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 September 30, 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)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Common stock, par value $0.001	SYRS	Nasdaq Global Select Market

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.

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 October 31, 2019: 42,441,227

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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 data to be reported from our clinical trials of SY-1425;
- our plans to progress SY-5609 through investigational new drug application, or IND, enabling preclinical studies by the end of 2019 and to initiate clinical development in the first quarter of 2020;
- 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 ability to replicate in any clinical trial of one of our product candidates the results we observed in preclinical or earlier clinical studies with such product candidate;
- 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)

	September 30, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 33,364	$ 49,886
Marketable securities	74,774	49,793
Prepaid expenses and other current assets	2,244	1,417
Restricted cash, current portion	638	638
Total current assets	111,020	101,734
Property and equipment, net	11,147	3,861
Other long-term assets	933	881
Restricted cash, net of current portion	3,376	290
Right-of-use assets – operating leases	16,496	—
Right-of-use asset – financing lease	859	—
Total assets	$ 143,831	$ 106,766
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 8,043	$ 3,309
Accrued expenses	11,204	13,893
Deferred revenue, current portion	1,114	1,926
Deferred rent, current portion	—	392
Financing and capital lease obligations, current portion	231	9
Operating lease obligations, current portion	1,978	—
Total current liabilities	22,570	19,529
Deferred rent, net of current portion	—	353
Deferred revenue, net of current portion	7,614	8,276
Financing and capital lease obligations, net of current portion	648	22
Operating lease obligations, net of current portion	18,425	—
Commitments and contingencies (See Note 8)		
Stockholders' equity:		
Preferred stock, $0.001 par value; 10,000,000 shares authorized at September 30, 2019 and December 31, 2018; 666 and 0 shares issued and outstanding at September 30, 2019 and December 31, 2018, respectively (equivalent to 666,000 shares of common stock upon conversion)	—	—
Common stock, $0.001 par value; 200,000,000 shares authorized at September 30, 2019 and December 31, 2018; 42,441,227 and 33,765,864 shares issued and outstanding at September 30, 2019 and December 31, 2018, respectively	43	34
Additional paid-in capital	367,764	296,100
Accumulated other comprehensive gain (loss)	21	(3)
Accumulated deficit	(273,254)	(217,545)
Total stockholders' equity	94,574	78,586
Total liabilities and stockholders' equity	$ 143,831	$ 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 September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Revenue	$ 558	$ 412	$ 1,474	$ 1,157
Operating expenses:				
Research and development	15,931	12,856	43,968	35,054
General and administrative	5,016	3,876	15,077	11,792
Total operating expenses	20,947	16,732	59,045	46,846
Loss from operations	(20,389)	(16,320)	(57,571)	(45,689)
Other income, net	596	583	1,862	1,442
Net loss applicable to common stockholders	$ (19,793)	$ (15,737)	$ (55,709)	$ (44,247)
Net loss per share applicable to common stockholders - basic and diluted	$ (0.47)	$ (0.47)	$ (1.42)	$ (1.37)
Weighted-average number of common shares used in net loss per share applicable to common stockholders - basic and diluted	42,439,338	33,653,479	39,324,751	32,306,261

See accompanying notes to unaudited condensed consolidated financial statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net loss	$ (19,793)	$ (15,737)	$ (55,709)	$ (44,247)
Other comprehensive gain (loss):				
Unrealized holding gains (losses) on marketable securities	17	(6)	24	29
Comprehensive loss	$ (19,776)	$ (15,743)	$ (55,685)	$ (44,218)

See accompanying notes to unaudited condensed consolidated financial statements.

SYROS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDER'S EQUITY
For the nine months ended September 30, 2019 and 2018
(in thousands, except share data)
(unaudited)

	Common Stock		Preferred Stock					
	Number of Shares	Par Value	Number of Shares	Par Value	Additional Paid-In Capital	Accumulated Other Comprehensive (Loss) Gain	Accumulated Deficit	Stockholders' Equity
Balance at December 31, 2017	26,423,376	$ 26	—	$ —	$ 220,606	$ (42)	$ (155,266)	$ 65,324
Exercise of stock options	103,153	—	—	—	488	—	—	488
Issuance of common stock to Incyte Corporation, net of issuance costs of $100	793,021	1	—	—	7,647	—	—	7,648
Issuance of common stock in underwritten public offering, net of issuance costs of $3,300	4,816,753	6	—	—	42,694	—	—	42,700
Issuance of common stock through private placement	144,505	—	—	—	1,380	—	—	1,380
Issuance of common stock at-the-market, net of issuance costs of $600	1,373,677	1	—	—	16,537	—	—	16,538
Stock-based compensation expense	—	—	—	—	4,977	—	—	4,977
Other comprehensive gain	—	—	—	—	—	29	—	29
Net loss	—	—	—	—	—	—	(44,247)	(44,247)
Balance at September 30, 2018	33,654,485	$ 34	—	$ —	$ 294,329	$ (13)	$ (199,513)	$ 94,837
Balance at December 31, 2018	33,765,864	$ 34	—	$ —	$ 296,100	$ (3)	$ (217,545)	$ 78,586
Exercise of stock options	7,780	—	—	—	51	—	—	51
Issuance of common stock and warrants in underwritten public offering, net of issuance costs of $4,600	8,667,333	9	—	—	60,350	—	—	60,359
Issuance of preferred stock and warrants in underwritten public offering, net of issuance costs of $400	—	—	666	—	4,638	—	—	4,638
Exercise of warrants	250	—	—	—	2	—	—	2
Stock-based compensation expense	—	—	—	—	6,623	—	—	6,623
Other comprehensive gain	—	—	—	—	—	24	—	24
Net loss	—	—	—	—	—	—	(55,709)	(55,709)
Balance at September 30, 2019	42,441,227	$ 43	666	$ —	$ 367,764	$ 21	$ (273,254)	$ 94,574

SYROS PHARMACEUTICALS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDER'S EQUITY
For the three months ended September 30, 2019 and 2018
(in thousands, except share data)
(unaudited)

	Common Stock		Preferred Stock					
	Number of Shares	Par Value	Number of Shares	Par Value	Additional Paid-In Capital	Accumulated Other Comprehensive (Loss) Gain	Accumulated Deficit	Stockholders' Equity
Balance at June 30, 2018	33,621,055	$ 34	—	$ —	$ 292,461	$ (7)	$ (183,776)	$ 108,712
Exercise of stock options	96	—	—	—	—	—	—	—
Issuance of common stock at-the-market, net of issuance costs of $10	33,334	—	—	—	330	—	—	330
Stock-based compensation expense	—	—	—	—	1,538	—	—	1,538
Other comprehensive loss	—	—	—	—	—	(6)	—	(6)
Net loss	—	—	—	—	—	—	(15,737)	(15,737)
Balance at September 30, 2018	33,654,485	$ 34	—	$ —	$ 294,329	$ (13)	$ (199,513)	$ 94,837
Balance at June 30, 2019	42,435,497	$ 43	666	$ —	$ 365,329	$ 4	$ (253,461)	$ 111,915
Exercise of stock options	5,480	—	—	—	45	—	—	45
Exercise of warrants	250	—	—	—	2	—	—	2
Stock-based compensation expense	—	—	—	—	2,388	—	—	2,388
Other comprehensive gain	—	—	—	—	—	17	—	17
Net loss	—	—	—	—	—	—	(19,793)	(19,793)
Balance at September 30, 2019	42,441,227	$ 43	666	$ —	$ 367,764	$ 21	$ (273,254)	$ 94,574

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

	Nine Months Ended September 30,	
	2019	**2018**
Operating activities		
Net loss	$ (55,709)	$ (44,247)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,686	1,172
Amortization of financing right-of-use asset	138	—
Loss on disposal of fixed assets	14	—
Stock-based compensation expense	6,623	4,977
Net amortization of premiums and discounts on marketable securities	(751)	(334)
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(827)	(758)
Other long-term assets	(2)	(45)
Accounts payable	92	369
Accrued expenses	(2,602)	1,529
Deferred revenue	(1,474)	11,095
Operating lease asset and liabilities	3,162	—
Deferred rent and lease incentive	—	(261)
Net cash used in operating activities	(49,650)	(26,503)
Investing activities		
Purchases of property and equipment	(4,481)	(1,189)
Proceeds from the disposition of property and equipment	—	9
Purchases of marketable securities	(108,206)	(72,000)
Maturities of marketable securities	84,000	42,500
Net cash used in investing activities	(28,687)	(30,680)
Financing activities		
Payments on financing and capital lease obligations	(149)	(48)
Proceeds from issuance of common stock through employee benefit plans	51	487
Proceeds from issuance of common stock through exercise of warrants	2	—
Proceeds from issuance of common stock and warrants in public offerings and private placements, net of issuance costs	60,359	68,508
Proceeds from issuance of convertible preferred stock and warrants in public offering, net of issuance costs	4,638	—
Net cash provided by financing activities	64,901	68,947
(Decrease) increase in cash, cash equivalents and restricted cash	(13,436)	11,764
Cash, cash equivalents and restricted cash (See Note 6)		
Beginning of period	50,814	32,688
End of period	$ 37,378	$ 44,452
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 52	$ 1
Non-cash investing and financing activities		
Property and equipment received but unpaid as of period end	$ 4,773	$ 77
Assets acquired under financing lease	$ 997	$ 28
Offering costs incurred but unpaid as of period end	$ 50	$ —

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 seeking to redefine the power of small molecules to control the expression of genes by elucidating regulatory regions of the genome.

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 September 30, 2019, the Company had an accumulated deficit of $273.3 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. The Company believes that its cash, cash equivalents and marketable securities of $108.1 million as of September 30, 2019 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 September 30, 2019, the results of its operations and statements of stockholder's equity for the three and nine months ended September 30, 2019 and 2018, and statements of cash flows for the nine months ended September 30, 2019 and 2018. Such adjustments are of a normal and recurring nature. The results for the nine months ended September 30, 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. These are developed based on the best information available under 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, restricted cash, accounts payable, accrued expenses, deferred revenue and financing and operating lease liabilities approximate their respective 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 and nine months ended September 30, 2019, the Company recognized approximately $0.6 million and $1.5 million of revenue, respectively. For the three and nine months ended September 30, 2018, the Company recognized approximately $0.4 million and $1.2 million of revenue, respectively. All revenue recognized for the periods presented is attributable to the Company's 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. If a contract is determined to be within the scope of ASC 606 at inception, the Company assesses the goods or services promised within such contract, determines which of those goods and services 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 or prepaid research and development services; 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 Company's drug discovery activities 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 condensed consolidated statements of operations based on their vesting date fair values. The Company estimates the fair value of stock 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 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. 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.

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 two-class 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 September 30,	
	2019	2018
Stock options	4,651,250	3,711,150
Unvested restricted stock	1,108,691	—
Warrants	2,118,094	—
Convertible preferred stock (*)	666,000	—
Total	8,544,035	3,711,150

* Reflecting 1 to 1,000 conversion ratio from preferred stock to common stock.

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 periodswithin 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 will 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 Company has also elected the practical expedient provided under ASC 842 for its operating and finance leases and will combine lease and non-lease components at the time of execution of the applicable lease. The primary effect of the new standard, as of the adoption date, was the recording of a right-of-use asset and lease liability for the current operating lease for the Company's office and laboratory facility at 620 Memorial Drive, Cambridge, Massachusetts. 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 non-employees over an estimated expected term or contractual term as well as elect to estimate forfeitures or account for forfeitures as they occur. ASU 2018-07 is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2018 and 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

Collaboration Agreement

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. For each option exercised by Incyte, Incyte will have the exclusive worldwide right to use the licensed intellectual property to develop and commercialize therapeutic products that modulate the target as to which the option was exercised. 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.

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 15 trading day period immediately preceding the date of the Stock Purchase Agreement.

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 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.

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 nine months ended September 30, 2019.

During the three and nine months ended September 30, 2019, the Company recognized $0.6 million and $1.5 million of revenue, respectively, and $0.4 million and $1.2 million during the three and nine months ended September 30, 2018, respectively, that was previously deferred under the Collaboration Agreement. As of September 30, 2019, the Company has deferred revenue outstanding under the Collaboration Agreement of approximately $8.7 million, of which $1.1 million and $7.6 million were classified as short and long-term, respectively, on the Company's condensed consolidated balance sheets.

The following table presents the changes in deferred revenue for thenine months ended September 30, 2019 (in thousands):

Nine months ended September 30, 2019	Balance at Beginning of Period	Additions	Deductions	Balance at End of Period
Deferred revenue	$ 10,202	$ —	$ 1,474	$ 8,728

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 September 30, 2019 and December 31, 2018 (in thousands):

September 30, 2019	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash and Cash equivalents:				
Cash and money market funds	$ 21,364	$ —	$ —	$ 21,364
Overnight repurchase agreements	12,000	—	—	12,000
Marketable Securities:				
U.S. treasury obligations	74,753	21	—	74,774
Total:	$ 108,117	$ 21	$ —	$ 108,138

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 nine months ended September 30, 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 September 30, 2019 and December 31, 2018, all marketable securities had maturities of less than twelve months when purchased and therefore were classified as short-term.

At September 30, 2019, the Company held two securities that were in an unrealized loss position. The aggregate fair value of securities held by the Company in an unrealized loss position for less than twelve months as of September 30, 2019 was $10.0 million. There were no securities held by the Company in an unrealized loss position for more than twelve months as of September 30, 2019. The Company has the intent and ability to hold such securities until recovery. The Company determined that there was no material change in the credit risk of the above marketable securities. As a result, the Company determined it did not hold any marketable securities with an other-than temporary impairment as of September 30, 2019.

5. Fair Value Measurements

Assets measured at fair value on a recurring basis as of September 30, 2019 and December 31, 2018 were as follows (in thousands):

Description	September 30, 2019	Active Markets (Level 1)	Observable Inputs (Level 2)	Unobservable Inputs (Level 3)
Cash and cash equivalents:				
Cash and money market funds	$ 21,364	$ 21,364	$ —	$ —
Overnight repurchase agreements	12,000	—	12,000	—
Marketable securities:				
U.S. treasury obligations	74,774	74,774	—	—
	$ 108,138	$ 96,138	$ 12,000	$ —

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 September 30, 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 was classified as long-term restricted cash on the Company's condensed consolidated balance sheet as of September 30, 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 was classified 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 initial term of the letter of credit expired on September 30, 2019 and under the terms of the manufacturing agreement, automatically renewed for an additional one-year period. The letter of credit will continue to automatically renew for additional one-year periods unless 90 days' notice is provided to the bank by the Company or unless released by the third-party manufacturer. The letter of credit was classified as short-term on the Company's condensed consolidated balance sheets as of September 30, 2019.

In October 2019, the third-party manufacturer released the Company from the letter of credit in accordance with the terms of the manufacturing agreement. In connection with this release, the Company collected the $0.6 million in full and the letter of credit is no longer outstanding.

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 Company's condensed consolidated statement of cash flows as of September 30, 2019, December 31, 2018, September 30, 2018 and December 31, 2017 (in thousands):

	September 30, 2019	December 31, 2018	September 30, 2018	December 31, 2017
Cash and cash equivalents	$ 33,364	$ 49,886	$ 43,524	$ 32,205
Restricted cash, current portion	638	638	638	193
Restricted cash, net of current portion	3,376	290	290	290
Total cash, cash equivalents and restricted cash	$ 37,378	$ 50,814	$ 44,452	$ 32,688

7. Accrued Expenses

Accrued expenses consisted of the following as of September 30, 2019 and December 31, 2018 (in thousands):

	September 30, 2019	December 31, 2018
External research and preclinical development	$ 7,271	$ 10,119
Employee compensation and benefits	3,323	2,985
Professional fees	549	618
Facilities and other	61	171
	$ 11,204	$ 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. In November 2019, the Company and its landlord agreed to terminate the 2015 Lease effective December 31, 2019. 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 amortized these incentives as a reduction of rent expense over the lease term. The related fixed assets were being amortized over the expected lease term. Effective January 1, 2019, upon the adoption of ASC 842, the Company recorded a right-of use asset and lease liability of $1.5 million and $2.2 million, respectively, with the remaining deferred rent and tenant allowance incentive included as an offsetting balance within the right-of-use asset. On the Company's condensed consolidated balance sheets, the Company classified $1.3 million of the lease liability as short-term and $0.1 million of the lease liability as long-term as of September 30, 2019.

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. The 2019 Lease has escalating rent payments and the Company records rent expense on a straight-line basis over the term of the 2019 Lease, including any rent-free periods. The 2019 Lease includes certain lease incentives in the form of tenant allowances. The 2019 Lease also includes an abatement period in which the Company is not required to remit monthly rent payments until March 2020.

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, for purposes of applying ASC 842, the commencement date of the 2019 Lease occurred on May 1, 2019. The Company recorded a right-of-use asset and lease liability of $15.8 million using an incremental borrowing rate of 9.3%, net of tenant allowances of $9.3 million, on the May 1, 2019 lease commencement date. The Company is amortizing the tenant allowance over the term of the 2019 Lease starting at the lease commencement date on a straight-line basis. On the Company's condensed consolidated balance sheets, the Company classified $0.7 million of the lease liability as short-term and $18.3 million of the lease liability as long-term as of September 30, 2019.

The Company elected the practical expedient provided under ASC 842 and therefore has combined all lease and non-lease components when determining the right-of-use asset and lease liability for the 2019 Lease.

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 the then-current fair market value of the equipment. The Company accounted 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 at the time of executing the Equipment Lease.

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 September 30, 2019 (in thousands):

	Operating	Financing/Capital
Three months ending December 31, 2019	$ 358	$ 76
Year ended December 31, 2020	4,252	304
Year ended December 31, 2021	3,824	300
Year ended December 31, 2022	3,935	299
Year ended December 31, 2023	4,049	51
Year ended December 31, 2024 and beyond	27,709	—
Total minimum lease payments	$ 44,127	$ 1,030
Less imputed interest	16,648	151
Less leasehold incentive	7,076	—
Total lease liability	$ 20,403	$ 879

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 September 30, 2019 (in thousands):

	Three Months Ended September 30, 2019	Nine Months Ended September 30, 2019
Lease cost:		
Operating lease cost	$ 959	$ 1,893
Financing lease cost:		
Amortization of right-of-use asset	$ 61	$ 138
Interest on lease liabilities	21	52
Total financing lease cost	$ 82	$ 190
Cash paid for amounts included in the measurement of liabilities		
Operating cash flows from operating leases	$ 330	$ 989
Operating cash flows from financing lease	$ 76	$ 200

Other information:	Nine Months Ended September 30, 2019
Weighted-average remaining lease term (in years) - operating lease	9.71
Weighted-average discount rate - operating lease	9.35 %
Weighted-average remaining lease term (in years) - financing lease	3.49
Weighted-average discount rate - financing lease	9.32 %

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 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 nine months ended September 30, 2019 and 2018.

9. Convertible Preferred Stock and Warrants

Concurrent Public Offerings and Accounting Treatment

On April 9, 2019, the Company completed two concurrent underwritten public offerings of its equity securities. In the first public offering, 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 second public offering, the Company sold 666 shares of its Series A convertible preferred stock (the "Series A Preferred 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. The offerings resulted in aggregate gross proceeds to the Company of $70.0 million, before underwriting discounts and commissions and offering expenses payable by the Company of approximately $5.0 million.

Each share of Series A Preferred 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. This percentage may be changed at the holder's election to a higher or lower percentage upon 61 days' notice to the Company.

As of September 30, 2019, all 666 shares of Series A Preferred Stock remain outstanding and have not been converted into shares of common stock.

Each Warrant has an exercise price per share of common stock of $8.625, subject to adjustment in certain circumstances, and will expire on October 10, 2022. Each Warrant is immediately exercisable, provided that the holder is prohibited, subject to certain exceptions, from exercising the Warrant for shares of the Company's common stock to the extent that immediately prior to or after giving effect to such exercise, the holder, together with its affiliates and other attribution parties, would own more than 4.99% of the total number of shares of the Company's common stock then issued and outstanding. This percentage may be changed at the holders' election to a higher or lower percentage upon 61 days' notice to the Company.

The Company evaluated the Series A Preferred Stock and Warrants for liability or equity classification in accordance with the provisions of ASC 480, *Distinguishing Liabilities from Equity*, and determined that equity treatment was appropriate because neither the Series A Preferred Stock nor the Warrants met the definition of liability instruments.

The Series A Preferred Stock is not mandatorily redeemable and does not embody an obligation to buy back the shares outside of the Company's control in a manner that could require the transfer of assets. Additionally, the Company determined that the Series A Preferred Stock would be recorded as permanent equity, not temporary equity, given that the holders of equally and more subordinated equity would be entitled to receive the same form of consideration upon the occurrence of the event that gives rise to the redemption or events of redemption that are within the control of the company.

Additionally, as the effective conversion price of the Series A Preferred Stock of $6.57 was below the fair value of the Company's common stock on the date of issuance of $7.50, the Company determined that the Series A Preferred Stock included a beneficial conversion feature. The Company calculated the beneficial conversion feature to be approximately $0.6 million, which was recorded as a discount to the Series A Preferred Stock at the time of issuance.

The Warrants are classified as component of permanent equity because they are freestanding financial instruments that are legally detachable and separately exercisable from the shares of common stock with which they were issued, are immediately exercisable, do not embody an obligation for the Company to repurchase its shares, and permit the holders to receive a fixed number of shares of common stock upon exercise. In addition, the Warrants do not provide any guarantee of value or return. The Company valued the Warrants at issuance using the Black-Scholes option pricing model and determined the fair value of the Warrants to purchase 2,118,344 shares of the Company's common stock at $9.0 million. The key inputs to the valuation model included an average volatility of 86.06% and an expected term of 3.5 years.

As of September 30, 2019, Warrants to purchase 2,118,094 shares of common stock are outstanding and remain unexercised.

Description of Series A Preferred Stock

Voting Rights

The Series A Preferred Stock will generally have no voting rights except as required by law and except that the consent of the holders of a majority of the Company's outstanding shares of Series A Preferred Stock will be required to amend the terms of the Series A Preferred Stock or take certain other actions with respect to the Series A Preferred Stock.

Dividends

The Series A Preferred 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 the Company's common stock.

Liquidation Rights

Subject to the prior and superior rights of the holders of any securities ranking senior to the Series A Preferred Stock of the Company, upon liquidation, dissolution or winding up of the Company, 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 Company to the holders of common stock, 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.

If, upon any such liquidation, dissolution or winding up of the Company, the assets of the Company 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 Company shall be distributed ratably to holders of the shares of the Series A Preferred Stock 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.

Conversion

Each share of Series A Preferred Stock is convertible, at any time and from time to time from and after the issuance date, at the option of the holder thereof, into 1,000 shares of common stock, provided that the holder will be prohibited from converting Series A Preferred Stock into shares of the Company's common stock if, as a result of such conversion, the holder, together with its affiliates and attribution parties, would own more than 9.99% of the total number of shares of common stock then issued and outstanding. The holder can change this requirement to a higher or lower percentage upon 61 days' notice to the Company.

Redemption

The Company is not obligated to redeem or repurchase any shares of Series A Preferred Stock. Shares of Series A Preferred Stock are not entitled to any redemption rights or mandatory sinking fund or analogous fund provisions.

10. 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, 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 September 30, 2019, 2,152,477 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, 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 September 30, 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 have a contractual term of ten years from the grant date.

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 and nine months ended September 30, 2019. As of September 30, 2019, there was $0.9 million of unrecognized stock-based compensation expense related to the performance-based stock options granted to management, with an expected recognition period of 3.0 years.

The Company has granted options to purchase 75,000 shares of common stock to an advisor that vest solely upon the achievement of performance-based criteria. As of September 30, 2019, none of such performance-based criteria had been achieved. As of September 30, 2019, there was $0.3 million of unrecognized compensation cost related to this option, with a remaining contractual period of 7.0 years.

A summary of the status of stock options as of December 31, 2018 and September 30, 2019 and changes during the nine months ended September 30, 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	1,107,000	6.73		
Exercised	(7,780)	6.48		
Cancelled	(180,613)	10.02		
Outstanding at September 30, 2019	4,651,250	$ 9.13	7.8	$ 9,419
Exercisable at September 30, 2019	2,085,000	$ 9.15	6.8	$ 4,591

The intrinsic value of stock options exercised during the nine months ended September 30, 2019 and 2018 was $19,300 and $0.8 million, respectively.

As of September 30, 2019, there was $14.1 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 2.8 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. Restricted stock units granted to the Company's executive officers during the nine months ended September 30, 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 September 30, 2019 and changes during the nine months ended September 30, 2019 is presented below:

	Shares	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2018	—	$ —
Granted	1,145,625	6.77
Vested	—	—
Forfeited	(36,934)	6.71
Outstanding at September 30, 2019	1,108,691	$ 6.77

As of September 30, 2019, there was $6.2 million of unrecognized stock-based compensation expense related to outstanding restricted stock units, with an expected recognition period of 3.2 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 September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Weighted-average risk-free interest rate	1.88 %	2.87 %	2.46 %	2.49 %
Expected dividend yield	— %	— %	— %	— %
Expected option term (in years)	6.08	6.08	6.02	6.03
Volatility	89.91 %	89.71 %	91.49 %	90.34 %

The weighted-average grant date fair value per share of options granted in the nine months ended September 30, 2019 and 2018 was $5.10 and $8.15, 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 September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Research and development	$ 874	$ 550	$ 2,490	$ 1,785
General and administrative	1,515	987	4,133	3,192
Total stock-based compensation expense	$ 2,389	$ 1,537	$ 6,623	$ 4,977

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.

Item 2. Management's Discussion 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 and in this Quarterly Report on Form 10-Q.

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 seeking to redefine the power of small molecules to control the expression of genes. Based on our unique ability to elucidate regulatory regions of the genome, we aim to develop medicines that provide a profound benefit for patients with diseases that have eluded other genomics-based approaches. 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 a genomically defined subset of patients with AML; and

- SY-5609, a highly selective and potent oral inhibitor of cyclin-dependent kinase 7, or CDK7, which is being evaluated in an investigational new drug application, or IND, enabling preclinical studies.

In October 2019, we announced a decision to prioritize the development of SY-5609 and to discontinue further development of SY-1365, our intravenously administered CDK7 inhibitor for which we are conducting a Phase 1 clinical trial in patients with advanced solid tumors.

We also have multiple preclinical and discovery programs in oncology and monogenic diseases, including sickle cell disease. We also 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.

Our ongoing Phase 2 clinical trial is assessing the safety and efficacy of SY-1425 in combination with azacitidine in approximately 25 newly diagnosed AML patients who are "unfit", meaning that they are not suitable candidates for standard chemotherapy, who have been prospectively selected using our proprietaryRARA or IRF8 biomarkers, as well as in approximately 25 newly diagnosed unfit AML patients who are biomarker-negative. The biomarker-negative patients are being enrolled to support the development of a commercial companion diagnostic test for SY-1425. In addition, we are evaluating the safety and efficacy of SY-1425 in combination with azacitidine in approximately 25 relapsed or refractory AML patients who are being prospectively selected using the RARA biomarker.

At the European School of Haematology International Conference on AML held in October 2019, or ESH, we reported data from the newly diagnosed unfit AML cohorts of the Phase 2 clinical trial as of an August 22, 2019 data cut-off, and we continue to enroll and follow patients in the trial. Enrollment in the newly diagnosed unfit AML cohorts of the trial is expected to be complete in the fourth quarter of 2019. As of the data cut-off, 40 newly diagnosed unfit AML patients had been enrolled in the trial and were eligible for the safety analysis. We reported at ESH 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. Across all grades and causalities, the most commonly reported adverse events in these cohorts of the trial were nausea, decreased appetite, constipation, fatigue and peripheral edema, the majority of which were low grade. Of the 17 biomarker-positive patients evaluable for response, 13 were RARA-positive and four were IRF8-positive. We reported at ESH that the aggregate rate of complete response, or CR, and complete response with incomplete blood count recovery, or CRi, in each case as defined by Revised International Working Group, or IWG, criteria, as of the data cut-off in RARA-positive patients was 62% and the CR rate was 54%. The duration of responses in RARA-positive patients was up to 344 days, with three of the eight responding patients having responses lasting beyond seven months at the time of the data cut-off. In patients with only the IRF8 biomarker, the CR/CRi rate was 0%, supporting our decision to use RARA as the sole biomarker for patient selection in SY-1425 clinical trials going forward. Most of the initial responses reported were seen at the end of the first treatment cycle. In 22 response-evaluable RARA-negative patients, the CR/CRi rate was 27%. Single-agent azacitidine has shown response rates of 18-29% in newly-diagnosed unfit AML patients, with initial responses generally occurring after four cycles of treatment in most patients who respond. We expect to report potential proof-of-concept data from the relapsed or refractory AML cohort of this trial in 2020.

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 patients with select solid tumors, including breast, lung and ovarian cancers, and in solid tumors of any histology having retinoblastoma-pathway, or Rb pathway, alterations, in the first quarter of 2020. At the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics held in October 2019, or ENA, we presented preclinical data characterizing the profile of SY-5609. These data show that SY-5609 is a potent and highly selective CDK7 inhibitor, with at least 13,000-fold greater selectivity for CDK7 over closely related members of the cyclin- dependent kinase family. In addition, we reported at ENA that SY-5609 induced dose-dependent tumor growth inhibition in preclinical models of ovarian and breast cancer, tumor regressions that were sustained after the end of treatment at well-tolerated doses in multiple preclinical models of triple-negative breast, small cell lung, and high-grade serous ovarian cancers, and anti-tumor activity in combination with fulvestrant, a hormonal therapy, in treatment-resistant preclinical models of estrogen-positive breast cancer. We have shown that SY-5609 inhibits CDK7 more potently and selectively than SY-1365, and that SY-5609 demonstrated at well-tolerated doses greater tumor growth inhibition than SY-1365 in preclinical models in which both agents were studied, including models that were not responsive to SY-1365.

In October 2019, we announced data from the expansion portion of our Phase 1 clinical trial evaluating SY-1365 in multiple solid tumor indications. As of a September 30, 2019 data snapshot, 68 patients had been treated in the expansion portion of this trial, including 53 across the single-agent cohorts in patients with high-grade serous ovarian cancer, relapsed clear cell ovarian cancer, and solid tumors of any histology available for biopsy, and 15 patients in combination cohorts evaluating SY-1365 in combination with carboplatin, a chemotherapeutic agent, in patients with high-grade serous ovarian cancer and in combination with fulvestrant in patients with treatment-resistant metastatic hormone-receptor positive breast cancer. We initiated the single-agent expansion cohorts at a dose of 80 mg/m^2 twice weekly and the combination cohorts at 53 mg/m^2 once weekly. During the expansion, adverse events occurring around the time of infusion of SY-1365, which we believe to be related to the intravenous administration of SY-1365, prompted us to evaluate lower doses in the single-agent cohorts and extended infusion times across all of the cohorts. We refer to adverse events occurring around the time of infusion as peri-infusional adverse events. Extended infusion times reduced peak drug concentrations while maintaining CDK7 target occupancy and appeared to reduce the overall frequency and severity of these peri-infusional adverse events, including headache, nausea and vomiting. The best response observed

across the expansion cohorts of the trial was stable disease, as defined by Response Evaluation Criteria in Solid Tumors criteria. Of the 31 response-evaluable patients treated with SY-1365 as a single agent, 13 of them, or 42%, had stable disease. Of the 11 response-evaluable patients treated in the combination cohorts of the trial, seven of them, or 64%, had stable disease. Based on preclinical and clinical data generated to date, we believe that sustaining the level of CDK7 target coverage needed to enhance clinical activity with SY-1365 would require more frequent dosing, or a higher dose that would necessitate lengthening the infusion to manage tolerability. We believe that either approach could create an overly burdensome dosing regimen for patients that could be better addressed with an oral agent like SY-5609. This belief, coupled with thesuperior preclinical data generated with SY-5609 and a competitive landscape increasingly focused on oral agents, led us to make a portfolio decision to discontinue further development of SY-1365 and prioritize the development of SY-5609.

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 September 30, 2019, we raised an aggregate of $358.7 million from such transactions, including aggregate proceeds of $70.0 million through concurrent public offerings of equity securities in April 2019.

Since inception, we have incurred significant operating losses. Our net losses were $55.7 million and$44.2 million for the nine months ended September 30, 2019 and 2018, respectively. As of September 30, 2019, we had an accumulated deficit of $273.3 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 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 only 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 and nine months ended September 30, 2019, we recognized approximately $0.6 million and $1.5 million of revenue, respectively. For the three and nine months ended September 30, 2018, we recognized approximately $0.4 million and $1.2 million of revenue, respectively. All revenue recognized for the periods presented 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 and nine months ended September 30, 2019 and 2018 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
SY-1425 external costs (1)	$ 2,342	$ 1,723	$ 4,157	$ 5,296
SY-1365 and other CDK7 program external costs (1)	5,020	4,834	13,515	11,956
Other research and platform program external costs	2,271	1,900	8,329	4,754
Employee-related expenses, including stock-based compensation	4,673	3,331	14,009	10,020
Facilities and other expenses	1,625	1,068	3,958	3,028
Total research and development expenses	$ 15,931	$ 12,856	$ 43,968	$ 35,054

(1) The results for the nine months ended September 30, 2019 include credits of $1.9 million and $1.2 million for our SY-1425 and SY-1365 clinical trials, respectively, due to a change in estimate of costs incurred over the life of these clinical trials through March 31, 2019.

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

- successful completion of preclinical studies, including 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 and interest and amortization of premiums and discounts on our investments in marketable securities, net of interest expense related to our equipment financing and capital lease 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. 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 September 30, 2019.

Results of Operations

Comparison of three months ended September 30, 2019 and 2018

The following table summarizes our results of operations for the three months ended September 30, 2019 and 2018, together with the changes in those items in dollars (in thousands):

	Three Months Ended September 30,			
	2019	2018	Dollar Change	% Change
Statements of Operations Data:				
Revenue	$ 558	$ 412	$ 146	35 %
Operating expenses:				
Research and development	15,931	12,856	3,075	24 %
General and administrative	5,016	3,876	1,140	29 %
Total operating expenses	20,947	16,732	4,215	25 %
Other income, net	596	583	13	2 %
Net loss	$ (19,793)	$ (15,737)	$ 4,056	26 %

Revenue

For the three months ended September 30, 2019 and 2018, we recognized approximately $0.6 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 $3.1 million, or 24%, from $12.9 million for the three months ended September 30, 2018 to $15.9 million for the three months ended September 30, 2019. The following table summarizes our research and development expenses for the three months ended September 30, 2019 and 2018, together with the changes to those items in dollars (in thousands):

	Three Months Ended September 30,			
	2019	2018	Dollar Change	% Change
External research and development	$ 8,710	$ 7,871	$ 839	11 %
Employee-related expenses, excluding stock-based compensation	3,798	2,781	1,017	37 %
Stock-based compensation	875	550	325	59 %
Consulting, licensing and professional fees	923	587	336	57 %
Facilities and other expenses	1,625	1,067	558	52 %
Total research and development expenses	$ 15,931	$ 12,856	$ 3,075	24 %

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

- an increase of approximately $0.8 million, or 11%, for external research and development costs, primarily due to increases in costs associated with the continued advancement of our existing clinical trials and advancement of our preclinical programs, including the advancement of SY-5609 into IND-enabling studies;
- an increase of approximately $1.0 million, or 37%, for increased employee-related expenses, including increased salary and benefits, primarily due to our increased headcount;
- an increase of approximately $0.3 million, or 59%, for stock-based compensation expense, also primarily due to our increased headcount;
- an increase of approximately $0.3 million, or 57%, 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 preclinical programs; and
- an increase of approximately $0.6 million, or 52%, in facilities and other expenses primarily due to the rent expense related to the lease for our new headquarters, over which we took possession for accounting purposes in May 2019.

General and Administrative Expense

General and administrative expense increased by approximately $1.1 million, or 29%, from $3.9 million for the three months ended September 30, 2018 as compared to $5.0 million for the three months ended September 30, 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 due to our increased headcount.

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 and capital lease arrangements. The increase in other income from the three months ended September 30, 2018 as compared to the three months ended September 30, 2019 is due to higher returns on our cash balances resulting from higher interest rates during 2019, notwithstanding slightly lower cash balances in that period.

Comparison of nine months ended September 30, 2019 and 2018

The following table summarizes our results of operations for the nine months ended September 30, 2019 and 2018, together with the changes in those items in dollars (in thousands):

	Nine Months Ended September 30,			
	2019	2018	Dollar Change	% Change
Statements of Operations Data:				
Revenue	$ 1,474	$ 1,157	$ 317	27 %
Operating expenses:				
Research and development	43,968	35,054	8,914	25 %
General and administrative	15,077	11,792	3,285	28 %
Total operating expenses	59,045	46,846	12,199	26 %
Other income, net	1,862	1,442	420	29 %
Net loss	$ (55,709)	$ (44,247)	$ 11,462	26 %

Revenue

For the nine months ended September 30, 2019 and 2018, we recognized approximately $1.5 million and $1.2 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 $8.9 million, or 25%, from $35.1 million for the nine months ended September 30, 2018 to $44.0 million for the nine months ended September 30, 2019. The following table summarizes our research and development expenses for the nine months ended September 30, 2019 and 2018, together with the changes to those items in dollars (in thousands):

	Nine Months Ended September 30,			
	2019	2018	Dollar Change	% Change
External research and development	$ 23,302	$ 20,595	$ 2,707	13 %
Employee-related expenses, excluding stock-based compensation	11,520	8,235	3,285	40 %
Stock-based compensation	2,490	1,785	705	39 %
Consulting, licensing and professional fees	2,699	1,410	1,289	91 %
Facilities and other expenses	3,957	3,029	928	31 %
Total research and development expenses	$ 43,968	$ 35,054	$ 8,914	25 %

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

- an increase of approximately $2.7 million, or 13%, for external research and development costs, primarily due to increases in costs associated with the continued advancement of our existing clinical trials and advancement of our preclinical programs, including the advancement of SY-5609 into IND-enabling studies, offset by a change in estimate of clinical trial costs for SY-1425 and SY-1365 that was recorded during the first quarter of 2019;
- an increase of approximately $3.3 million, or 40%, for increased employee-related expenses, including increased salary and benefits, primarily due to our increased headcount;
- an increase of approximately $0.7 million, or 39%, for stock-based compensation expense, also primarily due to our increased headcount;
- an increase of approximately $1.3 million, or 91%, 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 preclinical programs; and

- an increase of approximately $0.9 million, or 31%, in facilities and other expenses primarily due to the rent expense related to the lease for our new headquarters, over which we took possession for accounting purposes in May 2019.

General and Administrative Expense

General and administrative expense increased by approximately $3.3 million, or 28% from $11.8 million for the nine months ended September 30, 2018 as compared to $15.1 million for the nine months ended September 30, 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 primarily due to increased headcount, offset by the acceleration of certain performance-based stock options associated with entry into our target discovery collaboration with Incyte in January 2018, which did not reoccur in the current period.

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 and capital lease arrangements. The increase in other income from the nine months ended September 30, 2018 to the nine months ended September 30, 2019 is due to higher average balances of cash equivalents and marketable securities during the nine months ended September 30, 2019 as compared to the nine months ended September 30, 2018.

Liquidity and Capital Resources

Sources of Liquidity

We funded our operations from inception through September 30, 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 September 30, 2019, we had $32.8 million remaining for issuance under the sales agreement.

As of September 30, 2019, $91.8 million of securities remained available for issuance under the shelf registration agreement.

As of September 30, 2019, we had cash, cash equivalents and marketable securities of approximately $108.1 million.

Cash Flows

The following table provides information regarding our cash flows for the nine months ended September 30, 2019 and 2018 (in thousands):

	Nine Months Ended September 30,	
	2019	2018
Net cash (used in) provided by:		
Operating activities	$ (49,650)	$ (26,503)
Investing activities	(28,687)	(30,680)
Financing activities	64,901	68,947
Net (decrease) increase in cash, cash equivalents and restricted cash	$ (13,436)	$ 11,764

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 $49.7 million during the nine months ended September 30, 2019 compared to $26.5 million for the nine months ended September 30, 2018. The increase in cash used in operating activities was primarily due to a $11.5 million increase in our net loss for the nine months ended September 30, 2019 due to increased research and development spend and general and administrative costs to support our research and development activities as compared to the nine months ended September 30, 2018 as well as the proceeds received in January 2018 upon entry into the Incyte target discovery collaboration.

Net Cash Used in Investing Activities

Net cash used in investing activities was $28.7 million during the nine months ended September 30, 2019 compared to $30.7 million during the nine months ended September 30, 2018. The decrease in cash used in investing activities was primarily due to net purchases of marketable securities of $24.2 million during the nine months ended September 30, 2019 as compared to $29.5 million during the nine months ended September 30, 2018. This decrease was offset by $4.5 million of purchases of property and equipment during the nine months ended September 30, 2019 as compared to $1.2 million during the nine months ended September 30, 2018.

Net Cash Provided by Financing Activities

Net cash provided by financing activities was $64.9 million during the nine months ended September 30, 2019 compared to $68.9 million for the nine months ended September 30, 2018. Cash provided by financing activities for the nine months ended September 30, 2019 was primarily due to $65.0 million in net proceeds raised through two concurrent public offerings of equity securities that closed in April 2019, offset by payments of $0.1 million under our capital lease obligations. Net cash provided by financing activities for the nine months ended September 30, 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 our February 2018 private placement, $7.7 million in proceeds attributable to the equity investment made by Incyte in connection with entry into our target discovery collaboration, $16.6 million in net proceeds from the use of our at-the-market sales facility, and $0.5 million from the exercise of employee stock options, offset by payments of $0.1 million 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, 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 September 30, 2019, will enable us to fund our planned operating expense and capital expenditure requirements to the end of the second 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 any associated companion diagnostic test, as well as the scope, progress, timing, costs and results of IND-enabling studies of SY-5609;
- the timing of wind-down activities for SY-1365 following our announcement in October 2019 that we are ceasing further development of that product candidate as part of a prioritization of our CDK7 product portfolio;
- 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

Except with respect to contractual obligations related to our operating and financing leases which are discussed in Note 8 to our unaudited condensed consolidated financial statements included elsewhere in this report, during the nine months ended September 30, 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.

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 September 30, 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 nine months ended September 30, 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 officers, 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 September 30, 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

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.

The following information updates, and should be read in conjunction with, the risk factors discussed in Part I, Item 1A, "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2018. Any of the risk factors contained in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K could materially affect our business, financial condition or future results, and such risk factors may not be the only risks we face. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition or future results.

Risks Related to Our Financial Position and Need for Additional Capital

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

We have incurred significant annual net operating losses in every year since our inception. We expect to continue to incur significant and increasing net operating losses for at least the next several years. Our net losses were $62.3 million, $54.0 million and $47.7 million for the years ended December 31, 2018, 2017 and 2016, respectively. As of September 30, 2019, we had an accumulated deficit of $273.3 million. We have not generated any revenues from product sales, have not completed the development of any product candidate and may never have a product candidate approved for commercialization. We have financed our operations to date primarily through the sale of equity securities. We have devoted substantially all of our financial resources and efforts to research and development and general and administrative expense to support such research and development. Our net losses may fluctuate significantly from quarter to quarter and year to year. Net losses and negative cash flows have had, and will continue to have, an adverse effect on our stockholders' equity (deficit) and working capital.

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

- continue our planned clinical development activities with respect to SY-1425, a selective retinoic acid receptor alpha, or RARα, agonist that is currently being evaluated in combination with azacitidine, a hypomethylating agent, in a Phase 2 clinical trial, and SY-5609, an oral cyclin-dependent kinase 7, or CDK7, inhibitor for which clinical development is expected to begin in the first quarter of 2020;
- 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.

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

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

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is a very time consuming, expensive and uncertain process that takes years to complete. We expect our expenses to increase in connection with our ongoing activities, particularly with respect to our ongoing Phase 2 clinical trial of SY-1425 in combination with azacitidine and the development of a companion diagnostic test for use in identifying patients who may benefit from treatment with SY-1425, and as we advance SY-5609 through investigational new drug application, or IND, enabling studies, initiate new research, preclinical and clinical development efforts, and seek marketing approval for any product candidates and companion diagnostic tests that we or a vendor successfully develop. Moreover, under license agreements with various licensors, we are obligated to make milestone payments upon the successful completion of specified development and commercialization activities for products or product candidates covered by licensed intellectual property rights. In addition, if we obtain marketing approval for any product candidate that we may successfully develop, we may incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution to the extent that such sales, marketing, manufacturing and distribution are not the responsibility of a future collaborator. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we may be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

We will be required to expend significant funds in order to advance the development of SY-1425 and SY-5609, as well as our other research and preclinical programs. In addition, while we may seek one or more collaborators for future development of our current product candidates or any future product candidates that we may develop for one or more indications, we may not be able to enter into a collaboration for any of our product candidates for such indications on suitable terms, on a timely basis, or at all. In any event, our existing cash, cash equivalents and marketable securities will not be sufficient to fund all of the efforts that we plan to undertake or to fund the completion of development of our product candidates or our other preclinical programs. Accordingly, we will be required to obtain further funding through public or private equity offerings, debt financings, collaborations and licensing arrangements or other sources. We do not have any committed external source of funds to support our internal research and development efforts. Adequate additional financing may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed would have a negative impact on our financial condition and our ability to pursue our business strategy.

We believe that our cash, cash equivalents and marketable securities as ofSeptember 30, 2019 will enable us to fund our planned operating expense and capital expenditure requirements to the end of the second quarter of 2021. Our estimate as to how long we expect our existing cash, cash equivalents, and marketable securities to be able to continue to fund our operations is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Further, changing circumstances, some of which may be beyond our control, could cause us to consume capital significantly faster than we currently anticipate, and we may need to seek additional funds sooner than planned. Our future funding requirements, both short-term and long-term, will depend on many factors, including:

- the scope, progress, timing, costs and results of clinical trials of SY-1425 and any associated companion diagnostic test as well as the scope, progress, timing, costs and results of IND-enabling studies of SY-5609;
- the timing of wind-down activities for SY-1365 following our announcement in October 2019 that we are ceasing further development of that product candidate as part of a prioritization of our CDK7 product portfolio;
- 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 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 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 gene control platform;
- revenue received from commercial sales, if any, of our current and future product candidates;
- our headcount growth and associated costs as we advance our research and development programs 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.

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

In the near term, we are dependent on the success of SY-1425 and SY-5609. If we are unable to initiate or complete the clinical development of, obtain marketing approval for or successfully commercialize SY-1425 or SY-5609, either alone or with a collaborator, or if we experience significant delays in doing so, our business could be substantially harmed.

We currently have no products approved for sale and are investing a significant portion of our efforts and financial resources in the development of SY-1425 and SY-5609. Our prospects are substantially dependent on our ability, or that of any future collaborator, to develop, obtain marketing approval for and successfully commercialize product candidates in one or more disease indications.

The success of SY-1425 and SY-5609 will depend on several factors, including the following:

- successful initiation, enrollment and completion of clinical trials;
- a safety, tolerability and efficacy profile, alone or in combination with other approved or investigational products, that is satisfactory to the U.S. Food and Drug Administration, or FDA, or any comparable foreign regulatory authority for marketing approval;
- timely receipt of marketing approvals from applicable regulatory authorities;
- the successful development and approval of companion diagnostic tests for use in identifying patients who may benefit from treatment with SY-1425;
- competition from approved or other investigational agents or changes in the standard of care for the disease indications we are pursuing;
- the performance of our future collaborators, if any;
- the extent of any required post-marketing approval commitments to applicable regulatory authorities;
- establishment of supply arrangements with third-party suppliers of raw materials and drug substance and drug product manufacturers;
- establishment of arrangements with third-party manufacturers to obtain finished drug product that is appropriately packaged for sale;
- adequate ongoing availability of raw materials and drug product for clinical development and any commercial sales;
- obtaining and maintaining patent, trade secret protection and regulatory exclusivity, both in the United States and internationally, including our ability to maintain our license agreement with TMRC Co. Ltd., or TMRC;
- protection of our rights in our intellectual property portfolio;
- successful launch of commercial sales following any marketing approval;
- a continued acceptable safety profile following any marketing approval;
- commercial acceptance by patients, the medical community and third-party payors;
- successful identification of biomarkers for patient selection; and
- our ability to compete with other therapies.

Many of these factors are beyond our control, including clinical development, the regulatory submission process, potential threats to our intellectual property rights and the manufacturing, marketing and sales efforts of any future collaborator. If we are unable to develop, receive marketing approval for and successfully commercialize SY-1425 or SY-5609, on our own or with any future collaborator, or experience delays as a result of any of these factors or otherwise, our business could be substantially harmed.

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

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

We are conducting a Phase 2 clinical trial of SY-1425 in combination with azacitidine in a genomically defined subset of patients with acute myeloid leukemia, or AML, who are identified using our RARA biomarker. We anticipate reporting clinical data from a cohort of this trial in relapsed or refractory AML patients in 2020. We also plan to initiate a Phase 1 clinical trial of SY-5609 in the first quarter of 2020. Our anticipated time to data in our clinical trials and the quantity of data to be presented from these trials is and will continue to be subject to our continued ability to recruit eligible patients and the satisfaction by patients of other eligibility criteria for participation in the trial. In the case of SY-1425, our time to data is also dependent on the prevalence of patients with the RARA biomarker, and the impact of new product approvals in the AML field. The rate of patient enrollment in the trial is difficult to predict. As a result, there can be no assurance that we will enroll or have data from the trial when we anticipate.

Clinical testing is expensive, is difficult to design and implement, can take many years to complete and is inherently uncertain as to outcome. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. The clinical development of our product candidates is susceptible to the risk of failure inherent at any stage of product development, including failure to demonstrate efficacy in a clinical trial or across a broad population of patients, the occurrence of adverse events that are severe or medically or commercially unacceptable, failure to comply with protocols or applicable regulatory requirements and determination by the FDA or any comparable foreign regulatory authority that a product candidate may not continue development or is not approvable. It is also possible that, even if one or more of our product candidates has a beneficial effect, that effect will not be detected during clinical evaluation as a result of one or more of a variety of factors, including the size, duration, design, measurements, conduct or analysis of our clinical trials. For example, in December 2017 we reported data from our Phase 2 clinical trial evaluating SY-1425 as a single agent in genomically defined subsets of patients with relapsed or refractory AML and higher risk myelodysplastic syndrome, or MDS. While biological and clinical activity was observed in certain patients enrolled in the trial, the data were not sufficiently robust to warrant further development of SY-1425 as a single agent in these patient populations and we elected to cease further development in the portions of our Phase 2 clinical trial evaluating SY-1425 as a single agent. We face a similar risk of failure in our ongoing evaluation of SY-1425 in combination with azacitidine. Conversely, as a result of the same factors, our clinical trials may indicate an apparent positive effect of a product candidate that is greater than the actual positive effect, if any. Similarly, in our clinical trials we may fail to detect toxicity or intolerability caused by our product candidates, or mistakenly believe that our product candidates are toxic or not well tolerated when that is not in fact the case.

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

- incur additional unplanned costs;
- be delayed in obtaining marketing approval for our product candidates;

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

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

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

Adverse events or undesirable side effects caused by, or other unexpected properties of, SY-1425, SY-5609 or any future product candidates that we may develop could cause us, any future collaborators, an institutional review board or regulatory authorities to interrupt, delay or halt clinical trials of one or more of our product candidates and could result in a more restrictive label or the delay or denial of marketing approval by the FDA or comparable foreign regulatory authorities. Because gene control techniques are relatively new, side effects from gene control approaches may be unpredictable. Tamibarotene, the active ingredient in SY-1425, has been observed to be associated with adverse events, such as mild or moderate dry skin, skin rash, headache and bone pain, as well as retinoic acid syndrome and elevated levels of cholesterol, lipids, liver function enzymes and white blood cells, which were severe in certain cases. Furthermore, retinoids such as SY-1425 may cause birth defects and therefore may carry a warning on their label. Other examples of retinoids, a class of chemical compounds that are related to vitamin A, include all trans retinoic acid (also known as ATRA), Retin-A, retinol (found in over-the-counter skin creams), isotretinoin and bexarotene. In addition, we have no experience administering SY-5609 to humans, so the safety profile that SY-5609 will demonstrate in human clinical trials remains uncertain. Adverse events reported with non-selective cyclin dependent kinase, or CDK, inhibitors include myelosuppression. Adverse events related to SY-1365, an intravenously, or IV, administered CDK7 inhibitor included headache, nausea, vomiting and fatigue, and the dose-limiting toxicities observed in our Phase 1 clinical trial of SY-1365 included headache, coronary vasospasm and fatigue. While SY-5609 is a selective inhibitor of CDK7 that is administered orally, we cannot guarantee that, in the clinical development of SY-5609, we will not observe similar or more severe adverse events than those observed with these other CDK inhibitors.

We also are evaluating the administration of tamibarotene in combination with azacitidine in patients with AML and we may evaluate SY-5609 in combination with other therapeutic agents following completion of the dose escalation phase of our planned Phase 1 clinical trial. We cannot predict at this time whether the combination of our product candidates with another product, or with any premedication administered to mitigate potential side effects, will be well tolerated by patients in clinical studies or that any unexpected adverse events or undesirable side effects will not occur. If any of our product candidates is associated with adverse events or undesirable side effects or has properties that are unexpected, we, or any future collaborators, may need to abandon development or limit development of that product candidate to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective. Many compounds that initially showed promise in clinical or earlier stage testing have later been found to cause undesirable or unexpected side effects that prevented further development of the compound.

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

The data supporting our clinical development strategies for SY-1425 and SY-5609 have been derived entirely from preclinical studies and, in the case of SY-1425, early clinical trials. We cannot assure you that we will be able to replicate in human clinical trials the results we observed in earlier studies. Moreover, the outcome of preclinical studies and early clinical trials may not be predictive of the success of later or late-stage clinical trials, and interim results of clinical trials do not necessarily predict success in future clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials after achieving positive results in

earlier development, and we could face similar setbacks. The design of a clinical trial can determine whether its results will support approval of a product and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. We have limited experience in designing clinical trials and may be unable to design and execute a clinical trial to support marketing approval. In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses. Many companies that believed their product candidates performed satisfactorily in preclinical studies and early clinical trials have nonetheless failed to successfully complete later or late-stage clinical trials of, or obtain marketing approval for, the product candidates. Even if we, or any future collaborators, believe that the results of clinical trials for our product candidates warrant marketing approval, the FDA or comparable foreign regulatory authorities may disagree and may not grant marketing approval of our product candidates.

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

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

Clinical trials of SY-1425, SY-5609 or any future product candidates that we, or any future collaborators, may develop will be conducted in carefully defined subsets of patients who have agreed to enter into clinical trials. Consequently, it is possible that our clinical trials, or those of any future collaborator, may indicate an apparent positive effect of a product candidate that is greater than the actual positive effect, if any, or alternatively fail to identify undesirable side effects. If, following approval of a product candidate, we, or others, discover that the product is less effective than previously believed or causes undesirable side effects that were not previously identified, any of the following adverse events could occur:

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

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

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

Because we have limited financial resources, we intend to focus on developing product candidates for specific indications that we identify as most likely to succeed, in terms of both their potential for marketing approval and commercialization. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that may prove to have greater commercial potential. For example, in December 2018 we reported data 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. While we reported that SY-1425 in combination with daratumumab was generally well tolerated with no evidence of increased toxicities, and that 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. In order to focus our SY-1425 development activities on the ongoing combination with azacitidine, we announced in January 2019 our portfolio prioritization decision not to pursue further development of SY-1425 in combination with daratumumab beyond completion of this pilot cohort. Similarly, in October 2019 we announced a decision to prioritize development of SY-5609 and to discontinue further development of SY-1365 due to relative potency and selectivity of the two product candidates, comparative preclinical data generated by these product candidates, initial clinical activity and tolerability data from the Phase 1 clinical trial of SY-1365 that did not support an optimal profile for patients, and the emerging treatment landscape focused on oral targeted agents.

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

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

We expect that we, and any future collaborators, will face significant competition from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide with respect to any of our product candidates that we, or any future collaborators, may seek to develop or commercialize in the future. Specifically, there are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of product candidates for the treatment of the key indications of our most advanced programs. For example, we are aware of several new drugs approved by the FDA since 2018 for the treatment of AML or patient subsets within AML, including ivosidenib, venetoclax, glasdegib and gilteritinib. SY-1425 may also face competition from other investigational products currently in clinical development for AML and MDS, including investigational products in late-stage development from Takeda Pharmaceutical Co. Ltd., Daiichi Sankyo Company, Limited, Agios Pharmaceuticals, Inc., Otsuka Pharmaceutical Co., Ltd., Roche Holdings AG, Actinium Pharmaceuticals, Inc., GlycoMimetics, Inc., Arog Pharmaceuticals, Inc., Rafael Pharmaceuticals, Inc., MEI Pharma, Inc., argenx SE in collaboration with Jannsen Pharmaceuticals, Forty Seven, Inc., and Celgene Corporation. In addition, we are aware of CDK7 inhibitors being developed in early clinical trials by Carrick Therapeutics Ltd. and Eli Lilly & Co. and several other selective CDK7 inhibitor programs that we believe are in preclinical development, including programs from Aurigene Discovery Technologies Ltd., Ube Industries Ltd., Qurient Co. Ltd., and Yungjin Pharmaceutical Co., Ltd. SY-5609 may face competition from these CDK7 inhibitors. There is also significant competition in the field of ovarian cancer. For example, AstraZeneca plc has recently reported positive data on its PARP inhibitor, olaparib, in this disease, and we are aware of late-stage clinical programs in ovarian cancer being conducted by such companies as Pfizer, Inc., ImmunoGen, Inc., GlaxoSmithKline plc, Roche, Vascular Biogenics Ltd., AbbVie Inc., Clovis Oncology, Inc. and Merck Sharp & Dohme Corp. hormone-receptor positive breast cancer is also a competitive field, with indication expansion activities being conducted by Pfizer, Inc., Novartis AG and Eli Lilly & Co. for their respective CDK4/6 inhibitors, and with PI3K inhibitors such as alpelisib. Our competitors may succeed in developing, acquiring or licensing technologies and products that are more effective, have fewer side effects or more tolerable side effects or are less costly than any product candidates that we are currently developing or that we may develop, which could render our product candidates obsolete and noncompetitive.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer or more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we, or any future collaborators, may develop. For example, the evolving standard of care for the treatment of patients with AML and the response rates and duration of response seen with approved and investigational agents in this disease may result in a longer and more complex clinical development path for SY-1425, which in turn will impact the potential return on investments in clinical trials of SY-1425. Our competitors also may obtain FDA or other marketing approval for their products before we, or any future collaborators, are able to obtain approval for ours, which could result in our competitors establishing a strong market position before we, or any future collaborators, are able to enter the market.

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

Risks Related to Our Intellectual Property

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

We currently have rights to certain intellectual property, through ownership or licenses from third parties, to develop and commercialize SY-1425 for human cancers in North America and Europe, and SY-5609 for all potential uses worldwide. Because our programs may require the use of proprietary rights by third parties, the growth of our business likely will depend, in part, on our ability to acquire, in-license or use these proprietary rights. We may be unable to acquire or in-license any compositions, methods of use, processes or other intellectual property rights from third parties that we identify as necessary for any product candidates. The licensing or acquisition of third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive. These established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment.

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

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

Risks Related to Our Common Stock

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

Our stock price is likely to be highly volatile. The stock market in general and the market for smaller pharmaceutical and biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may lose some or all of your investment. The market price for our common stock may be influenced by many factors, including:

- the timing and results of clinical trials of SY-1425 and SY-5609;
- the success of existing or new competitive products or technologies;
- regulatory actions with respect to our product candidates or our competitors' products and product candidates;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- commencement or termination of collaborations for our development programs;
- failure or discontinuation of any of our development programs;
- results of clinical trials of product candidates of our competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to develop additional product candidates or products;
- actual or anticipated changes in estimates as to financial results or development timelines or recommendations by securities analysts;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or other stockholders;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in estimates or recommendations by securities analysts, if any, that cover our stock;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this “Risk Factors” section and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

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

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 (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 (File No. 001-37813) filed on May 1, 2019).
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*	Consulting Agreement dated August 8, 2012 between the Registrant and Richard A. Young, Ph.D., as amended. Filed herewith.
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

* Indicates management contract or compensatory plan.

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: November 12, 2019

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

Exhibit 10.1

CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the "Agreement"), made this 8th day of August, 2012 is entered into by LS22, Inc., a Delaware corporation with its principal place of business at One Memorial Drive, 7th Floor, Cambridge, MA 02142 (the "Company"), and Richard A. Young, PhD., (the "Consultant"). The Consultant is a Member of the Whitehead Institute for Biomedical Research ("WIBR") and faculty member in the Department of Biology of the Massachusetts Institute of Technology ("MIT").

INTRODUCTION

The Company desires to retain the services of the Consultant and the Consultant desires to perform certain services for the Company. In consideration of the mutual covenants and promises contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties hereto, the parties agree as follows:

1. Services. The Consultant agrees to perform such consulting, advisory and related services to and for the Company as may be reasonably requested from time to time by the Company. The Consultant agrees to devote up to one (1) day per week to the performance of such services. Without limiting the additional terms and conditions of Section 7 below, during the Consultation Period (as defined below), the Consultant shall not knowingly engage in any activity that has a conflict of interest with the Company, including any competitive employment, business, or other activity, and he shall not knowingly assist any other person or organization that competes, or intends to compete, with the Company, it being further acknowledged and understood by the Company that Consultant is currently involved in those endeavors listed on Annex 1 hereto.

The Whitehead Institute Uniform Consulting Agreement Provisions ("Standard Provisions") are attached hereto as Exhibit A and are incorporated herein by reference. The parties agree that the Standard Provisions are an integral part of this Agreement and this Agreement shall have no force or effect unless the Standard Provisions are signed by both parties. The parties hereto agree to abide by such Standard Provisions and further agree that in the event of any conflict between this Agreement and the Standard Provisions, the Standard Provisions shall govern and prevail.

2. Term. This Agreement shall commence on the date hereof and shall continue until August 8, 2016 (such period, as it may be extended, being referred to as the "Consultation Period"), unless sooner terminated in accordance with the provisions of Section 4.

3. Compensation.

3.1 Equity Compensation. Subject to approval by the Board of Directors of the Company, in consideration for the performance of the services hereunder, the Consultant shall be awarded a grant of 1,600,000 shares of restricted common stock, $0.001 par value per share, of the Company ("Common Stock"), having a purchase price equal to the fair market value of the Common Stock on the date of grant ($0.001 per share) and having such other terms and conditions, including with respect to forfeiture and other transfer restrictions in favor of the Company, as shall be set forth in a Restricted Stock Agreement by and between the Consultant and the Company.

3.2 Fees. The Company will not pay the Consultant any consulting fees before the Qualified Financing Date (as defined below). After the Qualified Financing Date and before the Second Qualified Financing Date (as defined below), the Company shall pay to the Consultant consulting fees of $25,000 per year, payable in equal quarterly installments. From and after the Second Qualified Financing Date, the Company shall pay to the Consultant consulting fees of $50,000 per year, payable in equal quarterly installments. Payment for any partial quarter shall be prorated.

For purposes of this Agreement, "Qualified Financing Date" shall mean the first date on which the Company receives aggregate gross proceeds equal to or exceeding $750,000 from the sale to one or more third parties of shares of its capital stock, or notes or other indebtedness that is convertible into or exercisable for shares of its capital stock, in a venture capital transaction. For purposes of this Agreement, "Second Qualified Financing Date" shall mean the first date on which the Company receives aggregate gross proceeds equal to or exceeding $12,500,000 from the sale to one or more third parties of its capital stock, or notes or other indebtedness that is convertible into or exercisable for shares of its capital stock, in a venture capital transaction.

3.3 Reimbursement of Expenses. The Company shall reimburse the Consultant for all reasonable and necessary expenses incurred or paid by the Consultant in connection with, or related to, the performance of his services under this Agreement. The Consultant shall submit to the Company itemized monthly statements, in a form satisfactory to the Company, of such expenses incurred in the previous month. The Company shall pay to the Consultant amounts shown on each such statement within 30 days after receipt thereof.

3.4 Benefits. The Consultant shall not be entitled to any benefits, coverages or privileges, including, without limitation, social security, unemployment, medical or pension payments, made available to employees of the Company.

4. Termination. The Company may, without prejudice to any right or remedy it may have due to any failure of the Consultant to perform his obligations under this Agreement, terminate the Consultation Period upon 30 days' prior written notice to the Consultant. The Consultant may, without prejudice to any right or remedy it may have due to any failure of the Company to perform its obligations under this Agreement, terminate the Consultation Period upon 90 days' prior written notice to the Company. In the event of such termination, the Consultant shall be entitled to payment for services performed and expenses paid or incurred prior to the effective date of termination, subject to the limitation on reimbursement of expenses set forth in Section 3.2. Such payments shall constitute full settlement of any and all claims of the Consultant of every description against the Company. Notwithstanding the foregoing, the Company may terminate the Consultation Period, effective immediately upon receipt of written notice, if the Consultant breaches or threatens to breach any provision of Section 6 or Section 7, and the Consultant may terminate the Consultation Period, effective immediately upon receipt of written notice, if the Company breaches any provision of Section 3. The provisions of Sections 4, 6, 7, 8, 10 and 14 shall survive any termination of this Agreement.

5. Cooperation. The Consultant shall use his best efforts in the performance of his obligations under this Agreement. The Company shall provide such access to its information and property as may be reasonably required in order to permit the Consultant to perform his obligations hereunder. The Consultant shall cooperate with the Company's personnel, shall not interfere with the conduct of the Company's business and shall observe all rules, regulations and security requirements of the Company concerning the safety of persons and property.

6. Inventions and Proprietary Information.

6.1 Inventions.

(a) All inventions, discoveries, computer programs, data, technology, designs, innovations and improvements (whether or not patentable and whether or not copyrightable) ("Inventions") which are made, conceived, reduced to practice, created, written, designed or developed by the Consultant, solely or jointly with others and whether during normal business hours or otherwise, (i) during the Consultation Period that result from the performance of Consultant's services and if related to the business of the Company or (ii) after the Consultation Period if resulting or directly derived from Proprietary Information (as defined below), shall be the sole property of the Company. The Consultant hereby assigns to the Company all Inventions and any and all related patents, copyrights, trademarks, trade names, and other industrial and intellectual property rights and applications therefor, in the United States and elsewhere and appoints any officer of the Company as his duly authorized attorney to execute, file, prosecute and protect the same before any government agency, court or authority. Upon the request of the Company and at the Company's expense, the Consultant shall execute such further assignments, documents and other instruments as may be necessary or desirable to fully and completely assign all Inventions to the Company and to assist the Company in applying for, obtaining and enforcing patents or copyrights or other rights in the United States and in any foreign country with respect to any Invention. The Consultant also hereby waives all claims to moral rights in any Inventions.

(b) The Consultant shall promptly disclose to the Company all Inventions and will maintain adequate and current written records (in the form of notes, sketches, drawings and as may be specified by the Company) to document the conception and/or first actual reduction to practice of any Invention. Such written records shall be available to and remain the sole property of the Company at all times.

6.2 Proprietary Information.

(a) The Consultant acknowledges that his relationship with the Company is one of high trust and confidence and that in the course of his service to the Company he will have access to and contact with Proprietary Information. The Consultant agrees that he will not, during the Consultation Period or at any time thereafter, disclose to others, or use for his benefit or the benefit of others, any Proprietary Information or Invention.

(b) For purposes of this Agreement, Proprietary Information shall mean, by way of illustration and not limitation, all information (whether or not patentable and whether or not copyrightable) owned, possessed or used by the Company, including, without limitation, any Invention, formula, vendor information, customer information, apparatus, equipment, trade secret, process, research, report, technical data, know-how, computer program, software, software documentation, hardware design, technology, marketing or business plan, forecast, unpublished financial statement, budget, license, price, cost and employee list that is communicated to, learned of, developed or otherwise acquired by the Consultant in the course of his service as a consultant to the Company.

(c) The Consultant's obligations under this Section 6.2 shall not apply to any information (none of which shall be deemed Proprietary Information) that (i) was known to Consultant prior to it being furnished to the Consultant by or on behalf of the Company provided that such information was or is not known to Consultant to be subject to another confidentiality agreement with, or other contractual, legal or fiduciary obligation of confidentiality to the Company, (ii) is developed by Consultant independently of the Proprietary Information disclosed to Consultant by the Company as demonstrated by the Consultant through third party written records, (iii) is acquired by Consultant on a non-confidential basis from any person entitled to make disclosure to Consultant unless such person is under an obligation of confidentiality to Company which is known to Consultant, (iv) is or becomes known to the general public under circumstances involving no breach by the Consultant or others of the terms of this Section 6.2, (v) is generally disclosed to third parties by the Company without restriction on such third parties, (vi) is approved for release by written authorization of the Board of Directors of the Company, or (vii) Consultant is obligated to produce pursuant to an order of a court of competent jurisdiction or a valid administrative or Congressional subpoena, provided that the Consultant promptly notify Company and cooperate reasonably with Company's efforts to contest or limit the scope of such order.

(d) Upon termination of this Agreement or at any other time upon request by the Company, the Consultant shall promptly deliver to the Company all records, files, memoranda, notes, designs, data, reports, price lists, customer lists, drawings, plans, computer programs, software, software documentation, sketches, laboratory and research notebooks and other documents (and all copies or reproductions of such materials) relating to the business of the Company.

(e) The Consultant represents that his retention as a consultant with the Company and his performance under this Agreement does not, and shall not, breach any agreement that obligates him to keep in confidence any trade secrets or confidential or proprietary information of his or of any other party or to refrain from competing, directly or indirectly, with the business of any other party. The Consultant shall not disclose to the Company any trade secrets or confidential or proprietary information of any other party.

(f) The Consultant acknowledges that the Company from time to time may have agreements with other persons or with the United States Government, or agencies thereof, that impose obligations or restrictions on the Company regarding inventions made during the course of work under such agreements or regarding the confidential nature of such work. The Consultant agrees to be bound by all such obligations and restrictions that are known to him and to take all action necessary to discharge the obligations of the Company under such agreements.

7. Non-Competition and Non-Solicitation.

7.1 Restrictions. During the term of this Agreement and for a period of one (1) year after termination of the Agreement, the Consultant will not directly or indirectly:

(a) Engage or assist others in engaging in any business or enterprise (whether as owner, partner, officer, director, employee, consultant, investor, lender or otherwise, except as the holder of not more than 1% of the outstanding stock of a publicly-held company) that is competitive with the Company's business, including but not limited to any business or enterprise that develops, manufactures, markets, licenses, sells or provides any product or service that competes with any product or service developed, manufactured, marketed, licensed, sold or provided, or planned to be developed, manufactured, marketed, licensed, sold or provided, by the Company while the Consultant was employed by the Company; or

(b) Either alone or in association with others, divert or take away, or attempt to divert or take away, the business or patronage of any of the clients, customers, or business partners of the Company which were contacted, solicited, or served by the Company during the 12-month period prior to the termination or cessation of the Consultant's services with the Company; or

(c) Either alone or in association with others (i) solicit, induce or attempt to induce, any employee or independent contractor of the Company to terminate his or her employment or other engagement with the Company, or (ii) hire, or recruit or attempt to hire, or engage or attempt to engage as an independent contractor, any person who was employed or otherwise engaged by the Company at any time during the term of the Consultant's services with the Company; provided, that this clause (ii) shall not apply to the recruitment or hiring or other engagement of any individual whose employment or other engagement with the Company has been terminated for a period of six months or longer.

7.2 Extension. If the Consultant violates the provisions of Section 7.1, the Consultant shall continue to be bound by the restrictions set forth in such paragraph until a period of one (1) year has expired without any violation of such provisions.

7.3 Company's Business. For purposes of this Agreement, the "Company's business" shall mean the discovery and development of therapeutic, diagnostic, and/or research products related to mechanisms by which gene transcription is regulated, provided, however, that the "Company's business" shall exclude the discovery and development of therapeutic, diagnostic, and/or research products that target BET bromodomains and histone deacetylases 1, 2 and 6.

8. Remedies. The Consultant acknowledges that any breach of the provisions of Section 6 or 7 could result in serious and irreparable injury to the Company for which the Company cannot be adequately compensated by monetary damages alone. The Consultant agrees, therefore, that in the event of such breach, in addition to any other remedy it may have, the Company shall be entitled to enforce the specific performance of this Agreement by the Consultant and to seek both temporary and permanent injunctive relief (to the extent permitted by law) without the necessity of proving actual damages.

9. Independent Contractor Status. The Consultant shall perform all services under this Agreement as an "independent contractor" and not as an employee or agent of the Company. The Consultant is not authorized to assume or create any obligation or responsibility, express or implied, on behalf of, or in the name of, the Company or to bind the Company in any manner.

10. Notices. All notices required or permitted under this Agreement shall be in writing and shall be deemed effective upon personal delivery or upon deposit in the United States Post Office, by registered or certified mail, postage prepaid, addressed to the other party at the address shown above, or at such other address or addresses as either party shall designate to the other in accordance with this Section 10.

11. Pronouns. Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine or neuter forms, and the singular forms of nouns and pronouns shall include the plural, and vice versa.

12. Entire Agreement. This Agreement constitutes the entire agreement between the parties and supersedes all prior agreements and understandings, whether written or oral, relating to the subject matter of this Agreement.

13. Amendment. This Agreement may be amended or modified only by a written instrument executed by both the Company and the Consultant.

14. Governing Law. This Agreement shall be construed, interpreted and enforced in accordance with the laws of the Commonwealth of Massachusetts.

15. Successors and Assigns. This Agreement shall be binding upon, and inure to the benefit of, both parties and their respective successors and assigns, including any corporation with which, or into which, the Company may be merged or which may succeed to its assets or business, provided, however, that the obligations of the Consultant are personal and shall not be assigned by him.

16. Miscellaneous.

16.1 No delay or omission by the Company in exercising any right under this Agreement shall operate as a waiver of that or any other right. A waiver or consent given by the Company on any one occasion shall be effective only in that instance and shall not be construed as a bar or waiver of any right on any other occasion.

16.2 The captions of the sections of this Agreement are for convenience of reference only and in no way define, limit or affect the scope or substance of any section of this Agreement. In the event that any provision of this Agreement shall be invalid, illegal or otherwise unenforceable, the validity, legality and enforceability of the remaining provisions shall in no way be affected or impaired thereby.

[*Remainder of page intentionally left blank*]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and . year set forth above.

LS22, INC.

By: /s/ Douglas Cole

Name: Douglas Cole, M.D.
Title: President

CONSULTANT

/s/ Richard A. Young
Richard A. Young, Ph.D.

Signature Page to Consulting Agreement

WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH

UNIFORM CONSULTING AGREEMENT PROVISIONS

1. The Whitehead Institute for Biomedical Research ("WHITEHEAD") is a non-profit biomedical research institute having a business address of Nine Cambridge Center, Cambridge, Massachusetts 02142. These Uniform Consulting Agreement Provisions (the "Uniform Provisions") are attached to an agreement (the "Agreement") under which a Member of WHITEHEAD (the "Consultant") has agreed to provide consulting services to the company named in the Agreement (the "Company"). The Consultant and the Company agree that the Agreement shall have no force or effect unless these Uniform Provisions are signed by both parties and attached to the Agreement. By signing the Uniform Provisions, the Consultant and the Company agree to abide by them, and also agree that if anything in the Agreement is inconsistent with the Uniform Provisions, the Uniform Provisions shall govern.

2. The Agreement shall disclose all compensation of whatever kind that is to be provided to the Consultant in connection with the consulting services. The Agreement shall disclose the time commitment for the consulting services, which may not exceed one day per week for all outside activities of the Member of WHITEHEAD.

3. The Consultant's services for the Company shall consist only of the exchange of ideas and provision of advice; the Consultant shall not direct or conduct research for or on behalf of the Company.

4. The Company acknowledges that the Consultant is a Member of WHITEHEAD and is subject to WHITEHEAD's policies, including policies concerning consulting, conflicts of interest, and intellectual property. In accordance with WHITEHEAD policy, the Consultant may disclose to the Company any information that the Consultant would normally freely disclose to other members of the scientific community at large, whether by publication, by presentation at seminars, or in informal scientific discussions. However, the Consultant shall not disclose to the Company information that (i) is proprietary to WHITEHEAD and (ii) is not generally available to the public, except through formal technology transfer procedures.

5. Subject to the terms of paragraph 6, below, the Consultant may assign to the Company any right, title and interest the Consultant may have in any invention, discovery, improvement, or other intellectual property which the Consultant (whether alone or with others) develops (i) during the course of performing consulting services for the Company under the Agreement and (ii) outside the course of the Consultant's activities as a Member of WHITEHEAD.

6. The Company shall have no rights by reason of the Agreement in any publication, invention, discovery, improvement, or other intellectual property whatsoever, whether or not publishable, patentable, or copyrightable, which is developed as a result of a program of research financed, in whole or in part, by funds provided by or under the control of WHITEHEAD. The Company also acknowledges and agrees that it will enjoy no priority or advantage as a result of the consultancy created by the Agreement in gaining access, whether by license or otherwise, to any proprietary information or intellectual property that arises from any research undertaken by the Consultant in his or her capacity as a Member of WHITEHEAD.

7. The Company agrees, at its sole expense, to defend WHITEHEAD against, and to indemnify and hold WHITEHEAD harmless from, any claim, liability, judgment, cost, expense, damage, deficiency, loss, or obligation, of any kind or nature (including without limitation reasonable attorneys' fees and other costs and expenses of defense) relating to a claim or suit by a third party against WHITEHEAD, either arising from the Agreement, the Consultant's performance of services for the Company under the Agreement, or any Company products or services which result from the Consultant's performance of services under the Agreement.

8. Nothing in the Agreement shall affect the Consultant's right to use, disseminate, or publish any information that (i) is or becomes available to the public through no breach of the Agreement by the Consultant; (ii) is obtained by the Consultant from a third party who had the legal right to disclose the information to the Consultant; (iii) is already in the possession of the Consultant on the date the Agreement becomes effective; or (iv) is required to be disclosed by law, government regulation, or court order, provided that the Consultant takes reasonable steps to provide the Company with sufficient prior notice to allow the Company to consent to the disclosure or seek a protective order. In addition, the Company's confidential information does not include information generated by the Consultant (whether alone or with others) unless the Consultant generated the information (i) during the course of performing consulting services for the Company under the Agreement and (ii) outside the course of the Consultant's activities as a Member of WHITEHEAD.

9. The Company acknowledges and agrees that nothing in the Agreement shall affect the Consultant's obligations to WHITEHEAD, the Consultant's research on behalf of WHITEHEAD, or research collaborations in which the Consultant is a participant, and that the Agreement shall have no effect upon transfers (by way of license or otherwise) to third parties of materials or intellectual property developed in whole or in part by the Consultant as a Member of WHITEHEAD.

10. Paragraphs 7, 8, 9, 10, 12, 13, and 14 of these Uniform Provisions shall survive termination of the Agreement.

11. The Company may use the Consultant's name, and in doing so may cite the Consultant's relationship with WHITEHEAD, so long as any such usage (i) is limited to reporting factual events or occurrences only, and (ii) is made in a manner that could not reasonably constitute an endorsement of the Company or of any Company program, product or service. However, the Company shall not use the Consultant's name or WHITEHEAD's name in any press release, or quote the Consultant in any company materials, or otherwise use the Consultant's name or WHITEHEAD's name in a manner not specifically permitted by the preceding sentence, unless in each case the Company obtains in advance WHITEHEAD's written consent, and, in the case of the use of the Consultant's name, the Consultant's consent as well.

12. The Consultant and the Company acknowledge that (i) the Consultant is entering into the Agreement and these Uniform Provisions in the Consultant's individual capacity and not as a Member of WHITEHEAD, (ii) WHITEHEAD is not a party to the Agreement or the Uniform Provisions and has no liability or obligation under them, and (iii) WHITEHEAD is an intended third-party beneficiary of the Agreement and the Uniform Provisions are for WHITEHEAD's benefit and are enforceable by WHITEHEAD in its own name.

13. These Uniform Provisions shall be in effect for the full term of the Agreement. The Company and the Consultant agree that any amendment of the Agreement (including, without limitation, any extension of the Agreement's term or any change in the consideration to be provided to the Consultant under the Agreement) or any other departure from the terms or conditions of the Agreement must be signed by the Consultant and an authorized representative of the Company, and also is subject to WHITEHEAD's prior written approval.

14. If any of these Uniform Provisions is adjudicated to be invalid, unenforceable, contrary to, or prohibited under applicable laws or regulations of any jurisdiction, the Agreement shall terminate as of the date such adjudication is effective.

COMPANY

By: /s/ Douglas Cole
Name: Douglas Cole, M.D.
Title: President
Date:

CONSULTANT

By: /s/ Richard A. Young
Name: Richard A. Young, Ph.D.
Date:

ANNEX 1

Existing Endeavors

1. Presently engaged under consulting arrangements with:

    - Enzon Pharmaceuticals, Inc.

CONSULTING AGREEMENT-FIRST AMENDMENT

This First Amendment to the CONSULTING AGREEMENT (the "First Amendment"), made this 3rd day of December, 2012 is entered into by Syros Pharmaceuticals, Inc. (f/k/a LS22, Inc.), a Delaware corporation with its principal place of business at One Memorial Drive, 7th Floor, Cambridge, MA 02142 (the "Company"), and Richard A. Young, Ph.D. (the "Consultant").

WHEREAS, Company and Consultant entered into a Consulting Agreement dated August 8, 2012 (the "Agreement"); and

WHEREAS, Company and Consultant desire to amend the Term of the Agreement under Section 2 and the Compensation under Section 3.

NOW THEREFORE, in consideration of the mutual covenants, conditions and agreements set forth herein, and for such other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Defined Terms. Unless otherwise defined herein, the meaning of the terms used herein shall have the same meanings set forth in the Agreement.

2A. Term. Section 2 of the Agreement is deleted and replaced in its entirety with the following:

"2. Term. This Agreement shall commence July 3, 2012 and shall continue until July 3, 2016 (such period, as it may be extended, being referred to as the "Consultation Period"), unless sooner terminated in accordance with the provisions of Section 4."

2B. Fees. Section 3.2 of the Agreement is deleted and replaced in its entirety with the following:

"3.2 Fees. The Company shall pay to the Consultant consulting fees of $75,000 per year, payable in equal quarterly installments. Payment for any partial quarter shall be prorated.

Transaction Bonus. If, within eighteen (18) months from the date hereof, the Company signs an agreement with a Partner (as defined below) encompassing a Qualifying Transaction (as defined below), the Company shall pay to the Consultant a cash bonus of $125,000 within fifteen (15) days of the signing of such agreement. For purposes of this Agreement, "Partner" means any third party for-profit entity. For purposes of this Agreement, "Qualifying Transaction" means a transaction pursuant to which the consideration received by the Company will, in the reasonable judgment of the Board of Directors of the Company, exceed $50 million within two (2) years from the date of the agreement with the Partner."

3. Full Force and Effect. Except as expressly provided in this First Amendment, all other terms, conditions and provisions of the Agreement shall continue in full force and effect as provided therein.

4. Entire Agreement. This First Amendment together with the Agreement constitute the full and complete agreement and understanding between Company and Consultant concerning the subject matter hereof.

IN WITNESS WHEREOF, Company and Consultant have caused this First Amendment to be executed by their duly authorized officer as ofthe Effective Date.

SYROS PHARMACEUTICALS, INC

By: /s/ Nancy Simonian
Nancy Simonian, M.D.CEO

CONSULTANT

/s/ Richard A. Young
Richard A. Young, Ph.D.

CONSULTING AGREEMENT- SECOND AMENDMENT

This Second Amendment to the CONSULTING AGREEMENT (the "Second Amendment"), dated as of September 29, 2016 (the "Agreement Date") and effective as of July 3, 2016, is entered into by Syros Pharmaceuticals, Inc. (f/k/a LS22, Inc.), a Delaware corporation with its principal place of business at 620 Memorial Drive, Suite 300, Cambridge, MA 02139 (the "Company"), and Richard A. Young, Ph.D. (the "Consultant").

WHEREAS, the Company and the Consultant entered into a Consulting Agreement dated August 8, 2012 (the "Original Agreement");

WHEREAS, the parties entered into that certain First Amendment dated December 3, 2012 (the "First Amendment"; and the Original Agreement, as amended by the First Amendment, the "Agreement"), to amend the term of the Original Agreement and the compensation to the Consultant set forth therein; and

WHEREAS, the Company and the Consultant desire to further amend the term of the Agreement under Section 2 and the compensation set forth under Section 3 as described herein.

NOW THEREFORE, in consideration of the mutual covenants, conditions and agreements set forth herein, and for such other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. **Defined Terms.** Unless otherwise defined herein, the meaning of the terms used herein shall have the same meanings set forth in the Agreement.

2. **Amendments to Agreement.** The Company and the Consultant agree that the Agreement shall be and hereby is amended as follows:

   a. Term. The reference to "July 3, 2016" in Section 2 of the Agreement shall be replaced by "July 3, 2019".

   b. Equity Compensation. Section 3.1 of the Agreement shall be deleted and replaced in its entirety with the following:

      "3.1 Equity Compensation. In consideration for the performance of the services hereunder, the Consultant has been awarded (a) a grant of 1,600,000 shares of restricted common stock, $0.001 par value per share, of the Company ("Common Stock"), having a purchase price of $0.001, pursuant to that certain Restricted Stock Agreement dated as of August 8, 2012 and (b) an option to purchase 75,000 shares of Common Stock, with an exercise price equal to the fair market value of such options on the date of grant, vesting upon certain performance-based milestones approved by the Board of Directors of the Company and having such other terms and conditions as shall be set forth in an option grant agreement between the Consultant and the Company."

c. Fees. Section 3.2 of the Agreement shall be deleted and replaced in its entirety with the following:

> "3.2 Fees. The Company shall pay to the Consultant consulting fees of $125,000 per year, payable in equal quarterly installments. Payment for any partial quarter shall be prorated."

1. **Full Force and Effect.** Except as expressly provided in this Second Amendment, all other terms, conditions and provisions of the Agreement shall continue in full force and effect as provided therein.

2. **Entire Agreement.** This Second Amendment together with the Agreement constitute the full and complete agreement and understanding between the Company and the Consultant concerning the subject matter hereof.

[Remainder of page intentionally blank]

IN WITNESS WHEREOF, the Company and the Consultant have caused this Second Amendment to be executed by their duly authorized officer as of the Agreement Date.

SYROS PHARMACEUTICALS,INC.

By: /s/ Nancy Simonian
Nancy Simonian, M.D. CEO

CONSULTANT

/s/ Richard A, Young
Richard A, Young, Ph.D.

AMENDMENT NO.3
TO CONSULTING AGREEMENT

This Amendment No. 3 to Consulting Agreement (this **"Amendment")** is made effective July 3, 2019 (the **"Amendment Effective Date")** by and between Syros Pharmaceuticals, Inc., having offices located at 620 Memorial Drive, Suite 300, Cambridge, Massachusetts 02139 **("Syros")**, and Richard A. Young, Ph.D. **("Consultant").** Syros and Consultant may be referred to herein individually as a **"Party"** or together as the **"Parties".**

WHEREAS, the Parties entered a Consulting Agreement dated August 8, 2012, as amended effective December 3, 2012 and July 3, 2016 (as so amended, the **"Agreement");**

WHEREAS, the Parties wish to amend the Agreement as described more fully below; and WHEREAS, pursuant to Section 13 of the Agreement, the Agreement may be amended by a written instrument executed by the Parties.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. **Amendments to Agreement.** The Parties agree to amend the Agreement as follows :

1.1 **Term.** The reference to "July 3, 2019" in Section 2 of the Agreement shall be replaced with "July 3, 2022".

1.2 **Fees.** The reference to "$125,000 per year" in Section 3.2 of the Agreement shall be replaced with "$115,000 per year".

2. **Other Obligations.** Consultant represents that he has provided Syros a complete and accurate list of all third-party consulting agreements to which he is a party or by which he is bound as of the Amendment Effective Date. From and after the Amendment Effective Date, Consultant shall provide advance written notice to Syros of all third-party consulting agreements he plans to enter during the term of the Agreement for the purpose of ensuring compliance with Sections 1 and 7 of the Agreement.

3. **Miscellaneous.** Except as expressly amended hereby, all other terms and conditions of the Agreement shall remain in full force and effect. Capitalized terms used in this Amendment that are not otherwise defined have the meanings given them in the Agreement. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Signature pages to this Amendment may be exchanged by facsimile or electronically as a portable document format (.pdt) file and such signature pages shall be deemed originals.

IN WITNESS HEREOF, the Parties hereto have executed this Amendment as of the date set forth above.

SYROS PHARMACEUTICALS, INC.

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

CONSULTANT

/s/ Richard A. Young
Richard A. Young, Ph.D.

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: November 12, 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: November 12, 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 September 30, 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: November 12, 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 September 30, 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: November 12, 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.