board of Directors at which a quorum is present. The stockholders may not adopt, amend, alter or repeal the By-laws of the Corporation, or adopt any provision inconsistent therewith, unless such action is approved, in addition to any other vote required by this Certificate of Incorporation, by the affirmative vote of the holders of at least seventy-five percent (75%) of the votes that all the stockholders would be entitled to cast in any annual election of directors or class of directors. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-laws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least seventy-five percent (75%) of the votes which all the stockholders would be entitled to cast in any annual election of directors or class of directors shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article SIXTH.

SEVENTH: 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, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment or repeal. If the General Corporation Law of the State of Delaware is amended to permit further elimination or limitation of 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 of the State of Delaware as so amended.

EIGHTH: The Corporation shall provide indemnification as follows:

1. Actions, Suits and Proceedings Other than by or in the Right of the Corporation. The Corporation shall indemnify each person who was or is a party or threatened to be made a party to 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 the Corporation) by reason of the fact that he or she is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan) (all such persons being referred to hereafter 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), liabilities, losses, judgments, fines (including excise taxes and penalties arising under the Employee Retirement Income Security Act of 1974), and amounts paid in settlement actually and reasonably incurred by or on behalf of Indemnitee in connection with such action, suit or proceeding and any appeal therefrom, if Indemnitee acted in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The termination of any action, suit or proceeding by judgment, order,

settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful.

2. Actions or Suits by or in the Right of the Corporation. The Corporation shall indemnify any Indemnitee who was or is a party to or threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that Indemnitee is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan), 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 by or on behalf of Indemnitee in connection with such action, suit or proceeding and any appeal therefrom, if Indemnitee acted in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the Corporation, except that no indemnification shall be made under this Section 2 in respect of any claim, issue or matter as to which Indemnitee shall have been adjudged to be liable to the Corporation, unless, and only to the extent, that the Court of Chancery of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of such liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnity for such expenses (including attorneys' fees) which the Court of Chancery of Delaware or such other court shall deem proper.

3. Indemnification for Expenses of Successful Party. Notwithstanding any other provisions of this Article EIGHTH, to the extent that an Indemnitee has been successful, on the merits or otherwise, in defense of any action, suit or proceeding referred to in Sections 1 and 2 of this Article EIGHTH, or in defense of any claim, issue or matter therein, or on appeal from any such action, suit or proceeding, Indemnitee shall be indemnified against all expenses (including attorneys' fees) actually and reasonably incurred by or on behalf of Indemnitee in connection therewith. Without limiting the foregoing, if any action, suit or proceeding is disposed of, on the merits or otherwise (including a disposition without prejudice), without (i) the disposition being adverse to Indemnitee, (ii) an adjudication that Indemnitee was liable to the Corporation, (iii) a plea of guilty or nolo contendere by Indemnitee, (iv) an adjudication that Indemnitee did not act 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 (v) with respect to any criminal proceeding, an adjudication that Indemnitee had reasonable cause to believe his or her conduct was unlawful, Indemnitee shall be considered for the purposes hereof to have been wholly successful with respect thereto.

4. Notification and Defense of Claim. As a condition precedent to an Indemnitee's right to be indemnified, such Indemnitee must notify the Corporation in writing as soon as practicable of any action, suit, proceeding or investigation involving such Indemnitee for which indemnity will or could be sought. With respect to any action, suit, proceeding or investigation of which the Corporation is so notified, the Corporation will be entitled to participate therein at its own expense and/or to assume the defense thereof at its own expense, with legal counsel

reasonably acceptable to Indemnitee. After notice from the Corporation to Indemnitee of its election so to assume such defense, the Corporation shall not be liable to Indemnitee for any legal or other expenses subsequently incurred by Indemnitee in connection with such action, suit, proceeding or investigation, other than as provided below in this Section 4. Indemnitee shall have the right to employ his or her own counsel in connection with such action, suit, proceeding or investigation, but the fees and expenses of such counsel incurred after notice from the Corporation of its assumption of the defense thereof shall be at the expense of Indemnitee unless (i) the employment of counsel by Indemnitee has been authorized by the Corporation, (ii) counsel to Indemnitee shall have reasonably concluded that there may be a conflict of interest or position on any significant issue between the Corporation and Indemnitee in the conduct of the defense of such action, suit, proceeding or investigation or (iii) the Corporation shall not in fact have employed counsel to assume the defense of such action, suit, proceeding or investigation, in each of which cases the fees and expenses of counsel for Indemnitee shall be at the expense of the Corporation, except as otherwise expressly provided by this Article EIGHTH. The Corporation shall not be entitled, without the consent of Indemnitee, to assume the defense of any claim brought by or in the right of the Corporation or as to which counsel for Indemnitee shall have reasonably made the conclusion provided for in clause (ii) above. The Corporation shall not be required to indemnify Indemnitee under this Article EIGHTH for any amounts paid in settlement of any action, suit, proceeding or investigation effected without its written consent. The Corporation shall not settle any action, suit, proceeding or investigation in any manner which would impose any penalty or limitation on Indemnitee without Indemnitee's written consent. Neither the Corporation nor Indemnitee will unreasonably withhold or delay its consent to any proposed settlement.

5. Advance of Expenses. Subject to the provisions of Section 6 of this Article EIGHTH, in the event of any threatened or pending action, suit, proceeding or investigation of which the Corporation receives notice under this Article EIGHTH, any expenses (including attorneys' fees) incurred by or on behalf of Indemnitee in defending an action, suit, proceeding or investigation or any appeal therefrom shall be paid by the Corporation in advance of the final disposition of such matter; provided, however, that the payment of such expenses incurred by or on behalf of Indemnitee in advance of the final disposition of such matter shall be made only upon receipt of an undertaking by or on behalf of Indemnitee to repay all amounts so advanced in the event that it shall ultimately be determined by final judicial decision from which there is no further right to appeal that Indemnitee is not entitled to be indemnified by the Corporation as authorized in this Article EIGHTH; and provided further that no such advancement of expenses shall be made under this Article EIGHTH if it is determined (in the manner described in Section 6 of this Article EIGHTH) that (i) Indemnitee did not act 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, or (ii) with respect to any criminal action or proceeding, Indemnitee had reasonable cause to believe his or her conduct was unlawful. Such undertaking shall be accepted without reference to the financial ability of Indemnitee to make such repayment.

6. Procedure for Indemnification and Advancement of Expenses. In order to obtain indemnification or advancement of expenses pursuant to Section 1, 2, 3 or 5 of this Article EIGHTH, an Indemnitee shall submit to the Corporation a written request. Any such advancement of expenses shall be made promptly, and in any event within 60 days after receipt by the Corporation of the written request of Indemnitee, unless (i) the Corporation has assumed

the defense pursuant to Section 4 of this Article EIGHTH (and none of the circumstances described in Section 4 of this Article EIGHTH that would nonetheless entitle the Indemnitee to indemnification for the fees and expenses of separate counsel have occurred) or (ii) the Corporation determines within such 60-day period that Indemnitee did not meet the applicable standard of conduct set forth in Section 1, 2 or 5 of this Article EIGHTH, as the case may be. Any such indemnification, unless ordered by a court, shall be made with respect to requests under Section 1 or 2 only as authorized in the specific case upon a determination by the Corporation that the indemnification of Indemnitee is proper because Indemnitee has met the applicable standard of conduct set forth in Section 1 or 2 of this Article EIGHTH, as the case may be. Such determination shall be made in each instance (a) by a majority vote of the directors of the Corporation consisting of persons who are not at that time parties to the action, suit or proceeding in question ("disinterested directors"), whether or not a quorum, (b) by a committee of disinterested directors designated by majority vote of disinterested directors, whether or not a quorum, (c) if there are no disinterested directors, or if the disinterested directors so direct, by independent legal counsel (who may, to the extent permitted by law, be regular legal counsel to the Corporation) in a written opinion, or (d) by the stockholders of the Corporation.

7. Remedies. The right to indemnification or advancement of expenses as granted by this Article EIGHTH shall be enforceable by Indemnitee in any court of competent jurisdiction. Neither the failure of the Corporation to have made a determination prior to the commencement of such action that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Corporation pursuant to Section 6 of this Article EIGHTH that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct. In any suit brought by Indemnitee to enforce a right to indemnification, or brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall have the burden of proving that Indemnitee is not entitled to be indemnified, or to such advancement of expenses, under this Article EIGHTH. Indemnitee's expenses (including attorneys' fees) reasonably incurred in connection with successfully establishing Indemnitee's right to indemnification, in whole or in part, in any such proceeding shall also be indemnified by the Corporation. Notwithstanding the foregoing, in any suit brought by Indemnitee to enforce a right to indemnification hereunder it shall be a defense that the Indemnitee has not met any applicable standard for indemnification set forth in the General Corporation Law of the State of Delaware.

8. Limitations. Notwithstanding anything to the contrary in this Article EIGHTH, except as set forth in Section 7 of this Article EIGHTH, the Corporation shall not indemnify an Indemnitee pursuant to this Article EIGHTH in connection with a proceeding (or part thereof) initiated by such Indemnitee unless the initiation thereof was approved by the Board of Directors of the Corporation. Notwithstanding anything to the contrary in this Article EIGHTH, the Corporation shall not indemnify an Indemnitee to the extent such Indemnitee is reimbursed from the proceeds of insurance, and in the event the Corporation makes any indemnification payments to an Indemnitee and such Indemnitee is subsequently reimbursed from the proceeds of insurance, such Indemnitee shall promptly refund indemnification payments to the Corporation to the extent of such insurance reimbursement.

9. Subsequent Amendment. No amendment, termination or repeal of this Article EIGHTH or of the relevant provisions of the General Corporation Law of the State of Delaware or any other applicable laws shall adversely affect or diminish in any way the rights of any Indemnitee to indemnification under the provisions hereof with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the final adoption of such amendment, termination or repeal.

10. Other Rights. The indemnification and advancement of expenses provided by this Article EIGHTH shall not be deemed exclusive of any other rights to which an Indemnitee seeking indemnification or advancement of expenses may be entitled under any law (common or statutory), agreement or vote of stockholders or disinterested directors or otherwise, both as to action in Indemnitee's official capacity and as to action in any other capacity while holding office for the Corporation, and shall continue as to an Indemnitee who has ceased to be a director or officer, and shall inure to the benefit of the estate, heirs, executors and administrators of Indemnitee. Nothing contained in this Article EIGHTH shall be deemed to prohibit, and the Corporation is specifically authorized to enter into, agreements with officers and directors providing indemnification rights and procedures different from those set forth in this Article EIGHTH. In addition, the Corporation may, to the extent authorized from time to time by its Board of Directors, grant indemnification rights to other employees or agents of the Corporation or other persons serving the Corporation and such rights may be equivalent to, or greater or less than, those set forth in this Article EIGHTH.

11. Partial Indemnification. If an Indemnitee is entitled under any provision of this Article EIGHTH to indemnification by the Corporation for some or a portion of the expenses (including attorneys' fees), liabilities, losses, judgments, fines (including excise taxes and penalties arising under the Employee Retirement Income Security Act of 1974) or amounts paid in settlement actually and reasonably incurred by or on behalf of Indemnitee in connection with any action, suit, proceeding or investigation and any appeal therefrom but not, however, for the total amount thereof, the Corporation shall nevertheless indemnify Indemnitee for the portion of such expenses (including attorneys' fees), liabilities, losses, judgments, fines (including excise taxes and penalties arising under the Employee Retirement Income Security Act of 1974) or amounts paid in settlement to which Indemnitee is entitled.

12. Insurance. The Corporation may purchase and maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan) against any expense, liability or loss incurred by him or her in any such capacity, or arising out of his or her status as such, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the General Corporation Law of the State of Delaware.

13. Savings Clause. If this Article EIGHTH or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Corporation shall nevertheless indemnify each Indemnitee as to any expenses (including attorneys' fees), liabilities, losses, judgments, fines (including excise taxes and penalties arising under the Employee Retirement Income Security Act of 1974) and amounts paid in settlement in connection with any action, suit, proceeding or investigation, whether civil, criminal or administrative, including an action by or in the right of the Corporation, to the fullest extent permitted by any applicable portion of this Article EIGHTH that shall not have been invalidated and to the fullest extent permitted by applicable law.

14. Definitions. Terms used herein and defined in Section 145(h) and Section 145(i) of the General Corporation Law of the State of Delaware shall have the respective meanings assigned to such terms in such Section 145(h) and Section 145(i).

NINTH: This Article NINTH is inserted for the management of the business and for the conduct of the affairs of the Corporation.

1. General Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.

2. Number of Directors; Election of Directors. 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 by the Board of Directors. Election of directors need not be by written ballot, except as and to the extent provided in the By-laws of the Corporation.

3. Classes of Directors. Subject to the rights of holders of any series of Preferred Stock to elect directors, the Board of Directors shall be and is divided into three classes, designated Class I, Class II and Class III. Each class shall consist, as nearly as may be possible, of one-third of the total number of directors constituting the entire Board of Directors. The Board of Directors is authorized to assign members of the Board of Directors already in office to Class I, Class II or Class III at the time such classification becomes effective.

4. Terms of Office. Subject to the rights of holders of any series of Preferred Stock to elect directors, each director shall serve for a term ending on the date of the third annual meeting of stockholders following the annual meeting of stockholders at which such director was elected; provided that each director initially assigned to Class I shall serve for a term expiring at the Corporation's first annual meeting of stockholders held after the effectiveness of this Restated Certificate of Incorporation; each director initially assigned to Class II shall serve for a term expiring at the Corporation's second annual meeting of stockholders held after the effectiveness of this Restated Certificate of Incorporation; and each director initially assigned to Class III shall serve for a term expiring at the Corporation's third annual meeting of stockholders held after the effectiveness of this Restated Certificate of Incorporation; provided further, that the term of each director shall continue until the election and qualification of his or her successor and be subject to his or her earlier death, resignation or removal.

5. Quorum. 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 of this Article NINTH 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.

6. Action at Meeting. Every act or decision done or made by a majority of the directors present at a meeting 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 this Certificate of Incorporation.

7. Removal. Subject to the rights of holders of any series of Preferred Stock, directors of the Corporation may be removed only for cause and only by the affirmative vote of the holders of at least seventy-five percent (75%) of the votes which all the stockholders would be entitled to cast in any annual election of directors or class of directors.

8. Vacancies. Subject to the rights of holders of any series of Preferred Stock, any vacancy or newly created directorship in the Board of Directors, however occurring, shall be filled only by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director and shall not be filled by the stockholders. A director elected to fill a vacancy shall hold office until the next election of the class for which such director shall have been chosen, subject to the election and qualification of a successor and to such director's earlier death, resignation or removal.

9. Stockholder Nominations and Introduction of Business, Etc. Advance notice of stockholder nominations for election of directors and other business to be brought by stockholders before a meeting of stockholders shall be given in the manner provided by the By-laws of the Corporation.

10. Amendments to Article. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-laws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least seventy-five percent (75%) of the votes which all the stockholders would be entitled to cast in any annual election of directors or class of directors shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article NINTH.

TENTH: Stockholders of the Corporation may not take any action by written consent in lieu of a meeting. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-laws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least seventy-five percent (75%) of the votes which all the stockholders would be entitled to cast in any annual election of directors or class of directors shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article TENTH.

ELEVENTH: 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 or the Chief Executive Officer, and may not be called by any other person or persons. 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. Notwithstanding any other provisions of law, this Certificate of Incorporation or the By-laws of the Corporation, and notwithstanding the fact that a lesser percentage may be specified by law, the affirmative vote of the holders of at least seventy-five percent (75%) of the votes which all the stockholders would be entitled to cast in any annual election of directors or class of directors shall be required to amend or repeal, or to adopt any provision inconsistent with, this Article ELEVENTH.

IN WITNESS WHEREOF, this Restated Certificate of Incorporation, which restates, integrates and amends the certificate of incorporation of the Corporation, and which has been duly adopted in accordance with Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware, has been executed by its duly authorized officer this 6th day of July, 2016.

SYROS PHARMACEUTICALS, INC.

By: /s/Nancy Simonian, M.D.
Name: Nancy Simonian, M.D.
Title: President and Chief Executive Officer

SYROS PHARMACEUTICALS, INC.

**CERTIFICATE OF DESIGNATION OF PREFERENCES,
RIGHTS AND LIMITATIONS
OF
SERIES A CONVERTIBLE PREFERRED STOCK**

PURSUANT TO SECTION 151 OF THE
DELAWARE GENERAL CORPORATION LAW

SYROS PHARMACEUTICALS, INC., a Delaware corporation (the "**Corporation**"), in accordance with the provisions of Section 103 of the Delaware General Corporation Law (the "**DGCL**") does hereby certify that, in accordance with Sections 141(c) and 151 of the DGCL, the following resolution was duly adopted by the Board of Directors of the Corporation on April 4, 2019:

RESOLVED, pursuant to authority expressly set forth in the Restated Certificate of Incorporation of the Corporation (the "**Certificate of Incorporation**"), the issuance of a series of Preferred Stock designated as the Series A Convertible Preferred Stock, par value $0.001 per share, of the Corporation is hereby authorized and the designation, number of shares, powers, preferences, rights, qualifications, limitations and restrictions thereof (in addition to any provisions set forth in the Certificate of Incorporation that are applicable to the Preferred Stock of all classes and series) are hereby fixed, and the Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock is hereby approved as follows:

SERIES A CONVERTIBLE PREFERRED STOCK

Section 1. Definitions. For the purposes hereof, the following terms shall have the following meanings:

"**Affiliate**" means any person or entity that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a person or entity, as such terms are used in and construed under Rule 144 under the Securities Act. With respect to a Holder, any investment fund or managed account that is managed on a discretionary basis by the same investment manager as such Holder will be deemed to be an Affiliate of such Holder.

"**Alternate Consideration**" shall have the meaning set forth in Section 7(b).

"**Beneficial Ownership Limitation**" shall have the meaning set forth in Section 6(c).

"**Business Day**" means any day except Saturday, Sunday, any day which shall be a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

"**Buy-In**" shall have the meaning set forth in Section 6(d)(iii).

"**Closing Sale Price**" means, for any security as of any date, the last closing trade price for such security prior to 4:00 p.m., New York City time, on the principal securities exchange or trading market where such security is listed or traded, as reported by Bloomberg, L.P. (or an equivalent, reliable reporting service mutually acceptable to and hereafter designated by Holders of a majority of the then-outstanding Series A Preferred Stock and the Corporation), or if the foregoing do not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, L.P., or, if no last trade price is reported for such security by Bloomberg, L.P., the average of the bid prices of any market makers for such security as reported on the OTC Pink Market by OTC Markets Group, Inc. If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as determined in good faith by the Board of Directors of the Corporation.

"**Commission**" means the Securities and Exchange Commission.

"**Common Stock**" means the Corporation's common stock, par value $0.001 per share, and stock of any other class of securities into which such common stock may hereafter be reclassified or changed into.

"**Conversion Date**" shall have the meaning set forth in Section 6(a).

"**Conversion Price**" shall mean $7.50, as adjusted pursuant to paragraph 7 hereof.

"**Conversion Ratio**" shall have the meaning set forth in Section 6(b).

"**Conversion Shares**" means, collectively, the shares of Common Stock issuable upon conversion of the shares of Series A Preferred Stock in accordance with the terms hereof.

"**Daily Failure Amount**" means the product of (x) .005 multiplied by (y) the Closing Sale Price of the Common Stock on the applicable Share Delivery Date.

"**DGCL**" shall mean the Delaware General Corporation Law.

"**Distributions**" shall have the meaning set forth in Section 5(a).

"**DTC**" shall have the meaning set forth in Section 6(a).

"**DWAC Delivery**" shall have the meaning set forth in Section 6(a).

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

"**Fundamental Transaction**" shall have the meaning set forth in Section 7(b).

"**Holder**" means any holder of Series A Preferred Stock.

"**Issuance Date**" means April 9, 2019.

"**Junior Securities**" shall have the meaning set forth in Section 5(a).

"**Notice of Conversion**" shall have the meaning set forth in Section 6(a).

"**Parity Securities**" shall have the meaning set forth in Section 5(a).

"**Person**" means any individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

"**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

"**Senior Securities**" shall have the meaning set forth in Section 5(a).

"**Series A Preferred Stock**" shall have the meaning set forth in Section 2(a).

"**Series A Preferred Stock Register**" shall have the meaning set forth in Section 2(b).

"**Share Delivery Date**" shall have the meaning set forth in Section 6(d)(i).

"**Stated Value**" shall mean $7,500.

"**Trading Day**" means a day on which the Common Stock is traded for any period on the principal securities exchange or if the Common Stock is not traded on a principal securities exchange, on a day that the Common Stock is traded on another securities market on which the Common Stock is then being traded.

Section 2. Designation, Amount and Par Value; Assignment.

(a) The series of preferred stock designated by this Certificate of Designation shall be designated as the Corporation's Series A Convertible Preferred Stock (the "**Series A Preferred Stock**") and the number of shares so designated shall be 666. Each share of Series A Preferred Stock shall have a par value of $0.001 per share. The Series A Preferred Stock may be issued in certificated form or in book-entry form at the election of the Holder. To the extent that any shares of Series A Preferred Stock are issued in book-entry form, references herein to "certificates" shall instead refer to the book-entry notation relating to such shares.

(b) The Corporation shall register shares of the Series A Preferred Stock, upon records to be maintained by the Corporation for that purpose (the "**Series A Preferred Stock Register**"), in the name of the Holders thereof from time to time. The Corporation may deem and treat the registered Holder of shares of Series A Preferred Stock as the absolute owner thereof for the purpose of any conversion thereof and for all other purposes. The Corporation shall register the transfer of any shares of Series A Preferred Stock in the Series A Preferred Stock Register, upon surrender of the certificates evidencing such shares to be transferred, duly endorsed by the Holder thereof, to the Corporation at its address specified herein. Upon any such registration or transfer, a new certificate evidencing the shares of Series A Preferred Stock so transferred shall be issued to the transferee and a new certificate evidencing the remaining portion of the shares not so transferred, if any, shall be issued to the transferring Holder, in each case, within three (3) Business Days. The provisions of this Certificate of Designation are intended to be for the benefit of all Holders from time to time and shall be enforceable by any such Holder.

Section 3. Dividends. Holders shall be entitled to receive, and the Corporation shall pay, dividends on shares of the Series A Preferred Stock equal (on an as-if-converted-to-Common-Stock basis, without regard to the Beneficial Ownership Limitation) to and in the same form, and in the same manner, as dividends (other than dividends in the form of Common Stock) actually paid on shares of the Common Stock when, as and if such dividends (other than dividends in the form of Common Stock, which shall be made in accordance with Section 7(a)) are paid on shares of the Common Stock. Other than as set forth in the previous sentence, no other dividends shall be paid on shares of Series A Preferred Stock, and the Corporation shall pay no dividends (other than dividends in the form of Common Stock) on shares of the Common Stock unless it simultaneously complies with the previous sentence.

Section 4. Voting Rights; Amendments. Except as otherwise provided herein or as otherwise required by the DGCL, the Series A Preferred Stock shall have no voting rights. However, as long as any shares of Series A Preferred Stock are outstanding, the Corporation shall not, without the affirmative vote of the Holders of a majority of the then outstanding shares of the Series A Preferred Stock, (a) (i) alter or change adversely the powers, preferences or rights given to the Series A Preferred Stock, (ii) alter or amend this Certificate of Designation, or (iii) amend or repeal any provision of, or add any provision to, the Certificate of Incorporation or bylaws of the Corporation, or file any articles of amendment or certificate of designations of preferences, limitations and relative rights of any series of preferred stock, if such action would adversely alter or change the powers, preferences or rights of the Series A Preferred Stock in a manner materially different than the effect of such actions on the Common Stock (regardless, in the case of clause (i), (ii) or (iii), of whether any of the foregoing actions shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation or otherwise), (b) issue further shares of Series A Preferred Stock or increase or decrease (other than by conversion) the number of authorized shares of Series A Preferred Stock or (c) enter into any agreement with respect to any of the foregoing.

Section 5. Rank; Liquidation.

(a) The Series A Preferred Stock shall rank (i) senior to all of the Common Stock; (ii) senior to any class or series of capital stock of the Corporation hereafter created specifically ranking by its terms junior to any Series A Preferred Stock ("**Junior Securities**"); (iii) on parity with any class or series of capital stock of the Corporation hereafter created specifically ranking by its terms on parity with the Series A Preferred Stock (the "**Parity Securities**"); and (iv) junior to any class or series of capital stock of the Corporation hereafter created specifically ranking by its terms senior to any Series A Preferred Stock ("**Senior Securities**"), in each case, as to distributions of assets upon liquidation, dissolution or winding up of the Corporation, whether voluntarily or involuntarily (all such distributions being referred to collectively as "**Distributions**").

(b) Subject to the prior and superior rights of the holders of any Senior Securities of the Corporation, upon liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, each holder of shares of Series A Preferred Stock shall be entitled to receive, in preference to any distributions of any of the assets or surplus funds of the Corporation to the holders of the Common Stock and Junior Securities and *pari passu* with any distribution to the holders of Parity Securities, an amount equal to $0.001 per share of Series A Preferred Stock, plus an additional amount equal to any dividends declared but unpaid on such shares, before any payments shall be made or any assets distributed to holders of any class of Common Stock or Junior Securities. If, upon any such liquidation, dissolution or winding up of the Corporation, the assets of the Corporation shall be insufficient to pay the holders of shares of the Series A Preferred Stock the amount required under the preceding sentence, then all remaining assets of the Corporation shall be distributed ratably to holders of the shares of the Series A Preferred Stock and Parity Securities 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.

Section 6. Conversion.

(a) Conversions at Option of Holder. Each share of Series A Preferred Stock shall be convertible, at any time and from time to time from and after the Issuance Date, at the option of the Holder thereof, into a number of shares of Common Stock equal to the Conversion Ratio. Holders shall effect conversions by providing the Corporation with the form of conversion notice attached hereto as **Annex A** (a "**Notice of Conversion**"), duly completed and executed. Other than a conversion following a Fundamental Transaction or following a notice provided for under Section 7(d)(ii) hereof, the Notice of Conversion must specify at least a number of shares of Series A Preferred Stock to be converted equal to the lesser of (x) 10,000 shares (such number subject to appropriate adjustment following the occurrence of an event specified in Section 7(a) hereof) and (y) the number of shares of Series A Preferred Stock then held by the Holder. Provided the Corporation's transfer agent is participating in the Depository Trust Company ("**DTC**") Fast Automated Securities Transfer program, the Notice of Conversion may specify, at the Holder's election, whether the applicable Conversion Shares shall be credited to the account of the Holder's prime broker with DTC through its Deposit Withdrawal Agent Commission system (a "**DWAC Delivery**"). The "**Conversion Date**", or the date on which a conversion shall be deemed effective, shall be defined as the Trading Day that the Notice of Conversion, completed and executed, is sent by facsimile or other electronic transmission to, and received during regular business hours by, the Corporation; provided that the original certificate(s) (if applicable) representing such shares of Series A Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion, are received by the Corporation within two (2) Trading Days thereafter. In all other cases, the Conversion Date shall be defined as the Trading Day on which the original share certificate(s) (if applicable) of Series A Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion, are received by the Corporation. The calculations set forth in the Notice of Conversion shall control in the absence of manifest or mathematical error.

(b) Conversion Ratio. The "**Conversion Ratio**" for each share of Series A Preferred Stock shall be equal to the Stated Value divided by the Conversion Price.

(c) Beneficial Ownership Limitation. Notwithstanding anything herein to the contrary, the Corporation shall not effect any conversion of the Series A Preferred Stock, and a Holder shall not have the right to convert any portion of the Series A Preferred Stock, to the extent that, after giving effect to an attempted conversion set forth on an applicable Notice of Conversion, such Holder (together with such Holder's Affiliates, and any other Person whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) or Section 16 of the Exchange Act and the applicable regulations of the Commission, including any "group" of which the Holder is a member (the foregoing, "**Attribution Parties**")) would beneficially own a number of shares of Common Stock in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by such Holder and its Attribution Parties shall include the number of shares of Common Stock held by such Holder and its Attribution Parties plus the number of shares of Common Stock issuable upon conversion of the Series A Preferred Stock subject to the Notice of Conversion with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which are issuable upon (A) conversion of the remaining, unconverted shares of Series A Preferred Stock beneficially owned by such Holder or any of its Attribution Parties, and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation (including any warrants) beneficially owned by such Holder or any of its Attribution Parties that, in the case of both (A) and (B), are subject to a limitation on conversion or exercise similar to the limitation contained herein. For purposes of this Section 6(c), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the applicable regulations of the Commission. In addition, for purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and the applicable regulations of the Commission. For purposes of this Section 6(c), in determining the number of outstanding shares of Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as stated in the most recent of the following: (A) the Corporation's most recent periodic or annual filing with the Commission, as the case may be, (B) a more recent public announcement by the Corporation that is filed with the Commission, or (C) a more recent notice by the Corporation or the Corporation's transfer agent to the Holder setting forth the number of shares of Common Stock then outstanding. Upon the written request of a Holder (which may be by email), the Corporation shall, within three (3) Trading Days thereof, confirm in writing to such Holder (which may be via email) the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to any actual conversion or exercise of securities of the Corporation, including shares of Series A Preferred Stock, by such Holder or its Attribution Parties since the date as of which such number of outstanding shares of Common Stock was last publicly reported or confirmed to the Holder. The "**Beneficial Ownership Limitation**" shall initially be 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock pursuant to such Notice of Conversion (to the extent permitted pursuant to this Section 6(c)). Notwithstanding the foregoing, by written notice to the Corporation, which will not be effective until the sixty-first (61st) day after such notice is delivered to the Corporation, the Holder may reset the Beneficial Ownership Limitation percentage to a higher or lower percentage. Upon such a change by a Holder of the Beneficial Ownership Limitation, the Beneficial Ownership Limitation may not be further amended by such Holder without first providing the minimum 61-day notice required by this Section 6(c). Notwithstanding the foregoing, at any time following notice of a Fundamental Transaction, the Holder may waive and/or change the Beneficial Ownership Limitation effective immediately upon written notice to the Corporation and may reinstitute a Beneficial Ownership Limitation at any time thereafter effective immediately upon written notice to the Corporation. The Corporation shall be entitled to rely on representations made to it by the Holder in any Notice of Conversion regarding its Beneficial Ownership Limitation, and the determination as to whether the Series A Preferred Stock is convertible and of which portion of the Series A Preferred Stock is convertible shall be made in the sole discretion of the Holder and the Company shall have no obligation to verify or confirm the accuracy of such determination.

(d) Mechanics of Conversion

(i) Delivery of Certificate or Electronic Issuance Upon Conversion. Not later than three (3) Trading Days after the applicable Conversion Date, or if the Holder requests the issuance of physical certificate(s), two (2) Trading Days after receipt by the Corporation of both the original certificate(s) representing such shares of Series A Preferred Stock being converted, duly endorsed, and the accompanying Notice of Conversion (the "**Share Delivery Date**"), the Corporation shall (a) deliver, or cause to be delivered, to the converting Holder a physical certificate or certificates representing the number of Conversion Shares being acquired upon the conversion of shares of Series A Preferred Stock or (b) in the case of a DWAC Delivery, electronically transfer such Conversion Shares by crediting the account of the Holder's prime broker with DTC through its DWAC system. If in the case of any Notice of Conversion such certificate or certificates are not delivered to or as directed by or, in the case of a DWAC Delivery, such shares are not electronically delivered to or as directed by, the applicable Holder by the Share Delivery Date, the applicable Holder shall be entitled to elect to rescind such Notice of Conversion by written notice to the Corporation at any time on or before its receipt of such certificate or certificates for Conversion Shares or electronic receipt of such shares, as applicable, in which event the Corporation shall promptly return to such Holder any original Series A Preferred Stock certificate delivered to the Corporation and such Holder shall promptly return to the Corporation any Common Stock certificates or otherwise direct the return of any shares of Common Stock delivered to the Holder through the DWAC system, representing the shares of Series A Preferred Stock unsuccessfully tendered for conversion to the Corporation.

(ii) Obligation Absolute. Subject to Section 6(c) hereof and subject to Holder's right to rescind a Notice of Conversion pursuant to Section 6(d)(i) above, the Corporation's obligation to issue and deliver the Conversion Shares upon conversion of Series A Preferred Stock in accordance with the terms hereof are absolute and unconditional, irrespective of any action or inaction by a Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by such Holder or any other Person of any obligation to the Corporation or any violation or alleged violation of law by such Holder or any other Person, and irrespective of any other circumstance which might otherwise limit such obligation of the Corporation to such Holder in connection with the issuance of such Conversion Shares. Subject to Section 6(c) hereof and subject to Holder's right to rescind a Notice of Conversion pursuant to Section 6(d)(i) above, in the event a Holder shall elect to convert any or all of its Series A Preferred Stock, the Corporation may not refuse conversion based on any claim that such Holder or anyone

associated or affiliated with such Holder has been engaged in any violation of law, agreement or for any other reason, unless an injunction from a court, on notice to Holder, restraining and/or enjoining conversion of all or part of the Series A Preferred Stock of such Holder shall have been sought and obtained by the Corporation, and the Corporation posts a surety bond for the benefit of such Holder in the amount of 150% of the value of the Conversion Shares into which would be converted the Series A Preferred Stock which is subject to such injunction, which bond shall remain in effect until the completion of arbitration/litigation of the underlying dispute and the proceeds of which shall be payable to such Holder to the extent it obtains judgment. In the absence of such injunction, the Corporation shall, subject to Section 6(c) hereof and subject to Holder's right to rescind a Notice of Conversion pursuant to Section 6(d)(i) above, issue Conversion Shares upon a properly noticed conversion. If the Corporation fails to deliver to a Holder such certificate or certificates, or electronically deliver (or cause its transfer agent to electronically deliver) such shares in the case of a DWAC Delivery, pursuant to Section 6(d)(i) on or prior to the fifth (5th) Trading Day after the Share Delivery Date applicable to such conversion (other than a failure caused by incorrect or incomplete information provided by Holder to the Corporation), then, unless the Holder has rescinded the applicable Notice of Conversion pursuant to Section 6(d)(i) above, the Corporation shall pay (as liquidated damages and not as a penalty) to such Holder an amount payable, at the Holder's option, either (a) in cash or (b) to the extent that it would not cause the Holder or its Attribution Parties to exceed the Beneficial Ownership Limitation, in shares of Common Stock that are valued for these purposes at the Closing Sale Price on the date of such calculation, in each case equal to the product of (x) the number of Conversion Shares required to have been issued by the Corporation on such Share Delivery Date, (y) an amount equal to the Daily Failure Amount and (z) the number of Trading Days actually lapsed after such fifth (5th) Trading Day after the Share Delivery Date during which such certificates have not been delivered, or, in the case of a DWAC Delivery, such shares have not been electronically delivered; *provided*, *however*, the Holder shall only receive up to such amount of shares of Common Stock such that Holder and its Attribution Parties and any other persons or entities whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act (including shares held by any "group" of which the Holder is a member, but excluding shares beneficially owned by virtue of the ownership of securities or rights to acquire securities that have limitations on the right to convert, exercise or purchase similar to the limitation set forth herein) shall not collectively beneficially own greater than the Beneficial Ownership Limitation. Nothing herein shall limit a Holder's right to pursue actual damages for the Corporation's failure to deliver Conversion Shares within the period specified herein and such Holder shall have the right to pursue all remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief; provided that Holder shall not receive duplicate damages for the Corporation's failure to deliver Conversion Shares within the period specified herein. The exercise of any such rights shall not prohibit a Holder from seeking to enforce damages pursuant to any other Section hereof or under applicable law.

(iii) Compensation for Buy-In on Failure to Timely Deliver Certificates Upon Conversion. If the Corporation fails to deliver to a Holder the applicable certificate or certificates or to effect a DWAC Delivery, as applicable, by the Share Delivery Date pursuant to Section 6(d)(i) (other than a failure caused by incorrect or incomplete information provided by Holder to the Corporation), and if after such Share Delivery Date such Holder is required by its brokerage firm to purchase (in an open market transaction or otherwise), or the Holder's

brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by such Holder of the Conversion Shares which such Holder was entitled to receive upon the conversion relating to such Share Delivery Date (a "**Buy-In**"), then the Corporation shall (A) pay in cash to such Holder (in addition to any other remedies available to or elected by such Holder) the amount by which (x) such Holder's total purchase price (including any brokerage commissions) for the shares of Common Stock so purchased exceeds (y) the product of (1) the aggregate number of shares of Common Stock that such Holder was entitled to receive from the conversion at issue multiplied by (2) the actual sale price at which the sell order giving rise to such purchase obligation was executed (including any brokerage commissions) and (B) at the option of such Holder, either reissue (if surrendered) the shares of Series A Preferred Stock equal to the number of shares of Series A Preferred Stock submitted for conversion or deliver to such Holder the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(d)(i). For example, if a Holder purchases shares of Common Stock having a total purchase price of $11,000 to cover a Buy-In with respect to an attempted conversion of shares of Series A Preferred Stock with respect to which the actual sale price (including any brokerage commissions) giving rise to such purchase obligation was a total of $10,000 under clause (A) of the immediately preceding sentence, the Corporation shall be required to pay such Holder $1,000. The Holder shall provide the Corporation written notice, within three (3) Trading Days after the occurrence of a Buy-In, indicating the amounts payable to such Holder in respect of such Buy-In together with applicable confirmations and other evidence reasonably requested by the Corporation. Nothing herein shall limit a Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Corporation's failure to timely deliver certificates representing shares of Common Stock upon conversion of the shares of Series A Preferred Stock as required pursuant to the terms hereof; provided, however, that the Holder shall not be entitled to both (i) require the reissuance of the shares of Series A Preferred Stock submitted for conversion for which such conversion was not timely honored and (ii) receive the number of shares of Common Stock that would have been issued if the Corporation had timely complied with its delivery requirements under Section 6(d)(i).

(iv) Reservation of Shares Issuable Upon Conversion. The Corporation covenants that it will at all times reserve and keep available out of its authorized and unissued shares of Common Stock for the sole purpose of issuance upon conversion of the Series A Preferred Stock, free from preemptive rights or any other actual contingent purchase rights of Persons other than the Holders of the Series A Preferred Stock, not less than such aggregate number of shares of the Common Stock as shall be issuable (taking into account the adjustments of Section 7) upon the conversion of all outstanding shares of Series A Preferred Stock. The Corporation covenants that all shares of Common Stock that shall be so issuable shall, upon issue, be duly authorized, validly issued, fully paid, nonassessable and free and clear of all liens and other encumbrances.

(v) Fractional Shares. No fractional shares or scrip representing fractional shares of Common Stock shall be issued upon the conversion of the Series A Preferred Stock. As to any fraction of a share which a Holder would otherwise be entitled to receive upon such conversion, the Corporation shall pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Conversion Price.

(vi) Transfer Taxes. The issuance of certificates for shares of the Common Stock upon conversion of the Series A Preferred Stock shall be made without charge to any Holder for any documentary stamp or similar taxes that may be payable in respect of the issue or delivery of such certificates, provided that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer involved in the issuance and delivery of any such certificate upon conversion in a name other than that of the registered Holder(s) of such shares of Series A Preferred Stock and the Corporation shall not be required to issue or deliver such certificates unless or until the Person or Persons requesting the issuance thereof shall have paid to the Corporation the amount of such tax or shall have established to the satisfaction of the Corporation that such tax has been paid.

(e) Status as Stockholder. Upon each Conversion Date, (i) the shares of Series A Preferred Stock being converted shall be deemed converted into shares of Common Stock and (ii) the Holder's rights as a holder of such converted shares of Series A Preferred Stock shall cease and terminate, excepting only the right to receive certificates for such shares of Common Stock and to any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the Corporation to comply with the terms of this Certificate of Designation. In all cases, the Holder shall retain all of its rights and remedies for the Corporation's failure to convert Series A Preferred Stock.

Section 7. Certain Adjustments.

(a) Stock Dividends and Stock Splits. If the Corporation, at any time while this Series A Preferred Stock is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Corporation upon conversion of this Series A Preferred Stock) with respect to the then outstanding shares of Common Stock; (ii) subdivides outstanding shares of Common Stock into a larger number of shares; or (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares, then the Conversion Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Corporation) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event (excluding any treasury shares of the Corporation). Any adjustment made pursuant to this Section 7(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision or combination.

(b) Fundamental Transaction. If, at any time while this Series A Preferred Stock is outstanding, (i) the Corporation, directly or indirectly in one or more related transactions, effects any merger or consolidation of the Corporation with or into another Person (other than such a transaction in which the Corporation is the surviving or continuing entity and its Common Stock is not exchanged for or converted into other securities, cash or property), (ii) the Corporation directly or indirectly effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one transaction or a series of related transactions, (iii) any tender offer or exchange offer (whether by the Corporation or another Person) is completed pursuant to which more than 50% of the Common Stock not held by the

Corporation or such Person is exchanged for or converted into other securities, cash or property, (iv) the Corporation, directly or indirectly in one or more related transactions, effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant (other than as a result of a dividend, subdivision or combination covered by Section 7(a) above) to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Corporation, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination and excluding shares acquired upon conversion of any currently outstanding convertible securities in accordance with the terms thereof as in effect on the date hereof) (in any such case, a "**Fundamental Transaction**"), then, as of the effective date and time of the Fundamental Transaction (the "**Effective Time**"), each outstanding share of Series A Preferred Stock shall be canceled without any further action on the part of the Corporation or the Holder thereof, and in consideration for such cancellation, each Holder shall automatically receive, for each Conversion Share that would have been issuable upon conversion of such cancelled shares of Series A Preferred Stock immediately prior to the occurrence of such Fundamental Transaction, the same kind and amount of securities, cash or property receivable upon the effectiveness of the Fundamental Transaction ("**Exchange Property**") as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of one share of Common Stock (the "**Alternate Consideration**"); provided, however, if the Fundamental Transaction is not of a type that results in the Common Stock being exchanged for other securities, cash or property, then the Series A Preferred Stock shall not be cancelled as provided in the immediately preceding sentence and shall remain outstanding. The amount of Exchange Property receivable upon any Fundamental Transaction shall be determined based upon the Conversion Ratio in effect at such Effective Time. Upon the cancellation of any Series A Preferred Stock as of the Effective Time, the Holder's rights as a holder of Series A Preferred Stock shall cease and terminate, excepting only the right to receive the Exchange Property to which the Holder is then entitled and to any remedies provided herein or otherwise available at law or in equity to such Holder because of a failure by the Corporation to comply with the terms of this Certificate of Designation. Should any shares of Series A Preferred Stock remain outstanding after a Fundamental Transaction, for purposes of any such subsequent conversion, the determination of the Conversion Ratio shall be appropriately adjusted to apply to such Alternate Consideration, if any, based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Corporation shall adjust the Conversion Ratio in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holders shall be given the same choice as to the Alternate Consideration it receives upon any conversion of their shares of Series A Preferred Stock following such Fundamental Transaction should such shares of Series A Preferred Stock remain outstanding after such Fundamental Transaction. To the extent necessary to effectuate the foregoing provisions should any shares of Series A Preferred Stock remain

outstanding after a Fundamental Transaction, any successor to the Corporation or surviving entity in such Fundamental Transaction shall file a new Certificate of Designation with the same terms and conditions and issue to the Holders new preferred stock consistent with the foregoing provisions and evidencing the Holders' right to convert such preferred stock into Alternate Consideration. The terms of any agreement to which the Corporation is a party and pursuant to which a Fundamental Transaction is effected shall include terms requiring any such successor or surviving entity to comply with the provisions of this Section 7(b) and ensuring that this Series A Preferred Stock (or any such replacement security) will be similarly adjusted upon any subsequent transaction analogous to a Fundamental Transaction. The Corporation shall cause to be delivered to each Holder, at its last address as it shall appear upon the stock books of the Corporation, written notice of any Fundamental Transaction at least 20 calendar days prior to the date on which such Fundamental Transaction is expected to become effective or close, which notice shall state the kind and amount of cash, securities or property that constitute the Exchange Property. Failure to deliver such notice shall not affect the operation of this Section 7. The Corporation shall not enter into any agreement for a transaction constituting a Fundamental Transaction that would interfere with or prevent (as applicable) the treatment of the Series A Preferred Stock in a manner that is consistent with and gives effect to this Section 7.

(c) Calculations. All calculations under this Section 7 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 7, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding any treasury shares of the Corporation) issued and outstanding.

(d) Notice to the Holders.

(i) Adjustment to Conversion Price. Whenever the Conversion Price is adjusted pursuant to any provision of this Section 7, the Corporation shall promptly deliver to each Holder a notice setting forth the Conversion Ratio after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

(ii) Other Notices. If (A) the Corporation shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Corporation shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Corporation shall authorize the granting to all holders of the Common Stock of rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Corporation shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Corporation is a party, any sale or transfer of all or substantially all of the assets of the Corporation, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Corporation shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Corporation, then, in each case, the Corporation shall cause to be filed at each office or agency maintained for the purpose of conversion of this Series A Preferred Stock, and, except if such notice and the contents thereof shall be deemed to constitute material non-public information, shall cause to be delivered to each Holder at its last address as it shall appear upon the stock books of the Corporation, at least 20 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to

be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange, provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice.

Section 8. Miscellaneous.

(a) Notices. Any and all notices or other communications or deliveries to be provided by the Holders hereunder including, without limitation, any Notice of Conversion, shall be in writing and delivered personally, by facsimile, via email or sent by a nationally recognized overnight courier service, addressed to the Corporation, at 620 Memorial Drive, Suite 300, Cambridge, Massachusetts 02139, Attention: Nancy Simonian, M.D., email: nsimonian@syros.com, or such other email address or mailing address as the Corporation may specify for such purposes by notice to the Holders delivered in accordance with this Section. Any and all notices or other communications or deliveries to be provided by the Corporation hereunder shall be in writing and delivered personally, by facsimile, or sent by a nationally recognized overnight courier service addressed to each Holder at the facsimile number or address of such Holder appearing on the books of the Corporation, or if no such facsimile number or address appears on the books of the Corporation, at the principal place of business of such Holder. Any notice or other communication or deliveries hereunder shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number, or via email at the email address, specified in this Section prior to 5:30 p.m. (New York City time) on any date, (ii) the date immediately following the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number, or via email at the email address, specified in this Section between 5:30 p.m. and 11:59 p.m. (New York City time) on any date, (iii) the second Business Day following the date of mailing, if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given.

(b) Lost or Mutilated Series A Preferred Stock Certificate. If a Holder's Series A Preferred Stock certificate shall be mutilated, lost, stolen or destroyed, the Corporation shall execute and deliver, in exchange and substitution for and upon cancellation of a mutilated certificate, or in lieu of or in substitution for a lost, stolen or destroyed certificate, a new certificate for the shares of Series A Preferred Stock so mutilated, lost, stolen or destroyed, but only upon receipt of evidence of such loss, theft or destruction of such certificate, and of the ownership thereof, reasonably satisfactory to the Corporation and, in each case, customary and reasonable indemnity, if requested. Applicants for a new certificate under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Corporation may prescribe.

(c) Waiver. Any waiver by the Corporation or a Holder of a breach of any provision of this Certificate of Designation shall not operate as or be construed to be a waiver of any other breach of such provision or of any breach of any other provision of this Certificate of Designation or a waiver by any other Holders. The failure of the Corporation or a Holder to insist upon strict adherence to any term of this Certificate of Designation on one or more occasions shall not be considered a waiver or deprive that party (or any other Holder) of the right thereafter to insist upon strict adherence to that term or any other term of this Certificate of Designation. Any waiver by the Corporation or a Holder must be in writing. Notwithstanding any provision in this Certificate of Designation to the contrary, any provision contained herein and any right of the Holders of Series A Preferred Stock granted hereunder may be waived as to all shares of Series A Preferred Stock (and the Holders thereof) upon the written consent of the Holders of not less than a majority of the shares of Series A Preferred Stock then outstanding, unless a higher percentage is required by the DGCL, in which case the written consent of the Holders of not less than such higher percentage shall be required.

(d) Severability. If any provision of this Certificate of Designation is invalid, illegal or unenforceable, the balance of this Certificate of Designation shall remain in effect, and if any provision is inapplicable to any Person or circumstance, it shall nevertheless remain applicable to all other Persons and circumstances. If it shall be found that any interest or other amount deemed interest due hereunder violates the applicable law governing usury, the applicable rate of interest due hereunder shall automatically be lowered to equal the maximum rate of interest permitted under applicable law.

(e) Next Business Day. Whenever any payment or other obligation hereunder shall be due on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

(f) Headings. The headings contained herein are for convenience only, do not constitute a part of this Certificate of Designation and shall not be deemed to limit or affect any of the provisions hereof.

(g) Status of Converted Series A Preferred Stock. If any shares of Series A Preferred Stock shall be converted or reacquired by the Corporation, such shares shall resume the status of authorized but unissued shares of preferred stock and shall no longer be designated as Series A Preferred Stock.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Designation this 5th day of April, 2019.

/s/ Nancy Simonian, M.D.
Nancy Simonian, M.D.
President and Chief Executive Officer

ANNEX A

NOTICE OF CONVERSION

(TO BE EXECUTED BY THE REGISTERED HOLDER IN ORDER
TO CONVERT SHARES OF SERIES A PREFERRED STOCK)

The undersigned Holder hereby irrevocably elects to convert the number of shares of Series A Preferred Stock indicated below, represented by stock certificate No(s). _____ (the "**Preferred Stock Certificates**"), into shares of common stock, par value $0.001 per share (the "**Common Stock**"), of Syros Pharmaceuticals, Inc., a Delaware corporation (the "**Corporation**"), as of the date written below. If securities are to be issued in the name of a person other than the undersigned, the undersigned will pay all transfer taxes payable with respect thereto. Capitalized terms utilized but not defined herein shall have the meaning ascribed to such terms in that certain Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (the "**Certificate of Designation**") filed by the Corporation with the Secretary of State of the State of Delaware on April 5, 2019.

As of the date hereof, the number of shares of Common Stock beneficially owned by the undersigned Holder (together with such Holder's Affiliates, and any other Person whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) or Section 16 of the Exchange Act and the applicable regulations of the Commission, including any "group" of which the Holder is a member (the foregoing, "**Attribution Parties**")), including the number of shares of Common Stock issuable upon conversion of the Series A Preferred Stock subject to this Notice of Conversion, but excluding the number of shares of Common Stock which are issuable upon (A) conversion of the remaining, unconverted Series A Preferred Stock beneficially owned by such Holder or any of its Attribution Parties, and (B) exercise or conversion of the unexercised or unconverted portion of any other securities of the Corporation (including any warrants) beneficially owned by such Holder or any of its Attribution Parties that are subject to a limitation on conversion or exercise similar to the limitation contained in Section 6(c) of the Certificate of Designation, is _____and does not exceed the Beneficial Ownership Limitation (as defined in the Certificate of Designation). For purposes hereof, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the applicable regulations of the Commission. In addition, for purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and the applicable regulations of the Commission.

Conversion calculations:

Date to Effect Conversion: _____

Number of shares of Series
A Preferred Stock owned prior to Conversion: _____

Number of shares of Series
A Preferred Stock to be Converted: _____

Certificate No(s). if shares to be converted are certificated: _____

Number of shares of Common Stock to be Issued: _____

Address for delivery of physical certificates:

or

for DWAC Delivery: _____

DWAC Instructions: _____

Broker no: _____

Account no: _____

Exhibit 31.1

Certification of Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of Sarbanes-Oxley Act of 2002

I, Nancy Simonian, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Syros Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Syros Pharmaceuticals, Inc.

/s/ Nancy Simonian, M.D.

Nancy Simonian, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

Dated: May 1, 2019

Exhibit 31.2

Certification of Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of Sarbanes-Oxley Act of 2002

I, Joseph J. Ferra, Jr., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Syros Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Syros Pharmaceuticals, Inc.

/s/ Joseph J. Ferra, Jr.

Joseph J. Ferra, Jr.
Chief Financial Officer
(Principal Financial Officer)

Dated: May 1, 2019

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Syros Pharmaceuticals, Inc. (the "Company") for the quarter ended March 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Nancy Simonian, President and Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of her knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 1, 2019

/s/ Nancy Simonian, M.D.

Nancy Simonian, M.D.
President and Chief Executive Officer
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Syros Pharmaceuticals, Inc. (the "Company") for the quarter ended March 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Joseph J. Ferra, Jr., Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: May 1, 2019

/s/ Joseph J. Ferra, Jr.

Joseph J. Ferra, Jr.
Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.