Loxo Oncology, Inc.
Form 10-Q
November 08, 2018
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2018

Or

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

Commission File Number 001-36562

LOXO ONCOLOGY, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**46-2996673**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
281 Tresser Blvd., 9th Floor Stamford, CT (Address of Principal Executive Offices)	**06901** (Zip Code)

Registrant s telephone number, including area code: **(203) 653-3880**

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

Title of each class	**Name of each exchange on which registered**
Common Stock, par value $0.0001 per share	Nasdaq Global Market

Securities registered pursuant to Section 12(g) of the Act: **None**

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 x No o

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 x No o

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 x	Accelerated filer o
Non-accelerated filer o	Smaller reporting company o
Emerging growth company o	

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. o

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

Common Stock, $0.0001 par value Shares outstanding as of October 31, 2018: 30,614,536

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PART I

ITEM 1. FINANCIAL STATEMENTS

LOXO ONCOLOGY, INC.

Condensed Consolidated Balance Sheets

(in thousands, except share and per share amounts)

	September 30, 2018 (unaudited)	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 136,109	$ 142,025
Short-term investments	485,890	484,175
Receivable from collaboration partner		150,000
Other prepaid expenses and current assets	6,309	5,607
Total current assets	628,308	781,807
Long term investments	25,603	
Property and equipment, net	4,253	912
Other assets	1,064	723
Total assets	$ 659,228	$ 783,442
Liabilities and stockholders equity		
Current liabilities:		
Accounts payable	$ 2,018	$ 3,996
Payable due to collaboration partner	2,576	
Accrued expenses and other current liabilities	43,739	22,537
Current portion of deferred revenue	125,436	195,037
Total current liabilities	173,769	221,570
Non-current portion of deferred revenue	106,244	183,662
Total liabilities	280,013	405,232
Commitments and contingencies		
Stockholders equity:		
Preferred stock, $0.0001 par value; 5,000,000 shares authorized; no shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively		
Common stock, $0.0001 par value; 125,000,000 shares authorized; 30,566,797 and 29,991,884 shares issued and outstanding at September 30, 2018 and December 31, 2017, respectively	3	3
Additional paid-in capital	710,137	666,891
Accumulated deficit	(330,460)	(288,112)
Accumulated other comprehensive loss	(465)	(572)
Total stockholders equity	379,215	378,210
Total liabilities and stockholders equity	$ 659,228	$ 783,442

See accompanying notes to unaudited condensed consolidated financial statements.

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LOXO ONCOLOGY, INC.

Condensed Consolidated Statements of Operations

(unaudited)

(in thousands, except share and per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	**2017**	**2018**	**2017**
Revenue from collaboration agreement	$ 42,470	$	$ 123,500	$
Operating expenses:				
Research and development	56,928	64,754	130,473	109,321
General and administrative	15,864	9,680	43,800	20,968
Total operating expenses	72,792	74,434	174,273	130,289
Loss from operations	(30,322)	(74,434)	(50,773)	(130,289)
Interest income, net	3,258	1,115	8,425	2,041
Net loss	$ (27,064)	$ (73,319)	$ (42,348)	$ (128,248)
Per share information:				
Net loss per share of common stock, basic and diluted	$ (0.89)	$ (2.45)	$ (1.40)	$ (4.68)
Weighted average shares outstanding, basic and diluted	30,502,789	29,872,198	30,230,160	27,391,020

See accompanying notes to unaudited condensed consolidated financial statements.

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LOXO ONCOLOGY, INC.

Condensed Consolidated Statements of Comprehensive Loss

(unaudited)

(in thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Net loss	$ (27,064)	$ (73,319)	$ (42,348)	$ (128,248)
Other comprehensive income (loss):				
Unrealized gain (loss) on available for sale securities	14	69	107	(75)
Comprehensive loss	$ (27,050)	$ (73,250)	$ (42,241)	$ (128,323)

See accompanying notes to unaudited condensed consolidated financial statements.

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LOXO ONCOLOGY, INC.

Condensed Consolidated Statement of Stockholders Equity

(unaudited)

For the period from January 1, 2018 to September 30, 2018

(in thousands except share and per share amounts)

	Stockholders equity					
	Common stock					
	Shares	$0.0001 Par Value	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders Equity
Balance at January 1, 2018	29,991,884	$ 3	$ 666,891	$ (288,112)	$ (572)	$ 378,210
Stock-based compensation expense			33,150			33,150
Stock option exercises	574,913		10,096			10,096
Other comprehensive income					107	107
Net loss				(42,348)		(42,348)
Balance at September 30, 2018	30,566,797	$ 3	$ 710,137	$ (330,460)	$ (465)	$ 379,215

See accompanying notes to unaudited condensed consolidated financial statements.

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LOXO ONCOLOGY, INC.

Condensed Consolidated Statements of Cash Flows

(unaudited)

(in thousands)

	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
Operating activities:		
Net loss	$ (42,348)	$ (128,248)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Amortization of premium and discounts on investments	(1,516)	142
Depreciation of property and equipment	392	80
Stock-based compensation	33,150	14,677
Changes in operating assets and liabilities:		
Receivable from collaboration partner	150,000	
Prepaid expenses and other assets	(1,041)	(2,095)
Accounts payable	(1,978)	768
Payable due to collaboration partner	2,576	
Accrued expenses and other current liabilities	21,202	1,558
Deferred revenue	(147,019)	
Net cash provided by (used in) operating activities	13,418	(113,118)
Investing activities:		
Purchases of available-for-sale securities	(436,593)	(359,694)
Proceeds from maturing available-for-sale securities	410,898	146,055
Purchase of property and equipment	(3,733)	(398)
Net cash used in investing activities	(29,428)	(214,037)
Financing activities:		
Proceeds from issuance of common stock, net		375,307
Proceeds from the exercise of stock options	10,096	2,207
Net cash provided by financing activities	10,096	377,514
Net (decrease) increase in cash, cash equivalents, and restricted cash	(5,914)	50,359
Cash, cash equivalents, and restricted cash beginning of period	142,341	30,376
Cash, cash equivalents, and restricted cash end of period	$ 136,427	$ 80,735

See accompanying notes to unaudited condensed consolidated financial statements.

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LOXO ONCOLOGY, INC.

Notes to Unaudited Condensed Consolidated Financial Statements

September 30, 2018

1. Organization and Description of the Business

Loxo Oncology, Inc. (the Company) was incorporated on May 9, 2013 in the State of Delaware. The Company is a biopharmaceutical company developing highly selective medicines for patients with genomically defined cancers. Its pipeline focuses on cancers that are uniquely dependent on single gene abnormalities, such that a single drug has the potential to treat the cancer with dramatic effect. The Company operates in one segment and has its principal office in Stamford, Connecticut.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP) and include the results of operations of the Company and its wholly owned subsidiary. All intercompany accounts and transactions have been eliminated in consolidation. Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification (ASC) and Accounting Standards Update (ASU) of the Financial Accounting Standards Board (FASB).

Unaudited Interim Financial Information

The accompanying balance sheet as of December 31, 2017, was derived from the Company s audited financial statements included in Form 10-K filed with the Securities and Exchange Commission (SEC) on March 1, 2018. It is suggested that the interim unaudited condensed consolidated financial statements be read in conjunction with the annual financial statements and the notes thereto included in the Company s Annual Report on Form 10-K.

The accompanying balance sheet as of September 30, 2018, the statements of operations for the three and nine months ended September 30, 2018 and 2017, the statements of comprehensive loss for the three and nine months ended

September 30, 2018 and 2017, the statement of stockholders equity for the period from January 1, 2018 to September 30, 2018 and the statements of cash flows for the nine months ended September 30, 2018 and 2017 are unaudited.

The interim unaudited condensed consolidated financial statements have been prepared on the same basis as the annual audited financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of the Company s financial position as of September 30, 2018, the results of its operations for the three and nine months ended September 30, 2018 and 2017 and its cash flows for the nine months ended September 30, 2018 and 2017. Certain amounts from prior periods have been reclassified on the statements of cash flows to conform to the current period presentation as a result of the adoption of ASU 2016-18, as described further below. Additionally, operating results for the three and nine months ended September 30, 2018 are not necessarily indicative of the results that may be expected for any other interim period or for the year ending December 31, 2018.

The interim unaudited condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the SEC. Certain information and note disclosures normally included in annual financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to those rules and regulations, although the Company believes that the disclosures made are adequate to make the information not misleading.

Significant Accounting Policies

The Company s significant accounting policies are disclosed in the audited financial statements for the year ended December 31, 2017 included in the Company s Form 10-K filed with the SEC on March 1, 2018. Since the date of such financial statements, there have been no changes to the Company s significant accounting policies, except as it relates to the impact of the adoption of applicable new accounting guidance as described below under Recently Adopted Accounting Pronouncements and policies related to the collaboration agreement with Bayer Consumer Care AG (Bayer).

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Collaboration Arrangements

The Company evaluates its collaborative arrangements pursuant to ASC 808, *Collaborative Arrangements* (ASC 808) and ASC 606, *Revenue from Contracts with Customers* (ASC 606). The Company considers the nature and contractual terms of collaboration arrangements and assesses whether the arrangement involves a joint operating activity pursuant to which the Company is an active participant and is exposed to significant risks and rewards with respect to the arrangement. If the Company is an active participant and is exposed to significant risks and rewards with respect to the arrangement, the Company accounts for the arrangement as a collaboration under ASC 808. To date, the Company has only entered into a single collaboration agreement with Bayer which was determined to be within the scope of ASC 808.

ASC 808 does not address recognition or measurement matters related to collaborative arrangements. Payments between participants pursuant to a collaborative arrangement that are within the scope of other authoritative accounting literature on income statement classification are accounted for using the relevant provisions of that literature. If the payments are not within the scope of other authoritative accounting literature, the income statement classification for the payments is based on an analogy to authoritative accounting literature or if there is no appropriate analogy, a reasonable, rational and consistently applied accounting policy election. Payments received from a collaboration partner to which this policy applies may include upfront payments in respect of a license of intellectual property, regulatory and sales-based milestones, profit share payments, and royalties.

Refer to the discussion in Note 3. Collaboration Agreement, for further discussion of the accounting related to the Bayer agreement.

Revenue Recognition

The Company entered into a License, Development and Commercialization Agreement (the Bayer Agreement) in November 2017, which is within the scope of ASC 808. Under the Bayer Agreement, the Company has licensed certain rights to its larotrectinib and LOXO-195 product candidates to Bayer. The terms of the agreement include payment to the Company of one or more of the following: a non-refundable, up-front license fee, regulatory and commercial milestone payments, and royalties on net sales of licensed products.

Licenses of intellectual property: If the license of the Company s intellectual property is determined to be a separate unit of accounting from the other performance obligations identified in the arrangement, the Company recognizes revenue from non-refundable, up-front fees allocated to the license when the license is transferred to the collaborative partner and the collaborative partner is able to use and benefit from the license. For licenses that are bundled with other promises, such as development activities, the Company recognizes revenue over time, using a proportional performance method as the related development activities are performed. Up-front payments are recorded as deferred revenue upon receipt and require deferral of revenue recognition to a future period until the Company performs its obligations under these arrangements. Amounts payable to the Company are recorded as accounts receivable when the Company s right to consideration is unconditional.

Milestone payments: Regulatory or commercial milestone payments will be recognized as revenue in the period the milestone is achieved. To date, the Company has not recognized any milestone payments as revenue resulting from its

collaboration arrangement.

Co-promote: In the United States, where the Company and Bayer will co-promote the products, the Company will be responsible for 50% of the commercial costs and receive 50% of the profits. Co-promote net cost/profit will be recognized when the related expenses and sales occur as a decrease/increase to Revenue from collaboration agreement. See Note 3 to the unaudited condensed consolidated financial statements for details of the co-promote net cost incurred to date.

Royalties: Sales-based royalties, including milestone payments based on the level of sales, will be recognized when the related sales occur. To date, the Company has not recognized any royalty revenue resulting from its collaboration arrangement.

Research and Development Expenses

Research and development costs are charged to expense as incurred. These costs include, but are not limited to, employee-related expenses, including salaries, benefits, stock-based compensation and travel as well as expenses related to asset acquisitions of IPR&D, third-party collaborations, contract research arrangements, chemistry, manufacturing and controls (CMC) related expenses and activities associated with the development of companion diagnostics for our product candidates. Under the Bayer Agreement, the Company receives reimbursement for 50% of its development activity expenses incurred for larotrectinib and LOXO-195 beginning January 1, 2018. This reimbursement of $7.1 million and $22.4 million for the three and nine months ended September 30, 2018, respectively, is recorded as a reduction to the Company s research and development costs.

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Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. As we advance our product candidates, we expect the amount of external research and development will continue to increase for the foreseeable future.

It is difficult to determine with certainty the duration and completion costs of our current or future preclinical programs and clinical trials of our product candidates, or if, when or to what extent we will generate revenue from the commercialization and sale of any of our product candidates that obtain regulatory approval. We may never succeed in achieving regulatory approval for any of our product candidates. The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors, including the uncertainties of future clinical and preclinical studies, uncertainties in clinical trial enrollment rate and significant and changing government regulation. In addition, the probability of success for each product candidate will depend on numerous factors, including competition, manufacturing capability and commercial viability. We will determine which programs to pursue and how much to fund each program in response to the scientific and clinical success of each product candidate, as well as an assessment of each product candidate s commercial potential.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly-liquid investments that have maturities of three months or less when acquired to be cash equivalents. The Company s cash and cash equivalents generally consist of a business checking account, repurchase agreements and a money market account. The Company s restricted cash balance consists of cash held to collateralize an outstanding letter of credit associated with the lease of its corporate office space in Connecticut.

The following table provides a reconciliation of cash, cash equivalents and restricted cash in the consolidated balance sheets to the total amount shown in the consolidated statements of cash flows (in thousands):

	September 30, 2018	September 30, 2017
Cash, cash equivalents and restricted cash reconciliation:		
Cash and cash equivalents	$ 136,109	$ 80,419
Restricted cash included in Other assets	318	316
Total cash, cash equivalents and restricted cash	$ 136,427	$ 80,735

Recently Adopted Accounting Pronouncements

In May 2017, the FASB issued ASU 2017-09, *Compensation Stock Compensation (Topic 718): Scope of Modification Accounting* (ASU 2017-09). ASU 2017-09 provides guidance about which changes to the terms or conditions of a share-based award require an entity to apply modification accounting under Topic 718 on a prospective basis. Specifically, an entity would not apply modification accounting if the fair value, vesting conditions and classification of the awards are the same immediately before and after a modification. ASU 2017-09 was effective for annual and interim periods beginning after December 15, 2017, with early adoption permitted. The Company adopted this standard effective January 1, 2018. The adoption of ASU 2017-09 did not have an impact on the Company s financial statements.

In November 2016, the FASB issued ASU No. 2016-18*, Statement of Cash Flows (Topic 230): Restricted Cash* (ASU 2016-18), which amended the existing accounting standards for the statement of cash flows by requiring restricted cash to be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-18 was effective for the Company in the first quarter of 2018. All prior periods were retrospectively adjusted upon adoption of ASU 2016-18.

In August 2016, the FASB issued ASU No. 2016-15*, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* (ASU 2016-15), which amended the existing accounting standards for the statement of cash flows by providing guidance on eight classification issues related to the statement of cash flows. ASU 2016-15 was effective for the Company in the first quarter of 2018. The adoption of ASU 2016-15 did not have an impact on the Company s financial statements.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments - Overall (Subtopic 825-10), Recognition and Measurement of Financial Assets and Financial Liabilities* (ASU 2016-01), which addresses certain aspects of recognition, measurement, presentation and disclosure of financial instruments. ASU 2016-01 was effective for the Company in the first quarter of 2018. The adoption of ASU 2016-01 did not have an impact on the Company s financial statements.

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In May 2014, the FASB issued ASU No. 2014-09, which amends the guidance for accounting for revenue from contracts with customers (ASU 2014-09). ASU 2014-09 supersedes the revenue recognition requirements in ASC Topic 605, Revenue Recognition, and creates a new ASC Topic 606, Revenue from Contracts with Customers. Subsequent to May 2014, the FASB issued additional guidance that delayed the effective date and clarified various aspects of the new guidance, including principal versus agent considerations, identifying performance obligations and licensing, and also included other improvements and practical expedients. ASU 2014-09 was effective for the Company in the first quarter of 2018. The adoption of ASU 2014-09 did not have a material impact on the Company s financial statements as the Company did not have any contracts with customers subject to the guidance.

Recent Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842).* The new standard establishes a right-of-use, or ROU, model that requires a lessee to record a ROU asset and a lease liability on the condensed consolidated balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the condensed consolidated statement of operations. ASU 2016-02 is effective for annual periods beginning after December 15, 2018, including interim periods within those annual periods, with early adoption permitted. In July 2018, the FASB issued ASU No. 2018-11, *Leases: Targeted Improvements*, which provides an optional transition method that allows entities to apply the new guidance using a modified retrospective approach at the beginning of the year in which the new lease standard is adopted, rather than to the earliest comparative period presented in their financial statements. The Company will use the new transition option and is also utilizing the package of practical expedients that allows it to not reassess: (1) whether any expired or existing contracts are or contain leases, (2) lease classification for any expired or existing leases, and (3) initial direct costs for any expired or existing leases. The Company additionally expects to use the practical expedient that allows it to treat the lease and non-lease components of its leases as a single component. The Company is currently evaluating the effect that the updated standards will have on its consolidated financial statements and related disclosures and is in the process of completing an analysis of its existing lease arrangements including the assessment of any embedded leases. The new standard will have an impact on the Company s consolidated financial statements as it will result in a lease liability and ROU asset on the Company s consolidated balance sheets and additional lease-related disclosures in the footnotes to the consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments Credit Losses*, which replaces the incurred loss impairment methodology with a methodology that reflects expected credit losses. The update is intended to provide financial statement users with more useful information about expected credit losses. The amended standard is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. The Company is currently evaluating the impact the standard will have on the Company s financial statements and related disclosures.

In February 2018, the FASB issued ASU No. 2018-02, *Income Statement Reporting Comprehensive Income* (ASU 2018-02), to allow reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. ASU 2018-02 will be effective for annual and interim periods beginning after December 15, 2018, with earlier application permitted. The Company is currently evaluating the impact the standard will have on the Company s financial statements and related disclosures.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation Stock Compensation* (ASU 2018-07) intended to reduce cost and complexity and to improve financial reporting for nonemployee share-based payments. Currently, the accounting requirements for nonemployee and employee share-based payment transactions are significantly different. ASU 2018-07 expands the scope of Topic 718, *Compensation-Stock Compensation* (which currently only includes share-based payments to employees) to include share-based payments issued to nonemployees for goods or services. Consequently, the accounting for share-based payments to nonemployees and employees will be substantially aligned. ASU 2018-07 supersedes Subtopic 505-50, *Equity Equity-Based Payments to Nonemployees*. The amendments in ASU 2018-07 are effective for fiscal years beginning after December 15, 2018, with early adoption permitted. The Company is currently evaluating the impact the standard will have on the Company s financial statements and related disclosures, including early adoption.

In August 2018, the SEC adopted the final rule under SEC Release No. 33-10532, Disclosure Update and Simplification, amending certain disclosure requirements that were redundant, duplicative, overlapping, outdated or superseded. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders equity for interim financial statements. Under the amendments, an analysis of changes in each caption of stockholders equity presented in the balance sheet must be provided in a note or separate statement. The analysis should present a reconciliation of the beginning balance to the ending balance of each period for which a statement of comprehensive income is required to be filed. The Company anticipates its first presentation of changes in stockholders equity as required under the new SEC guidance will be included in its Form 10-Q for the quarter ended March 31, 2019.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement*, which modifies certain disclosure requirements on fair value measurements

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in ASC 820. This ASU is effective for interim and annual periods beginning after December 15, 2019 and early adoption is permitted. The Company is currently evaluating the effect that ASU 2018-13 will have on its consolidated financial statements disclosures.

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles Goodwill and Other Internal-Use Software, Customer s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* (ASU 2018-15), which requires a customer in a hosting arrangement that is a service contract to follow the internal-use software guidance to determine which implementation costs to capitalize as an asset related to the service contract and which costs to expense. The new guidance is effective for annual and interim periods beginning after December 15, 2019. Early adoption is permitted. The amendments in this update should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The Company is currently evaluating the impact the standard will have on the Company s consolidated financial statements.

3. Collaboration Agreement

Agreement Terms

On November 14, 2017, the Company entered into the Bayer Agreement pursuant to which the Company and Bayer will collaborate to develop and commercialize larotrectinib and LOXO-195, the Company s franchise of highly selective TRK inhibitors for patients with TRK fusion cancers. Pursuant to the Bayer Agreement, Loxo has granted co-exclusive development and commercialization licenses to Bayer for both larotrectinib and LOXO-195. Upon the effective date, the Company became eligible for a non-refundable, upfront cash payment of $400 million from Bayer. In accordance with the terms of the Bayer Agreement, the Company received $250 million in November 2017 and the remaining $150 million in March 2018.

In addition to the upfront cash payment of $400 million, the Company is eligible to receive $450 million in milestone payments upon larotrectinib regulatory approvals and first commercial sale events in certain major markets and an additional $200 million in milestone payments upon LOXO-195 regulatory approvals and first commercial sale events in certain major markets.

The Company will lead global development activities and regulatory activities in the United States. Bayer will lead regulatory activities outside the United States and global commercial activities. Globally, the Company will be responsible for 50% of development costs incurred after January 1, 2018. In the United States, where the Company and Bayer will co-promote the products, the Company will be responsible for 50% of the commercial costs and receive 50% of the profits. In addition to the milestones described above, Bayer will pay the Company a $25 million milestone upon achieving a certain aggregate U.S. net sales threshold. The Company will have the right to opt-out of the U.S. co-promotion, in which case the Company would receive a royalty in the low thirties percentage range on U.S. net sales, which is meant to approximate the economics of the 50/50 profit split. Both parties will participate on a Global Steering Committee and a Joint Steering Committee and will participate in working groups established by the Committees.

Outside of the United States, where Bayer will commercialize, Bayer will pay the Company tiered, double digit royalties on net sales, and sales milestones totaling $475 million.

The Bayer Agreement will terminate as to a product or country upon the expiration of the royalty term applicable to such product in such country. The Bayer Agreement may be terminated by either party for material breach or bankruptcy. In addition, (i) Bayer may terminate the Bayer Agreement after the fourth anniversary of the effective date upon written notice to the Company which termination shall be effective 18 months following the Company s receipt of such notice, or (ii) Bayer shall have the right, but not the obligation, to terminate the Bayer Agreement with respect to the Co-Promotion Territory or in its entirety by written notice to the Company with immediate effect in the event that the Company receives a complete response letter from the U.S. Food and Drug Agency with respect to larotrectinib, or if the Company does not receive marketing approval for larotrectinib by December 31, 2018.

The Agreement contains customary representations, warranties and covenants by the Company and Bayer. Each of the Company and Bayer is required to indemnify the other party against all losses and expenses related to breaches of its representations, warranties and covenants under the Agreement.

To account for the Bayer Agreement, the Company applied the guidance in ASC 808 as the parties are active participants and are exposed to significant risks and rewards dependent on commercial success of the collaborative activity. The Company also determined that the arrangement does not represent a vendor-customer relationship. ASC 808 does not contain prescriptive guidance on the measurement or recognition of collaborative arrangements. Therefore, there was significant judgment applied in determining a reasonable, rational method of accounting for the Bayer Agreement, with the Company considering the guidance in ASC 606 as well as ASC 730 *Research and Development* (ASC 730).

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Collaboration Revenue

The Company concluded that the upfront payment of $400 million related to the transfer of the licenses to Bayer. The Company considered the guidance in ASC 606 to determine whether and, if so, how to separate the licenses and concluded that Bayer is able to obtain the utility of the larotrectinib and LOXO-195 licenses separately.

The Company also considered the guidance in ASC 606 to determine the measurement of the arrangement consideration related to the licenses. At contract inception, the Company determined that the upfront payment should be included in the transaction price and constituted the consideration to be allocated to the two licenses. The future potential milestone amounts were not included in the transaction price, as they were all determined to be fully constrained following the concepts of ASC 606. Additionally, the Company expects that any consideration related to royalties and sales-based milestones will be recognized when the subsequent sales occur.

The Company also considered the guidance in ASC 606 to allocate the arrangement consideration to the two licenses. The Company allocated the estimated consideration to the licenses based on its estimates of the relative estimated standalone selling prices. This resulted in an allocation at contract inception of $280 million to larotrectinib and $120 million to LOXO-195. In the event it is probable that a significant reversal of income will not occur for a regulatory milestone, it will be included in the license consideration and allocated to the specific license to which it relates.

In order to determine the period of attribution of the license consideration, the Company considered that Bayer is unable to obtain utility of the licenses without the benefit of the research and development. Therefore, the Company will recognize collaboration revenue for the licenses over time using a proportional performance method. In applying the proportional performance method of recognition, collaboration revenue will be recognized based on actual development costs incurred as a percentage of the total budgeted development costs over the time period the Company completes its development activities, which the Company believes is the most appropriate measure of the utility provided to Bayer. The Company estimates that the collaboration revenue will be recognized over a remaining weighted average period of 1.1 years for larotrectinib and 1.7 years for LOXO-195. A proportional performance method of recognition requires management to make estimates of costs to complete the development activities. In making such estimates, significant judgment is required to evaluate assumptions related to cost estimates. The cumulative effect of increases in the license consideration related to regulatory milestones or revisions to estimated costs to complete the Company s performance obligations will be recorded in the period in which changes are identified and amounts can be reasonably estimated. A significant change in these assumptions and estimates could have a material impact on the timing and amount of collaboration revenue recognized in future periods.

The Company has not yet recognized any revenues for milestone payments as the related regulatory or sales milestones have not yet been achieved.

Research and Development Activities

The Company is incurring global development costs, with Bayer responsible for 50% of such costs. The Company will record all costs associated with the development activities as research and development expenses in the consolidated statements of operations consistent with ASC 730. The reimbursement of a portion of the development costs by Bayer is representative of the joint risk sharing nature of the arrangement. The Company considered the guidance in ASC 808 and will recognize the payments received from Bayer as a reduction to research and development expense when the related costs are incurred. For the three and nine months ended September 30, 2018, the Company

recognized the reimbursement from Bayer of $7.1 million and $22.4 million, respectively.

Commercialization Activities

Bayer is the principal as it relates to the commercialization of larotrectinib and LOXO-195. Therefore, profits and losses related to commercialization activities, including sales-based milestones, royalties and the Company s 50% share of U.S. profits or losses incurred by Bayer, will be recognized as collaboration revenue. Commercialization costs incurred by the Company will be recognized as a reduction to the collaboration revenue.

The following table shows the components of revenue from the collaboration agreement for the three and nine months ended September 30, 2018 and 2017 (in thousands):

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	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
	(unaudited)		(unaudited)	
Upfront:				
Revenue recognized from $400M upfront payment	$ 52,938	$	$ 147,019	$
Milestones				
Royalties				
Co-promote:				
Product revenue subject to profit sharing (as recorded by Bayer)				
Combined cost of goods sold, distribution, selling, general and administrative expenses	(20,936)		(47,038)	
Combined collaboration co-promotion profit/(loss)	(20,936)		(47,038)	
Loxo Oncology s 50/50 share of collaboration co-promotion profit/(loss)	(10,468)		(23,519)	
Total revenue from collaboration agreement	$ 42,470	$	$ 123,500	$

4. Net Loss Per Common Share

The following table sets forth the computation of basic and diluted net loss per share for the periods indicated (in thousands, except share and per share data):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Basic and diluted net loss per common share calculation:				
Net loss	$ (27,064)	$ (73,319)	$ (42,348)	$ (128,248)
Weighted average common shares outstanding basic and diluted	30,502,789	29,872,198	30,230,160	27,391,020
Net loss per share of common stock basic and diluted	$ (0.89)	$ (2.45)	$ (1.40)	$ (4.68)

The following outstanding securities at September 30, 2018 and 2017 have been excluded from the computation of diluted weighted average shares outstanding, as they would have been anti-dilutive:

	September 30, 2018	September 30, 2017
Stock options	4,176,718	3,246,018
Total	4,176,718	3,246,018

5. Fair Value Measurements

Financial Instruments

The financial instruments recorded in the Company s balance sheets include cash and cash equivalents, receivable owed from collaboration partner, payable due to collaboration partner, investments, and accounts payable. Included in cash and cash equivalents are money market funds representing a type of mutual fund required by law to invest in low-risk securities (for example, U.S. government bonds, U.S. treasury bills and commercial paper) and overnight repurchase agreements. Money market funds are structured to maintain the fund s net asset value at $1.00 per unit, which assists in providing adequate liquidity upon demand by the holder. Money market funds pay dividends that generally reflect short-term interest rates. Thus, only the dividend yield fluctuates. Also included in cash and cash equivalents are U.S. government sponsored enterprise debt securities that have a maturity of 3 months or less from their original acquisition date. Due to their short-term maturity, the carrying amounts of cash and cash equivalents (including money market funds), receivable owed from collaboration partner, payable due to collaboration partner and accounts payable approximate their fair values. The Company classifies its remaining investments as available-for-sale. Gains or losses on securities sold are based on the specific identification method.

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For investments classified as available-for-sale, the Company records unrealized gains or losses resulting from changes in fair value between measurement dates as a component of other comprehensive loss.

(amounts in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
September 30, 2018				
Overnight repurchase agreements	$ 44,250	$	$	$ 44,250
Money market funds	52,482			52,482
Government enterprise debt securities	29,500			29,500
Total included in cash and cash equivalents	126,232			126,232
U.S. Government debt securities	143,810		(139)	143,671
Government enterprise debt securities	342,525		(306)	342,219
Short-term available-for-sale securities	486,335		(445)	485,890
U.S. Government debt securities	11,854		(6)	11,848
Government enterprise debt securities	13,769		(14)	13,755
Long-term available-for-sale securities	25,623		(20)	25,603
Total fair value financial instruments	$ 638,190	$	$ (465)	$ 637,725
December 31, 2017				
Overnight repurchase agreements	$ 51,750	$	$	$ 51,750
Money market funds	50,744			50,744
Government enterprise debt securities	23,444			23,444
Total included in cash and cash equivalents	125,938			125,938
U.S. Government debt securities	192,473	1	(129)	192,345
Government enterprise debt securities	292,274		(444)	291,830
Short-term available-for-sale securities	484,747	1	(573)	484,175
Total fair value financial instruments	$ 610,685	$ 1	$ (573)	$ 610,113

Fair value guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. These tiers include:

- Level 1 Quoted prices in active markets for identical assets or liabilities.

- Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

- Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company s financial assets measured at fair value on a recurring basis at September 30, 2018 were as follows (in thousands):

	Fair Value Measurements at Measurement Date:			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**	**Total as of September 30, 2018**
Assets:				
Cash and cash equivalents				
Overnight repurchase agreements	$ 44,250	$	$	$ 44,250
Money market funds	52,482			52,482
Government enterprise debt securities		29,500		29,500
Total cash and cash equivalents	96,732	29,500		126,232
Short-term investments				
U.S. Government debt securities	143,671			143,671
Government enterprise debt securities		342,219		342,219
Total short-term investments	143,671	342,219		485,890
Long-term investments				
U.S. Government debt securities	11,848			11,848
Government enterprise debt securities		13,755		13,755
Total long-term investments	11,848	13,755		25,603
Totals	$ 252,251	$ 385,474	$	$ 637,725

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The Company s financial assets measured at fair value on a recurring basis at December 31, 2017 were as follows (in thousands):

	Fair Value Measurements at Measurement Date:			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total as of December 31, 2017
Assets:				
Cash and cash equivalents				
Overnight repurchase agreements	$ 51,750	$	$	$ 51,750
Money market funds	50,744			50,744
Government enterprise debt securities		23,444		23,444
Total cash and cash equivalents	102,494	23,444		125,938
Short-term investments				
U.S. Government debt securities	192,345			192,345
Government enterprise debt securities		291,830		291,830
Total short-term investments	192,345	291,830		484,175
Totals	$ 294,839	$ 315,274	$	$ 610,113

There were no items that were accounted for at fair value on a non-recurring basis for the nine months ended September 30, 2018 and 2017. The Company s Level 2 securities are typically valued utilizing third party pricing services or other observable market data. The pricing services utilize industry standard valuation models, including both income and market-based approaches and observable market inputs to determine value. These observable market inputs include reportable trades, benchmark yields, credit spreads, broker/dealer quotes, bids, offers, and other industry and economic events.

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash and cash equivalents. At September 30, 2018 and December 31, 2017, the Company s cash and cash equivalents were held by two financial institutions and the amounts on deposit were in excess of Federal Deposit Insurance Company insurance limits. The Company mitigates this risk by depositing its uninsured cash in major well capitalized financial institutions, and by investing excess operating cash in overnight repurchase agreements which are 100% collateralized by U.S. government backed securities with the Company s bank. The Company has not recognized any losses on its cash and cash equivalents.

6. Stock-Based Compensation

Equity Incentive Plan (the Plan)

Effective July 2013, the Company adopted the 2013 Equity Incentive Plan, which was amended in November 2013 (the 2013 Plan). The 2013 Plan provided for the granting of incentive stock options, non-statutory stock options and the issuance of restricted stock awards. In connection with the Company s initial public offering, no further grants will be made under this plan and all remaining shares available for grant were transferred to the 2014 Equity Incentive Plan.

The Company adopted the 2014 Equity Incentive Plan (the 2014 Plan) that became effective on July 30, 2014 and serves as the successor to the 2013 Plan. The 2014 Plan provides for the grant of awards to employees, directors, consultants, independent contractors and advisors, provided the consultants, independent contractors, directors and advisors are natural persons that render services other than in connection with the offer and sale of securities in a capital-raising transaction. The exercise price of stock options must be at least equal to the fair market value of the Company s common stock on the date of grant.

In 2018, our Board of Directors approved the grant of non-plan inducement stock options (non-plan inducement option grants) to prospective employees pursuant to non-plan stock option agreements as a material inducement for entering into

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employment with the Company. The non-plan inducement option grants must be made in connection with the commencement of employment, are subject to the Company s standard vesting schedule and will expire no more than ten years from their respective dates of grant. Additionally, recipients of non-plan inducement option grants must meet certain other pre-employment criteria. During the nine months ended September 30, 2018, the Company granted 98,525 inducement stock options to employees.

The Company adopted the Amended and Restated 2014 Equity Incentive Plan (the A&R 2014 Plan) on April 23, 2018. The A&R 2014 Plan reserved an additional 1,500,000 shares of the Company s common stock for issuance under the A&R 2014 Plan, subject to certain additions and adjustments, and approved certain amendments to the A&R 2014 Plan to (i) change the automatic evergreen increase in shares reserved for issuance under the A&R 2014 Plan from 3% to 4% of the aggregate number of outstanding shares of the Company s common stock as of the immediately preceding December 31 for each calendar year January 1, 2019 through January 1, 2023, (ii) impose a limit of 30,000 shares as the maximum number of shares that may be granted under the A&R 2014 Plan to each of the Company s non-employee directors each year, (iii) prohibit shares that are withheld from exercised shares for taxes, payment of exercise price in connection with the exercise of options or stock appreciation rights from returning to the total number of shares reserved for awards, (iv) provide for a prohibition on payment of dividends on unvested awards, (v) prohibit repricing without stockholder approval, (vi) prohibit transfer of awards to third-party institutions for value and (vii) make certain modifications to reflect changes to the tax law by 2017 tax legislation.

As of September 30, 2018, the Company has reserved 5,228,625 shares of its common stock to be issued under the A&R 2014 Plan, including those shares transferred from the 2013 Plan to be issued under the A&R 2014 Plan, of which 1,521,732 shares were available for future issuance. The A&R 2014 Plan authorizes the award of stock options, restricted stock awards (RSAs), stock appreciation rights (SARs), restricted stock units (RSUs), performance awards and stock bonuses.

The following table summarizes stock option activity for the period from January 1, 2018 through September 30, 2018:

	Number of Shares	Weighted-Average Exercise Price	Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2018	3,225,356	$ 25.82	7.72	$ 188,626
Granted	1,554,775	98.36		
Exercised	(574,913)	17.56		
Expired				
Forfeited	(28,500)	89.00		
Outstanding at September 30, 2018	4,176,718	$ 53.52	7.99	$ 490,720
Vested and expected to vest at September 30, 2018	4,035,232	$ 52.53	7.95	$ 478,110
Exercisable at September 30, 2018	1,931,667	$ 27.14	6.94	$ 277,712
Weighted-average grant date fair value of options granted during the nine months ended September 30, 2018	$ 59.72			

As of September 30, 2018, there was $108.8 million of total unrecognized compensation expense related to options granted but not yet vested of which $10.9 million is attributable to non-employee awards and subject to re-measurement until vested. The total unrecognized compensation expense of $108.8 million will be recognized as expense over a weighted-average period of 2.94 years.

The Company uses the Black-Scholes option pricing model to estimate the fair value of option awards with the following weighted-average assumptions, certain of which are based on industry comparative information, for the period indicated:

	Nine Months Ended September 30, 2018
Risk-free interest rate	2.45%
Expected dividend yield	0%
Expected stock price volatility	68.84%
Expected term of options (in years)	6.1
Expected forfeiture rate	9.08%

The weighted-average valuation assumptions were determined as follows:

- Risk-free interest rate: The Company bases the risk-free interest rate on the interest rate payable on U.S. Treasury securities in effect at the time of grant for a period that is commensurate with the assumed expected option term.

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- Expected annual dividends: The estimate for annual dividends is 0%, because the Company has not historically paid, and does not expect for the foreseeable future to pay, a dividend.

- Expected stock price volatility: The expected volatility used is based on historical volatilities of similar entities within the Company s industry which were commensurate with the Company s expected term assumption.

- Expected term of options: The expected term of options represents the period of time options are expected to be outstanding. The expected term of the options granted to employees is derived from the simplified method as described in Staff Accounting Bulletin 107 relating to stock-based compensation. The expected term for options granted to non-employees is equal to the contractual term of the awards.

- Expected forfeiture rate: The Company s estimated forfeiture rate is based on historical forfeiture experience of its various employee groups.

- Estimated fair value of the Company s stock-based awards: The estimated fair value of the Company s stock-based awards is amortized on a straight-line basis over the awards service period for those awards with graded vesting and which contain only a service condition. For awards with graded vesting and a performance and service condition, when achievement of the performance condition is deemed probable, the Company recognizes compensation cost using the accelerated recognition method over the awards service period.

Share-based compensation expense recognized was as follows (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Research and development	$ 4,205	$ 2,148	$ 14,313	$ 8,010
General and administrative	6,948	3,120	18,837	6,667
	$ 11,153	$ 5,268	$ 33,150	$ 14,677

7. Commitments and Contingencies

Array Bio Pharma (Array) Collaboration

On July 3, 2013, the Company signed a multi-year strategic collaboration agreement with Array, and this agreement was subsequently amended on November 26, 2013, April 10, 2014, October 13, 2014, March 31, 2015 and February 18, 2016. Under the terms of the collaboration agreement, as amended, the Company obtained certain rights to Array s tropomyosin receptor kinase (TRK) inhibitor program, as well as additional novel oncology targets, including rearranged during transfection (RET), and fibroblast growth factor receptor (FGFR). The Company received worldwide commercial rights to each product candidate from the collaboration, and Array participates in any potential successes through milestones and royalties.

Before the February 2016 amendment, in addition to larotrectinib, the parties designated 12 discovery targets, of which seven were selected for additional study in January 2015, which was to be reduced to four on or before January 2016. The Company had the option to maintain the total target number at five for an additional payment, and the Company exercised this option to maintain five discovery programs in January 2016. In the February 2016 amendment, the parties designated a total of six discovery targets. An additional payment was due at contract signing, satisfying a prior obligation of the April 2014 amendment.

As part of the agreement the Company agreed to pay Array a fixed amount per month, based on Array s commitment to provide full-time equivalents and other support relating to the conduct of the discovery and preclinical development programs. For the three months ended September 30, 2018 and 2017, the Company recorded $2.4 million and $2.2 million, respectively, of research and development expenses related to the collaboration agreement. For the nine months ended September 30, 2018 and 2017, the Company recorded $7.3 million and $6.1 million, respectively, of research and development expenses related to the collaboration agreement. With respect to this discovery and preclinical program, the collaboration agreement, as amended, ran through September 30, 2018. Projects that were in-process at the time of the collaboration s expiry have since been transferred to the Company s internal discovery facility and team.

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Milestones

With respect to product candidates directed to TRK, including larotrectinib and LOXO-195, the Company could be required to pay Array up to $223 million in milestone payments for each compound, the substantial majority of which are due upon the achievement of commercial milestones. The Company has made or accrued $7.0 million and $1.3 million in larotrectinib and LOXO-195 milestone payments, respectively, from inception through September 30, 2018. No expense relating to a milestone payment was recognized in research and development expenses for either larotrectinib or LOXO-195 in the three and nine months ended September 30, 2018. A milestone payment of $1.0 million was recognized in research and development expenses relating to LOXO-195 in the three and nine months ended September 30, 2017.

With respect to product candidates directed to targets other than TRK, including LOXO-292, the Company could be required to pay Array up to $213 million in milestone payments, the substantial majority of which are due upon the achievement of commercial milestones. The Company has made or accrued $8.3 million in LOXO-292 milestone payments from inception through September 30, 2018. Milestone payments of $4.0 million and $7.0 million were recognized in research and development expenses for LOXO-292 in the three and nine months ended September 30, 2018, respectively. A milestone payment of $1.0 million for LOXO-292 was recognized in research and development expenses in the nine months ended September 30, 2017.

Royalties

The Company is required to pay Array mid-single digit royalties on worldwide net sales of products that were discovered under the agreement. With respect to the royalty on products directed to targets other than TRK, including LOXO-292, the Company has the right to credit certain milestone payments against royalties on sales of products directed to such target.

Research and Development Arrangements

In the course of normal business operations, the Company enters into agreements with contract research organizations (CROs) to assist in the performance of research and development and preclinical activities, and contract manufacturers to assist with CMC related expenses. Expenditures to CROs may represent a significant cost in preclinical and clinical development for the Company in future periods. The Company can elect to discontinue the work under these agreements at any time. The Company also enters into agreements with third parties to develop and commercialize companion diagnostics. The Company could also enter into additional collaborative research, contract research, manufacturing, and supplier agreements in the future, which may require upfront payments and long-term commitments of cash.

Legal Proceedings

The Company is not involved in any legal proceeding that it expects to have a material effect on its business, financial condition, results of operations and cash flows.

8. Related Party Transactions

Dr. Lori Kunkel, a board member, had a consulting agreement with the Company to assist in the Company s drug development process, which was modified, effective as of October 31, 2015, to provide that she receives only the standard director compensation for her services. Dr. Kunkel also received stock option grants in 2013 and 2014 as compensation for her consulting services. As of September 30, 2018, these stock options are fully vested. During the three and nine months ended September 30, 2018, the Company recognized stock-based compensation expense of $0.2 million and $1.0 million, respectively, and during the three and nine months ended September 30, 2017, the Company recognized stock-based compensation of $0.3 million and $1.7 million, respectively, in accordance with the terms of the consulting agreement.

Dr. Keith Flaherty, a board member, has an agreement with the Company to serve as Scientific Advisor Board (SAB) Chair for which he receives cash compensation. Dr. Flaherty also received stock option grants in 2013, 2014, and 2018 as compensation for his SAB services. The stock options granted in 2013 are fully vested, stock options granted in 2014 and 2018 continue to vest. Both cash compensation that was expensed as incurred and stock-based compensation are recorded as a component of research and development expenses. During the three months ended September 30, 2018 and 2017, the Company recognized cash compensation expense of $15 thousand and $15 thousand, respectively, and stock-based compensation expense of $0.1 million and $0.5 million, respectively, in accordance with the terms of the SAB agreement. During the nine months ended September 30, 2018 and 2017, the Company recognized cash compensation expense of $48 thousand and $45 thousand, respectively, and stock-based compensation expense of $0.8 million and $2.3 million, respectively, in accordance with the terms of the SAB agreement.

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ITEM 2. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The interim unaudited condensed consolidated financial statements and this Management s Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the financial statements and notes thereto for the year ended December 31, 2017 and the related Management s Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K filed with the SEC on March 1, 2018. As used in this report, unless the context suggests otherwise, we, us, our, the Company or Loxo refer to Loxo Oncology, Inc.

Forward Looking Statements

The information in this discussion contains forward-looking statements and information within the meaning of Section 27A of the Securities Act of 1933, as amended, (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended, (the Exchange Act), which are subject to the safe harbor created by those sections. This Quarterly Report on Form 10-Q contains forward-looking statements that involve substantial risks and uncertainties. In some cases, you can identify forward-looking statements by the words may, might, will, could, would, should, expect, intend, plan, objective, anticipate, believe, estimate, predict, project, potential, continue and ongoing, terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Form 10-Q, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain. You should refer to the risks set forth in Part II, Item 1A, Risk Factors in this Quarterly Report on Form 10-Q for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Furthermore, such forward-looking statements speak only as of the date of this report. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Overview

Loxo Oncology is a biopharmaceutical company developing highly selective medicines for patients with genomically defined cancers. Our pipeline focuses on cancers that are uniquely dependent on single gene abnormalities, such that a single drug has the potential to treat the cancer with dramatic effect. We believe that the most selective, purpose-built medicines have the highest probability of maximally inhibiting the intended target, thereby delivering best-in-class disease control and safety. Our management team seeks out experienced industry partners, world-class scientific advisors and innovative clinical-regulatory approaches to deliver new cancer therapies to patients as quickly and efficiently as possible.

With our scientific knowledge, collaborative partnerships and targeted approach, we are developing multiple small molecule therapeutics utilizing focused clinical development strategies in well-defined patient populations. Larotrectinib, a selective TRK inhibitor currently in clinical development, is being evaluated in three ongoing multi-center studies that include patients with solid tumors that harbor TRK gene fusions. In May 2018, we announced that the U.S. Food and Drug Administration (FDA) accepted the company s New Drug Application (NDA) and granted Priority Review for larotrectinib for the treatment of adult and pediatric patients with locally advanced or metastatic solid tumors harboring an NTRK gene fusion. The FDA set a target action date of November 26, 2018, under the Prescription Drug User Fee Act (PDUFA). In October 2018, updated clinical data for larotrectinib were presented at the European Society for Medical Oncology (ESMO) 2018 Congress. The oral

presentation provided approximately one year of additional follow-up for the primary dataset, the 55 patients with TRK fusion cancer described in the larotrectinib New England Journal of Medicine publication from February 2018. In addition, the update included data for a supplementary dataset, an additional 67 patients with TRK fusion cancer who were subsequently enrolled across the larotrectinib development program. Response evaluations were based on investigator assessment. As of a data cut-off date of July 30, 2018, in the primary dataset (n=55), the overall response rate (ORR) was 80% (44/55) (95% CI: 67-90%) and in the supplementary dataset (n=67), the ORR was 81% (44/54) (95% CI: 69-91%). Across both datasets, the ORR was 81% (88/109) (95% CI: 72-88%). The ORR analyses for the supplementary and integrated datasets included nine patients with unconfirmed partial responses awaiting confirmatory response assessments, but did not include 13 patients who were awaiting an initial response assessment and continuing on study. Median duration of response (DOR) had not been reached in either the primary dataset or supplementary dataset, with median follow-up of 17.6 months and 7.4 months, respectively. Larotrectinib was well tolerated, with the majority of adverse events recorded as grade 1 or 2. The most common treatment-emergent adverse events occurring in 15% or more of patients in the trial were fatigue, dizziness, nausea, constipation, anemia, increased ALT, increased AST, cough, diarrhea, vomiting, pyrexia, dyspnea, headache, myalgia and peripheral oedema.

In June 2018, we announced positive interim clinical data from the LOXO-292 dose escalation trial in RET-altered cancers that were presented at the American Society of Clinical Oncology Annual Meeting (ASCO), and announced updated data at the International Association for the Study of Lung Cancer (IASLC) 19th World Conference on Lung Cancer in September 2018 and the

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Annual Meeting of the American Thyroid Association in October 2018. In August 2018, we announced that we recently conducted a meeting with the FDA for LOXO-292. Based on written minutes from the FDA, we expect to submit an NDA for LOXO-292 in late 2019, utilizing data generated from the ongoing LIBRETTO-001 clinical trial.

We also have programs in development for TRK (LOXO-195), RET (LOXO-292), BTK (LOXO-305), FGFR and other targets.

Since inception, we have incurred significant operating losses. Our net loss for the three and nine months ended September 30, 2018 was $27.1 million and $42.3 million, respectively, including approximately $56.9 million and $130.5 million, respectively, of total research and development expenses, and approximately $15.9 million and $43.8 million, respectively, of total general and administrative expenses, partially offset by revenue from our Bayer collaboration agreement of $42.5 million and $123.5 million, respectively. We expect to incur significant expenses and operating losses for the foreseeable future as we continue the discovery, development and clinical trials of, and seek regulatory approval for and pursue potential commercialization of, our product candidates. In addition, we will also incur additional expenses if and as we enter into additional collaboration agreements, acquire or in-license products and technologies, enter into companion diagnostics collaborations, establish sales, marketing and distribution infrastructure, expand our lab and scientific infrastructure and/or expand and protect our intellectual property portfolio.

While we have substantial cash on hand for immediate operations, we will need to obtain substantial additional funding in connection with our long term continuing operations. We will seek to fund our operations through the sale of equity, debt financings or other sources, including potential collaborations. We may be unable to raise additional funds or enter into such other agreements when needed on favorable terms, or at all. If we fail to raise capital or enter into such other arrangements as, and when, needed, we may have to significantly delay, scale back or discontinue the development and commercialization of one or more of our product candidates.

Bayer License, Development and Commercialization Agreement

In November 2017, we entered into a license, development and commercialization agreement with Bayer pursuant to which we and Bayer will collaborate to develop and commercialize larotrectinib and LOXO-195, our franchise of highly selective TRK inhibitors for patients with TRK fusion cancers. Pursuant to the Bayer Agreement, we granted co-exclusive development and commercialization licenses to Bayer for both larotrectinib and LOXO-195.

In addition to an upfront cash payment of $400.0 million, we are eligible to receive $450.0 million in milestone payments upon larotrectinib regulatory approvals and first commercial sale events in certain major markets and an additional $200.0 million in milestone payments upon LOXO-195 regulatory approvals and first commercial sale events in certain major markets. Bayer will also pay us a $25.0 million milestone upon achieving a certain U.S. net sales threshold.

We will lead global development activities and regulatory activities in the United States. Bayer will lead regulatory activities outside the United States and global commercial activities. Globally, we will be responsible for 50% of development costs incurred after January 1, 2018. In the United States, where we and Bayer will co-promote the products, we will be responsible for 50% of the commercial costs and receive 50% of the profits. We will have the right to opt-out of the U.S. co-promotion, in which case we would receive a royalty in the low thirties percent range on U.S. net sales, which is meant to approximate the economics of the 50/50 profit split.

Outside of the United States, where Bayer will commercialize, Bayer will pay us tiered, double digit royalties on net sales, and sales milestones totaling $475.0 million.

The Bayer Agreement also includes a standstill provision that prevents Bayer from acquiring five percent or more of our voting securities.

The Bayer Agreement will terminate as to a product or country upon the expiration of the royalty term applicable to such product in such country. The Bayer Agreement may be terminated by either party for material breach or bankruptcy. In addition, Bayer may terminate the Bayer Agreement after the fourth anniversary of the effective date upon written notice to us, or in the event that we receive a complete response letter from the FDA with respect to larotrectinib, or if we do not receive marketing approval for larotrectinib by December 31, 2018.

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Components of Operating Results

Revenue from Collaboration Agreement

Our revenue from collaboration agreement is derived from payments we receive under the license, development and commercialization collaboration agreement with Bayer. This currently includes a portion of the upfront payment, to be recognized as revenue over time using a proportional performance method as the related research and development activities are performed by us, partially offset by our share of co-promote costs.

Research and Development Expenses

Research and development costs are charged to expense as incurred. These costs include, but are not limited to, employee-related expenses, including salaries, benefits, stock-based compensation and travel as well as expenses related to asset acquisitions of IPR&D, third-party collaborations, contract research arrangements and activities associated with the development of companion diagnostics for our product candidates. Under the Bayer Agreement, we receive reimbursement for 50% of our development activity expenses incurred for larotrectinib and LOXO-195 beginning January 1, 2018. This reimbursement is recorded as a reduction to our research and development costs.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. As we advance our product candidates, we expect the amount of external research and development will continue to increase for the foreseeable future, while our internal spending should increase at a slower and more controlled pace.

It is difficult to determine with certainty the duration and completion costs of our current or future preclinical programs and clinical trials of our product candidates, or if, when or to what extent we will generate revenue from the commercialization and sale of any of our product candidates that obtain regulatory approval. We may never succeed in achieving regulatory approval for any of our product candidates. The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors, including the uncertainties of future clinical and preclinical studies, uncertainties in clinical trial enrollment rate and significant and changing government regulation. In addition, the probability of success for each product candidate will depend on numerous factors, including competition, manufacturing capability and commercial viability. We will determine which programs to pursue and how much to fund each program in response to the scientific and clinical success of each product candidate, as well as an assessment of each product candidate s commercial potential.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for executive and other personnel, including stock-based compensation and travel expenses. General and administrative expenses also include facility-related costs, communication expenses and professional fees for legal, patent prosecution and maintenance, consulting and accounting services.

Interest Income, net

Interest income, net consists principally of the interest earned from our short-term and long-term investments and amortization of premiums related to certain of our investments, partially offset by the amortization of discounts recorded in connection with the purchase of certain investments.

Critical Accounting Policies and Significant Judgments and Estimates

This discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with generally accepted accounting principles in the U.S. (GAAP). The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reported period. In accordance with GAAP, we base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

We believe there have been no significant changes in our critical accounting policies as discussed in our Form 10-K filed on March 1, 2018 with the SEC, except for those related to our collaboration agreement with Bayer and from the adoption of new accounting standards, as described in Note 2 to these condensed consolidated financial statements.

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Results of Operations

Comparison of the Three Months Ended September 30, 2018 and 2017 (in thousands)

	Three Months Ended September 30, 2018 (unaudited)	Three Months Ended September 30, 2017 (unaudited)	Change
Revenue from collaboration agreement	$ 42,470	$	$ 42,470
Operating expenses:			
Research and development	56,928	64,754	(7,826)
General and administrative	15,864	9,680	6,184
Total operating expenses	72,792	74,434	(1,642)
Loss from operations	(30,322)	(74,434)	44,112
Interest income, net	3,258	1,115	2,143
Net loss	$ (27,064)	$ (73,319)	$ 46,255

Revenue from collaboration agreement

For the three months ended September 30, 2018, we recognized $42.5 million of revenues under the Bayer Agreement which includes the components in the table below. We did not recognize any revenue from collaboration agreements during the three months ended September 30, 2017.

	Three Months Ended September 30, 2018 (unaudited)	Three Months Ended September 30, 2017 (unaudited)
Upfront:		
Revenue recognized from $400M upfront payment	$ 52,938	$
Milestones		
Royalties		
Co-promote:		
Product revenue subject to profit sharing (as recorded by Bayer)		
Combined cost of goods sold, distribution, selling, general and administrative expenses	(20,936)	
Combined collaboration co-promotion profit/(loss)	(20,936)	
Loxo Oncology s 50/50 share of collaboration co-promotion profit/(loss)	(10,468)	
Total revenue from collaboration agreement	$ 42,470	$

A portion of this amount represents the amount of the $400.0 million upfront license fee recognized as revenue using a proportional performance method based on actual research and development costs incurred from the effective date of the Bayer Agreement as a percentage of the current projected development costs.

The Company has not yet recognized any revenues for milestone payments as the related regulatory or sales milestones have not yet been achieved.

The Company and Bayer make quarterly cost-sharing payments to one another in amounts necessary to ensure that each party bears its contractual share of the overall shared co-promote profits/costs incurred. For the three months ended September 30, 2018, the Company recognized $52.9 million of revenue under the Bayer Agreement related to the portion of the upfront payment earned during the period, partially offset by $10.5 million in co-promote costs.

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Research and development expenses

Research and development expenses were $56.9 million for the three months ended September 30, 2018, compared to $64.8 million for the three months ended September 30, 2017. The decrease was primarily due to the $40.0 million asset acquisition of the BTK inhibitor program from Redx in the third quarter of 2017, partially offset by an increase due to expanded development activities including clinical and CMC related expenses. The expense for the three months ended September 30, 2018 is net of 50/50 cost-sharing with Bayer for larotrectinib and LOXO-195 development costs. There were also increases related to higher headcount and employment-related costs, as well as higher stock-based compensation costs. As a result, we had increases of LOXO-292 development expenses of $20.4 million, LOXO-305 development expenses of $3.0 million, Array full-time equivalents and milestones of $3.2 million, employment costs of $3.5 million, stock-based compensation of $2.1 million, $1.8 million in discovery costs and $1.1 million of other costs which includes Boulder lab and other infrastructure expenses to support our research and development operations. These increases were offset by a net decrease in larotrectinib and LOXO-195 development expenses of $3.7 million primarily due to the 50/50 cost sharing with Bayer.

General and administrative expenses

General and administrative expenses were $15.9 million for the three months ended September 30, 2018, compared to $9.7 million for the three months ended September 30, 2017. The increase was primarily due to increased stock-based compensation expense of $3.8 million, general and administrative professional fees of $0.8 million, employment-related expenses of $0.9 million and $0.5 million of facility and other general and administrative costs.

Interest income, net

Interest income was $3.3 million for the three months ended September 30, 2018, compared to $1.1 million for the three months ended September 30, 2017. The increase was primarily due to the increase in short and long-term investment balances as of September 30, 2018 as compared to September 30, 2017, in addition to increasing interest rates.

Comparison of the Nine Months Ended September 30, 2018 and 2017 (in thousands)

	Nine Months Ended September 30, 2018 (unaudited)	Nine Months Ended September 30, 2017 (unaudited)	Change
Revenue from collaboration agreement	$ 123,500	$	$ 123,500
Operating expenses:			
Research and development	130,473	109,321	21,152
General and administrative	43,800	20,968	22,832
Total operating expenses	174,273	130,289	43,984
Loss from operations	(50,773)	(130,289)	79,516

Interest income, net	8,425	2,041	6,384
Net loss	$ (42,348)	$ (128,248)	$ 85,900

Revenue from collaboration agreement

For the nine months ended September 30, 2018, we recognized $123.5 million of revenues under the Bayer Agreement, which includes the components in the table below. We did not recognize any revenue from collaboration agreements during the nine months ended September 30, 2017.

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	Nine Months Ended September 30, 2018 (unaudited)	Nine Months Ended September 30, 2017 (unaudited)
Upfront:		
Revenue recognized from $400M upfront payment	$ 147,019	$
Milestones		
Royalties		
Co-promote:		
Product revenue subject to profit sharing (as recorded by Bayer)		
Combined cost of goods sold, distribution, selling, general and administrative expenses	(47,038)	
Combined collaboration co-promotion profit/(loss)	(47,038)	
Loxo Oncology s 50/50 share of collaboration co-promotion profit/(loss)	(23,519)	
Total revenue from collaboration agreement	$ 123,500	$

A portion of this amount represents the amount of the $400.0 million upfront license fee recognized as revenue using a proportional performance method based on actual research and development costs incurred from the effective date of the Bayer Agreement as a percentage of the current projected development costs.

The Company has not yet recognized any revenues for milestone payments as the related regulatory or sales milestones have not yet been achieved.

The Company and Bayer make quarterly cost-sharing payments to one another in amounts necessary to ensure that each party bears its contractual share of the overall shared co-promote profits/costs incurred. For the nine months ended September 30, 2018, the Company recognized $147.0 million of revenue under the Bayer Agreement related to the portion of the upfront payment earned during the period, partially offset by $23.5 million in co-promote costs.

Research and development expense

Research and development expenses were $130.5 million for the nine months ended September 30, 2018, compared to $109.3 million for the nine months ended September 30, 2017. The increase was primarily due to expanded development activities, including clinical and CMC related costs and expenses. These numbers are net of 50/50 cost-sharing with Bayer for larotrectinib and LOXO-195 development costs for the 2018 period. We also had higher headcount and employment-related costs, as well as higher stock-based compensation costs. As a result, we had increases in LOXO-292 development expenses of $41.0 million, LOXO-305 development costs of $9.4 million, stock-based compensation of $6.3 million, Array full-time equivalents and milestones of $6.2 million. employment-related expenses of $6.4 million, $2.5 million of discovery costs and $4.1 million of other costs which includes Boulder lab and other infrastructure expenses to support our research and development operations. This was offset by a net decrease in larotrectinib and LOXO-195 development expenses of $16.3 million primarily due to the 50/50 cost sharing with Bayer for the 2018 period. This increase was further offset by a $40.0 million asset acquisition of the BTK inhibitor program from Redx in the prior year.

General and administrative expense

General and administrative expenses were $43.8 million for the nine months ended September 30, 2018, compared to $21.0 million for the nine months ended September 30, 2017. The increase was primarily due to increased stock-based compensation expense of $12.2 million, general and administrative fees of $5.1 million, employment-related costs of $3.9 million and $1.4 million of facility and other general and administrative costs.

Interest income, net

Interest income was $8.4 million for the nine months ended September 30, 2018, compared to $2.0 million for the nine months ended September 30, 2017. The increase was primarily due to the increase in short and long-term investment balances as of September 30, 2018 as compared to September 30, 2017, in addition to increasing interest rates.

Liquidity and Capital Resources

Our financial statements and related disclosures have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. Accordingly, the financial statements do not include any adjustments that might be necessary should we be unable to continue in existence. We have not generated any revenues from products and have not yet achieved profitable operations. There is no assurance that profitable operations, if ever achieved, could be sustained on a continuing basis. In addition, development activities, clinical and preclinical testing and commercialization of our products will require significant additional financing. We incurred a net loss of $42.3 million for the nine months ended September 30, 2018. Net cash provided by operating activities was $13.4 million during the nine months ended September 30, 2018.

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At September 30, 2018, we had an accumulated deficit of $330.5 million and working capital of $454.5 million. Aggregate cash equivalents and investments were $647.6 million at September 30, 2018. Management expects to incur substantial and increasing losses in future periods.

Our ability to successfully pursue our business is subject to certain risks and uncertainties, including among others, uncertainty of product development, competition from third parties, uncertainty of capital availability, uncertainty in our ability to enter into agreements with collaborative partners, dependence on third parties, and dependence on key personnel. Historically, we have financed our operations principally through private placements of preferred stock, our initial public offering of common stock, follow-on offerings of common stock and the $400.0 million upfront payment received from our collaboration with Bayer. We plan to finance future operations with a combination of proceeds from the issuance of equity, debt and other sources, our collaboration with Bayer and other potential collaborations and revenues from future product sales, if any. Historically, we had not generated positive cash flows from operations, and there are no assurances that we will be successful in obtaining an adequate level of financing for the development and commercialization of our planned products. We believe that our existing cash, cash equivalents and investments as of September 30, 2018, will be sufficient to enable us to continue as a going concern through at least November 8, 2019.

Cash Flows

The following table summarizes our cash flows for the nine months ended September 30, 2018 and 2017 (in thousands):

	Nine Months Ended September 30, 2018 (unaudited)	Nine Months Ended September 30, 2017 (unaudited)
Net cash provided by (used in):		
Operating activities	$ 13,418	$ (113,118)
Investing activities	(29,428)	(214,037)
Financing activities	10,096	377,514
Net (decrease) increase in cash and cash equivalents	$ (5,914)	$ 50,359

Net cash provided by (used in) operating activities

Net cash provided by operating activities was $13.4 million for the nine months ended September 30, 2018 and consisted primarily of the receipt of $150.0 million in cash from our collaboration partner, non-cash stock-based compensation expenses of $33.2 million, and an increase in accrued expenses and other current liabilities of $21.2 million. This was offset by a net loss of $42.3 million and a decrease in deferred revenue of $147.0 million.

Net cash used in operating activities was $113.1 million for the nine months ended September 30, 2017 and consisted primarily of a net loss of $128.2 million, which included the $40.0 million cash asset acquisition of the BTK inhibitor program from Redx, a decrease in paid expenses and other current assets of $2.1 million, an increase in accrued expenses in other current liabilities of $1.6 million and an increase in accounts payable of $0.8 million. This was offset by noncash expenses of $14.9 million, primarily attributable to stock-based-compensation expense.

Net cash used in investing activities

Net cash used in investing activities for the nine months ended September 30, 2018 totaled $29.4 million and consisted primarily of $436.6 million of available for sale security purchases offset by $410.9 million of proceeds from maturing available-for-sale securities.

Net cash used in investing activities for the nine months ended September 30, 2017 totaled $214.0 million and consisted primarily of $359.7 million of available for sale security purchases offset by $146.0 million of proceeds from maturing available-for-sale securities.

Net cash provided by financing activities

Net cash provided by financing activities was $10.1 million for the nine months ended September 30, 2018, which was primarily due to proceeds from the exercise of employee stock options.

Net cash provided by financing activities was $377.5 million for the nine months ended September 30, 2017, which was primarily due to $375.3 million in net proceeds from the sale and issuance of our common stock in January 2017 and June 2017. We also received $2.2 million in proceeds from the exercise of employee stock options.

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Operating and Capital Expenditure Requirements

We have not achieved profitability since our inception and we expect to continue to incur net losses for the foreseeable future. We expect our cash expenditures to increase in the near term as we fund our clinical trials, prepare for potential larotrectinib commercialization, establish companion diagnostics collaborations, fund clinical trials of our product candidates and continue other preclinical activities.

We anticipate that we will need to raise additional capital in the future to fund our operations. In order to meet these additional cash requirements, we may incur debt, license certain intellectual property and seek to sell additional equity or convertible securities that may result in dilution to our stockholders. If we raise additional funds through the issuance of equity or convertible securities, these securities could have rights or preferences senior to those of our common stock and could contain covenants that restrict our operations. There can be no assurance that we will be able to obtain additional equity or debt financing on terms acceptable to us, if at all. Our future capital requirements will depend on many factors, including:

- the progress and results of our clinical programs;
- the number and development requirements of any other product candidates that we pursue;
- our ability to enter into collaborative agreements for the development and commercialization of our product candidates;
- the scope, progress, results and costs of researching and developing our product candidates or any future product candidates, both in the U.S. and outside the U.S.;
- the costs, timing and outcome of regulatory review of our product candidates or any future product candidates, both in the U.S. and outside the U.S.;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- the costs, timing and outcome of our companion diagnostics collaborations;

- any product liability or other lawsuits related to our products;

- the ability to achieve milestones associated with the Bayer collaboration;

- the expenses needed to attract and retain skilled personnel;

- the general and administrative expenses related to being a public company, including developing an internal accounting function;

- the revenue, if any, received from the commercialization of our product candidates for which we receive marketing approval; and

- the costs involved in preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending our intellectual property-related claims, both in the U.S. and outside the U.S.

See Risk Factors for additional risks associated with our substantial capital requirements.

If we are unable to successfully raise sufficient additional capital, through future equity financings, product sales, debt or other sources, our collaboration with Bayer and other potential collaborations, we will not have sufficient cash flows and liquidity to fund our planned business operations. In that event, we might be forced to limit many, if not all, of our programs and consider other means of creating value for our stockholders, such as licensing to others the development and commercialization of products that we consider valuable and would otherwise likely develop internally. To the extent that we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our product candidates, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable to us. If we do raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders rights or restrict our operations. If we raise additional capital through debt

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financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends.

Contractual Obligations and Commitments

Purchase Commitments

Other than amounts due for the leases of our office locations and under the Array collaboration agreement, as described below, we have no material non-cancelable purchase commitments with contract manufacturers or service providers as we have generally contracted on a cancelable basis.

Array Collaboration

On July 3, 2013, we signed a multi-year strategic collaboration agreement with Array, and this agreement was subsequently amended on November 26, 2013, April 10, 2014, October 13, 2014, March 31, 2015 and February 18, 2016. Under the terms of the collaboration agreement, we obtained certain rights to Array s tropomyosin receptor kinase inhibitor program, as well as additional novel oncology targets, including RET and FGFR. We received worldwide commercial rights to each product candidate from the collaboration and Array participates in any potential successes through milestones and royalties.

Before the February 2016 amendment, in addition to larotrectinib the parties designated 12 discovery targets, of which seven were selected for additional study in January 2015, which was to be reduced to four on or before January 2016. We had the option to maintain the total target number at five for an additional payment, and we exercised this option to maintain five discovery programs in January 2016. In the February 2016 amendment, the parties designated a total of six discovery targets. An additional payment was due at contract signing, satisfying a prior obligation of the April 2014 amendment.

As part of the Array Agreement, as amended, we agreed to pay Array a fixed amount per month, based on Array s commitment to provide full-time equivalents and other support relating to the conduct of the discovery and preclinical development programs. For the three months ended September 30, 2018 and 2017, we recorded $2.4 million and $2.2 million, respectively, of research and development expenses related to the collaboration agreement. For the nine months ended September 30, 2018 and 2017, we recorded $7.3 million and $6.1 million, respectively, of research and development expenses related to the collaboration agreement. With respect to this discovery and preclinical program, the collaboration agreement, as amended, ran through September 30, 2018. Projects that were in-process at the time of the collaboration s expiry have since been transferred to the Company s internal discovery facility and team.

Milestones

With respect to product candidates directed to TRK, including larotrectinib and LOXO-195, we could be required to pay Array up to $223 million in milestone payments for each compound, the substantial majority of which are due upon the achievement of commercial milestones. We have made or accrued $7.0 million and $1.3 million in larotrectinib and LOXO-195 milestone payments, respectively, from inception through September 30, 2018. No expense was recognized in research and development relating to LOXO-195 and larotrectinib in the three and nine months ended September 30, 2018. A milestone payment of $1.0 million was recognized in research and development relating to LOXO-195 in the three and nine months ended September 30, 2017.

With respect to product candidates directed to targets other than TRK, including LOXO-292, we could be required to pay Array up to $213 million in milestone payments, the substantial majority of which are due upon the achievement of commercial milestones. We have made or accrued $8.3 million in LOXO-292 milestone payments from inception through September 30, 2018. Milestone payments of $4.0 million and $7.0 million were recognized in research and development expenses for LOXO-292 in the three and nine months ended September 30, 2018, respectively. A milestone payment of $1.0 million for LOXO-292 was recognized as Research and Development expense in the nine months ended September 30, 2017.

Royalties

We are required to pay Array mid-single digit royalties on worldwide net sales of products developed through the collaboration. With respect to the royalty on products directed to targets other than TRK, including LOXO-292, we have the right to credit certain milestone payments against royalties on sales of products directed to such target.

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Off-Balance Sheet Arrangements

Through September 30, 2018, we do not have any off-balance sheet arrangements, as defined by applicable SEC regulations.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risk related to changes in interest rates. As of September 30, 2018 and December 31, 2017, we had cash and cash equivalents and investments of $647.6 million and $626.2 million, respectively. 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 are in marketable debt securities. Our available-for-sale securities are subject to interest rate risk and will fall in value if market interest rates increase. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 10% change in interest rates would not have a material effect on the fair market value of our portfolio. We have the ability to hold our available-for-sale-securities until maturity, and therefore, we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a change in market interest rates on our investments. We do not currently have any auction rate securities.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2018, the end of the period covered by this Quarterly Report on Form 10-Q.

Based on our evaluation, we believe that our disclosure controls and procedures as of September 30, 2018 are effective to provide reasonable assurance that the information required to be disclosed by us in reports filed under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in the SEC s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. We believe that a controls system, no matter how well designed and operated, cannot provide absolute assurance that the objectives of the controls system are met, and no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within a company have been detected.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting during our fiscal quarter ended September 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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PART II

ITEM 1. LEGAL PROCEEDINGS

We are not currently a party to any material legal proceedings and we are not aware of any pending or threatened legal proceeding against us that we believe could have a material adverse effect on our business, operating results or financial condition.

ITEM 1A. RISK FACTORS

This Quarterly Report on Form 10-Q contains forward-looking information based on our current expectations. Because our actual results may differ materially from any forward-looking statements that we make or that are made on our behalf, this section includes a discussion of important factors that could affect our actual future results, including, but not limited to, our capital resources, the progress and timing of our clinical programs, the safety and efficacy of our product candidates, risks associated with regulatory filings, risks associated with determinations made by regulatory agencies, the potential clinical benefits and market potential of our product candidates, commercial market estimates, future development efforts, patent protection, effects of healthcare reform, reliance on third parties, and other risks set forth below.

Risks Related to Our Financial Position and Capital Needs

We have incurred significant losses since our inception. We expect to incur losses over the next several years and may never achieve or maintain profitability.

Since inception, we have incurred significant operating losses. Our net loss was $27.1 and $42.3 million, respectively, for the three and nine months ended September 30, 2018. As of September 30, 2018, we had an accumulated deficit of $330.5 million. We have focused primarily on our drug discovery efforts and developing our product candidates. To date, we have financed our operations primarily through private placements of our convertible preferred stock, our initial public offering, our follow-on public offerings and our collaboration agreement with Bayer. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. The net losses we incur may fluctuate significantly from quarter to quarter. We anticipate that our expenses will increase substantially if and as we:

- continue development of our product candidates;
- seek to identify additional product candidates;

- enter into additional collaboration arrangements with regards to product discovery, acquire or in-license other products and technologies, or develop internal drug discovery capabilities;

- enter into collaboration arrangements for companion diagnostics for our cancer therapies;

- maintain and leverage our collaborations;

- continue and initiate clinical trials for our product candidates;

- seek marketing approvals for our product candidates that successfully complete clinical trials;

- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;

- maintain, expand and protect our intellectual property portfolio;

- hire additional personnel;

- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts; and

- incur increased costs as a result of operating as a public company.

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To become and remain profitable, we must, alone or with our collaborators, develop and eventually commercialize a product or products with significant market potential. This will require us to be successful in a range of challenging activities, including completing clinical trials of our product candidates, successfully developing companion diagnostics, obtaining marketing approval for these product candidates and manufacturing, marketing and selling those products for which we may obtain marketing approval. We may never succeed in these activities and, even if we do, may never generate revenues that are significant or large enough to achieve profitability. 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 could impair our ability to raise capital, maintain our discovery and preclinical development efforts, expand our business or continue our operations and may require us to raise additional capital that may dilute your ownership interest. A decline in the value of Loxo Oncology could also cause you to lose all or part of your investment.

Our limited operating history may make it difficult to evaluate the success of our business to date and to assess our future viability.

We are a clinical development company. We were incorporated in May 2013 and commenced operations in the third quarter of 2013. We rely on collaborations with third parties for discovery, preclinical development, manufacturing, companion diagnostics development and other activities critical to our business. For larotrectinib and LOXO-195, we rely on our collaboration with Bayer to commercialize these products and secure regulatory approvals outside of the United States. Our operations to date have been limited to organizing and staffing our Company, business planning, raising capital, acquiring and developing our technology, identifying and acquiring potential product candidates and conducting product development activities, which we have advanced into clinical trials, and other product candidates. We have not yet demonstrated our ability to successfully complete large-scale, pivotal clinical trials, develop companion diagnostics, obtain marketing approvals, manufacture a commercial scale product, or arrange for a third-party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. Medicines, on average, take ten to fifteen years to be developed from the time they are discovered to the time they are available for treating patients. Consequently, any predictions about our future success or viability based on our short operating history to date may not be as accurate as if we had a longer operating history.

In addition, as a new business, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors. We will need to transition from a company with a research focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We will need substantial additional funding. If we are unable to raise capital when needed, we would be compelled to delay, reduce or eliminate our product development programs or commercialization efforts.

We expect our expenses to increase in parallel with our ongoing activities, particularly as we continue our discovery and preclinical development collaborations to identify new clinical candidates and initiate clinical trials of, seek marketing approval for, and prepare for the commercial launch of our product candidates. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, diagnostics, manufacturing and distribution to the extent that such sales, marketing, manufacturing and distribution expenses are not the responsibility of Bayer or other collaborators. Furthermore, we continue to incur costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce or eliminate our discovery and preclinical development programs or any future commercialization efforts.

Our future capital requirements will depend on many factors, including:

- the scope, progress, results and costs of compound discovery, preclinical development, laboratory testing and clinical trials for our product candidates;

- the extent to which we enter into additional collaboration arrangements with regard to product discovery or acquire or in-license products or technologies;

- the extent to which we enter into collaboration arrangements for companion diagnostics for our cancer therapies;

- our ability to establish additional discovery collaborations on favorable terms, if at all;

- the extent to which we develop or expand internal drug discovery and development capabilities;

- the costs, timing and outcome of regulatory review of our product candidates;

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- the costs of future commercialization activities, including product sales, marketing, manufacturing and distribution, for any of our product candidates for which we receive marketing approval;

- revenue, if any, received from commercial sales of our product candidates, should any of our product candidates receive marketing approval; and

- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims.

Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes 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. In addition, public policy around drug pricing, in the U.S., and outside of the U.S., may affect the commercial success of our product candidates. Our commercial revenues, if any, will be derived from sales of products that we do not expect to be commercially available for many years, if at all. 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.

Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

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 or other sources, our collaboration with Bayer and other potential collaborations. We do not have any committed external source of funds. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity 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 additional funds through up-front payments or milestone payments pursuant to strategic collaborations with third parties, we may have to relinquish valuable rights to our product candidates, or grant licenses on terms that are not favorable to us.

We cannot be certain that additional funding will be available on acceptable terms, or at all. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts.

Risks Related to the Discovery and Development of Our Product Candidates

Our discovery and preclinical development is focused on the development of targeted therapeutics for well-defined patient populations, which is a rapidly evolving area of science, and the approach we are taking to discover and develop drugs is relatively new and may never lead to marketable products.

The discovery and development of targeted therapeutics for well-defined patient populations is an emerging field, and the scientific discoveries that form the basis for our efforts to discover and develop product candidates are relatively new. The scientific evidence to support the feasibility of developing product candidates based on these discoveries is both preliminary and limited. The patient populations for our product candidates are not completely defined but are substantially smaller than the general treated cancer population, and we will need to screen and identify these patients. Successful identification of patients is dependent on several factors, including achieving certainty as to how specific genomic alterations respond to our product candidates and developing companion diagnostics to identify such genomic alterations as appropriate. Furthermore, even if we are successful in identifying patients, we cannot be certain that the resulting patient populations will be large enough to allow us to successfully commercialize our products and achieve profitability. Our estimates of the potential market opportunities for our products are informed by work that is not definitive and future analyses may lead to estimates that are higher or lower than these estimates than those provided at any given time, with respect to addressable patient populations. Therefore, we do not know if our approach will be successful, and if our approach is unsuccessful, our business will suffer.

We are early in our development efforts and are substantially dependent on the development of our product candidates. If we or our collaborators are unable to successfully develop and commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.

We currently do not have any products that have gained regulatory approval. We have invested significant financial resources in identifying potential product candidates, funding our collaboration agreement with Array to conduct preclinical studies, conducting

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clinical development of our product candidates, acquiring the Redx Pharma Plc BTK program and opening scientific labs in Boulder, Colorado.

Our ability to generate product revenues will depend heavily on the successful development and eventual commercialization of our product candidates. We have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biopharmaceutical area. For example, to execute our business plan, we will need to successfully:

- execute and complete development activities;
- obtain required regulatory approvals for the development and commercialization of our product candidates;
- maintain, leverage and expand our intellectual property portfolio;
- build and maintain robust sales, distribution and marketing capabilities, either on our own or in collaboration with strategic partners;
- establish successful companion diagnostics collaborations;
- gain market acceptance;
- develop and maintain any strategic relationships we elect to enter into, including our collaborations with Bayer and others; and
- manage our spending as costs and expenses increase due to drug discovery, preclinical development, clinical trials, regulatory approvals and commercialization.

If we are unsuccessful in accomplishing these objectives, we may not be able to successfully develop and commercialize our product candidates, and our business will suffer.

Difficulty in enrolling patients could delay or prevent clinical trials of our product candidates. We may find it difficult to enroll patients in our clinical trials given that we do not know how many patients harbor the relevant alteration each product candidate is designed to inhibit.

Identifying and qualifying patients to participate in clinical studies of our product candidates is critical to our success. The timing of our clinical studies depends in part on the speed at which we can recruit patients to participate in testing our product candidates, and we may experience delays in our clinical trials if we encounter difficulties in enrollment. The patient populations for our product candidates are not completely defined, but are substantially smaller than other cancer indications, because we are often looking for the same type of genomic alterations across different tumor types and the number of patients with these alterations may be small. We do not yet know exactly how many patients will have the targets that our product candidates are designed to inhibit. In addition, the adoption of genomic testing across large populations of patients with cancer will be required for us to identify patients appropriate for our trials that are restricted to genomically defined populations.

The number of patients suitable for trial enrollment and potential commercialization depends on a series of risks that are difficult to quantify based on available information. For example, in the case of TRK, there is significant uncertainty around the true number of patients with advanced cancer and a TRK fusion, the number of these patients who are referred for comprehensive genomic profiling, the sensitivity of the chosen comprehensive genomic assay for detecting TRK fusions, the ability of healthcare providers to recognize the importance of the presence of a TRK fusion, patient interest in seeking out a TRK inhibitor, and patient interest in larotrectinib instead of a competing program. Nevertheless, in the case of TRK fusion cancers, incidence appears to be low in the more common tumor types. Our proprietary work suggests that there are approximately 2,500-3,000 eligible advanced cancer patients addressable each year in the United States. However, the work that informed this estimate is not definitive and future analyses may lead to estimates that are higher or lower than this estimate. In addition, the broad utilization of sensitive diagnostic tests in routine clinical practice capable of identifying TRK fusion patients is as important to successful commercialization as the actual number of addressable patients. Similar issues apply to our LOXO-292 and LOXO-305 programs as well.

In addition to potentially small populations, the eligibility criteria of our clinical trials will further limit the pool of available study participants as we will require that patients have specific characteristics that we can measure and/or that their disease is either severe enough or not too advanced to include them in a study. Additionally, the process of finding and diagnosing patients may prove

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costly. We also may not be able to identify, recruit, and enroll a sufficient number of patients to complete our clinical studies because of the perceived risks and benefits of the product candidate under study, the availability and efficacy of competing therapies and clinical trials, the proximity and availability of clinical study sites for prospective patients, and the patient referral practices of physicians. If patients are unwilling to participate in our studies for any reason, the timeline for recruiting patients, conducting studies, and obtaining regulatory approval of potential products may be delayed.

If we experience delays in the completion of, or termination of, any clinical trial of our product candidates, the commercial prospects of our product candidates will be harmed, and our ability to generate product revenue from any of these product candidates could be delayed or prevented. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process and jeopardize our ability to commence product sales and generate revenue. Any of these occurrences may harm our business, financial condition, and prospects significantly. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates, including:

- unforeseen safety issues or adverse side effects;

- failure of our companion diagnostics in identifying patients;

- modifications to protocols of our clinical trials resulting from FDA or institutional review board (IRB) decisions; and

- ambiguous or negative interim results of our clinical trials, or results that are inconsistent with earlier results.

Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

There is significant risk that one or more of our product candidates will fail to reach commercialization. Before obtaining marketing approval from regulatory authorities for the sale of any product candidate, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, difficult to design and implement and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. Further, the results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products. It is difficult to accurately predict when or if any of our product candidates will prove effective or safe in humans or will receive regulatory approval.

We may experience delays in our clinical trials and we do not know whether planned clinical trials will begin or enroll subjects on time, need to be redesigned or be completed on schedule, if at all. There can be no assurance that the FDA will not put any of our product candidates on clinical hold in the future. We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates. Clinical trials may be delayed, suspended or prematurely terminated because costs are greater than we anticipate or for a variety of reasons, such as:

- delay or failure in reaching agreement with the FDA or a comparable foreign regulatory authority on a trial design that we are able to execute;

- delay or failure in obtaining authorization to commence a trial or inability to comply with conditions imposed by a regulatory authority regarding the scope or design of a clinical trial;

- delays in reaching, or failure to reach, agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;

- inability, delay, or failure in identifying and maintaining a sufficient number of trial sites, many of which may already be engaged in other clinical programs;

- delay or failure in recruiting and enrolling suitable subjects to participate in a trial;

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- delay or failure in having subjects complete a trial or return for post-treatment follow-up;

- clinical sites and investigators deviating from trial protocol, failing to conduct the trial in accordance with regulatory requirements, or dropping out of a trial;

- lack of adequate funding to continue the clinical trial, including the incurrence of unforeseen costs due to enrollment delays, requirements to conduct additional clinical studies and increased expenses associated with the services of our CROs and other third parties;

- clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;

- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;

- we may experience delays or difficulties in the enrollment of patients whose tumors harbor the specific genomic alterations that our product candidates are designed to target;

- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;

- we may have difficulty partnering with experienced CROs that can screen for patients whose tumors harbor the applicable genomic alterations and run our clinical trials effectively;

- regulators or IRBs may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;

- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate; or

- there may be changes in governmental regulations or administrative actions.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- 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 safety warnings that would reduce the potential market for our products or inhibit our ability to successfully commercialize our products;

- be subject to additional post-marketing restrictions and/or testing requirements; or

- have the product removed from the market after obtaining marketing approval.

Our product development costs will also increase if we experience delays in testing or marketing approvals. We do not know whether any of our preclinical studies or clinical trials will need to be restructured or will be completed on schedule, or at all. Significant preclinical or clinical trial delays also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

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We may not be successful in advancing the clinical development of our product candidates.

In order to execute on our strategy of advancing the clinical development of our product candidates, we have designed clinical trials, and expect to design future trials, to include patients whose tumors harbor the applicable genomic alterations that we believe contribute to cancer. Our goal is to enroll patients who have the highest probability of responding to the drug, in order to show early evidence of clinical efficacy. If we are unable to include patients whose tumors harbor the applicable genomic alterations, or if our product fails to work as we expect, our ability to assess the therapeutic effect, seek participation in FDA expedited review and approval programs, including Breakthrough Therapy, Fast Track Designation, Priority Review and Accelerated Approval, or otherwise to seek to accelerate clinical development and regulatory timelines, could be compromised, resulting in longer development times, larger trials and a greater likelihood of not obtaining regulatory approval.

We have completed the submission of a rolling NDA for larotrectinib for the treatment of adult and pediatric patients with locally advanced or metastatic solid tumors harboring an NTRK gene fusion. However, in order to obtain marketing approval from the FDA, we may need to study our product candidates, including larotrectinib, in clinical trials specific for a given tumor type and this may result in increased time and cost. Even if our product candidate demonstrates efficacy in a particular tumor type, we cannot guarantee that any product candidate, including larotrectinib, will behave similarly in all tumor types, and we may be required to obtain separate regulatory approvals for each tumor type we intend a product candidate to treat. If any of our clinical trials are unsuccessful, our business will suffer. Furthermore, we do not yet know if the NDA for larotrectinib will be considered for accelerated approval or full approval. If larotrectinib is granted accelerated approval, the FDA may impose significant post-marketing commitments that are challenging to satisfy. If these post-marketing commitments are not satisfied within an agreed-upon timeline with FDA, the larotrectinib approval could be rescinded.

The larotrectinib EU MAA has been submitted by Bayer and regulatory filings are planned or underway for other markets as well. Regulatory standards in these territories may differ from those in the U.S. There is risk that larotrectinib will not receive approvals in these territories.

If serious adverse events or unacceptable side effects are identified during the development of our product candidates, we may need to abandon or limit our development of some of our product candidates.

If our product candidates are associated with undesirable side effects in preclinical or clinical trials or have characteristics that are unexpected, we may need to interrupt, delay or abandon their development or limit development to more narrow 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.

For example, toxicology studies for LOXO-292 and LOXO-195 have demonstrated potential side effects that could affect humans, but also may have failed to uncover additional side effects that could affect humans. In the case of larotrectinib, adverse events observed in ongoing clinical trials are discussed in more detail in our Annual Report on Form 10-K filed with the SEC on March 1, 2018, under Business Product Candidates Larotrectinib (TRK Inhibitor) .

Additional or more severe side effects may be identified in our ongoing clinical trials or in future clinical studies. These or other drug-related side effects could affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Many compounds developed in the biopharmaceutical industry that initially showed promise in early-stage testing for treating cancer have later been found to cause side effects that prevented further development of the compound. Any of these occurrences may harm our business, financial condition and prospects significantly.

Investors should not place undue reliance on the results of preclinical experiments or our ongoing clinical trials since they are not necessarily predictive of the results that will form the basis of our global regulatory approval packages, and our product candidates may not receive regulatory approval.

Investors should not place undue reliance on the results from completed preclinical studies or data from our ongoing clinical trials since they do not ensure that other clinical trial data will be comparable, in terms of safety, ORR, DOR, or other factors the FDA and other regulators will consider in determining whether to approve our product candidates.

Final datasets, upon which global regulatory decisions will be based, will differ from interim datasets previously disclosed. Potential reasons for these differences include, but are not limited to:

- not all patients will demonstrate tumor regression, experience tumor regression that meets the measurement thresholds required under RECIST v1.1 for a partial response, or remain on study long enough for an initial or confirmatory response assessment;

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- patients will discontinue our product candidates for a number of reasons, including an adverse event, tumor progression following a response, or a lack of tumor regression or clinical benefit and discontinuations will impact our product candidates reported duration of therapy and DOR;

- additional time and patient accrual provide new opportunities to capture new adverse events and further characterize the ORR and DOR;

- patient accrual beyond interim disclosed data will likely include study subjects with new tumor types, demographics (e.g. pediatric patients), and exposures to varying prior therapies. Thus, the inclusion of these subpopulations in the final dataset may alter the characterization of our product candidates overall safety, ORR and DOR; and

- the precise composition of the final dataset is subject to additional regulatory feedback, which is expected closer to the time of an NDA, or equivalent, and the advice may vary by regulatory authority.

As a result, the final efficacy and safety datasets for our product candidates have not been fully populated or established, and are expected to differ from any interim dataset publicly disclosed. Moreover, regulatory approvals will be based on the final efficacy and safety databases, and as such, we can give no assurance that our product candidates will receive regulatory approval.

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

Because we have limited financial and managerial resources, we must focus on a limited number of research programs and product candidates and on specific indications. As a result, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future discovery and preclinical development programs and product candidates for specific indications may not yield any commercially viable products.

We may expand our business through the acquisition of drug products, companies or businesses or by entering into collaborations or in-licensing product candidates that could disrupt our business and harm our financial condition.

We have in the past and may in the future seek to expand our pipeline and capabilities by acquiring one or more companies, businesses or assets, entering into collaborations or in-licensing one or more product candidates. For example, in July 2017, we acquired a patent portfolio from Redx Pharma Plc and Redx Oncology Limited in connection with our acquisition of the Redx BTK discovery program. Any difficulties we experience in transitioning and integrating such product candidate into our operations may result in delays in clinical trials as well as problems in our development efforts and regulatory filings, particularly if we do not receive all of the necessary drug product, information, reports and data from

third parties in a timely manner. More particularly, we have had no involvement with or control over the preclinical development of LOXO-305 prior to acquiring the rights to it. Furthermore, we did not get any representations or warranties with regards to the patents or associated rights.

In November 2017, we entered into the Bayer Agreement pursuant to which we will collaborate with Bayer to develop and commercialize larotrectinib and LOXO-195. For more descriptions of the risks involved in this agreement, see the risk factor *Our existing collaboration with Bayer is important to our business. If we are unable to maintain this or any other collaboration, or if this or any other collaboration is not successful, our business could be adversely affected.*

Acquisitions, collaborations and in-licenses involve numerous risks, including:

- substantial cash expenditures;
- potentially dilutive issuance of equity securities;
- incurrence of debt and contingent liabilities, some of which may be difficult or impossible to identify at the time of acquisition;
- potential adverse consequences if the acquired assets are worth less than we anticipated or we are unable to successfully develop and commercialize the acquired assets for any reason;
- difficulties in assimilating the operations and technology of the acquired companies;
- potential disputes, including litigation, regarding contingent consideration for the acquired assets;
- the assumption of unknown liabilities of the acquired businesses;

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- diverting our management s attention away from other business concerns;
- entering markets in which we have limited or no direct experience; and
- potential loss of our key employees or key employees of the acquired companies or businesses.

Our experience in making acquisitions, entering collaborations and in-licensing product candidates is limited. We cannot assure you that any acquisition, collaboration or in-license will result in short-term or long-term benefits to us. We may incorrectly judge the value or worth of an acquired company or business or in-licensed product candidate. In addition, our future success may depend in part on our ability to manage the growth and technology integration associated with any of these acquisitions, collaborations and in-licenses. We cannot assure you that we will be able to successfully combine our business with that of acquired businesses, manage collaborations or integrate in-licensed product candidates or that such efforts would be successful. Furthermore, the development or expansion of our business or any acquired business or company or any collaboration or in-licensed product candidate may require a substantial capital investment by us. We may also seek to raise funds by selling shares of our capital stock, which could dilute our current stockholders ownership interest, or securities convertible into our capital stock, which could dilute current stockholders ownership interest upon conversion. We may also incur debt obligations, which could require us to comply with covenants which could restrict our ability to operate our business and negatively impact the value of our common stock.

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

As one of the central elements of our business strategy and clinical development approach, we often seek to identify subsets of patients with a genomic alteration who may derive meaningful benefit from our development product candidates. To achieve this, our product development programs can be dependent on the development and commercialization of a companion diagnostic by us or by third-party collaborators. Companion diagnostics are developed in conjunction with clinical programs for the associated product and are subject to regulation as medical devices. For example, for larotrectinib, we are working with collaborators to develop appropriate companion diagnostics to identify patients with tumors that harbor TRK fusions. The approval of a companion diagnostic as part of the product labeling may limit the use of the product candidate to only those patients who express the specific genomic alteration it was developed to detect. We may also experience delays in developing a sustainable, reproducible and scalable manufacturing process or transferring that process to commercial partners or negotiating insurance reimbursement plans, all of which may prevent us from completing our clinical trials or commercializing our products on a timely or profitable basis, if at all.

Companion diagnostics are subject to regulation by the FDA and comparable foreign regulatory authorities as medical devices and require separate clearance or approval prior to their commercialization. To date, the FDA has required premarket approval of all companion diagnostics for cancer therapies, either at the time of initial drug approval, or as a post-marketing commitment. We, and our third-party collaborators, may encounter difficulties in developing and obtaining approval for these companion diagnostics. Our third-party collaborators may de-prioritize, abandon or fail to execute against our development projects. Any delay or failure by us or third-party collaborators to develop or obtain regulatory approval of a companion diagnostic could delay or prevent approval of our related product candidates.

Failure by us or our third-party collaborators to successfully commercialize companion diagnostics developed for use with our product candidates could harm our ability to commercialize these product candidates.

Even if we or our companion diagnostic collaborators successfully obtain regulatory approval for the companion diagnostics for our product candidates, our collaborators:

- may not perform their obligations as expected;

- may not pursue commercialization of companion diagnostics for our therapeutic product candidates that achieve regulatory approval;

- may elect not to continue or renew commercialization programs based on changes in the collaborators strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;

- may not commit sufficient resources to the marketing and distribution of such product or products;

- may fail to establish adequate reimbursement for their products, thus limiting the use of such product; and

- may terminate their relationship with us.

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Additionally, we, or our collaborators, may encounter production difficulties that could constrain the supply of the companion diagnostics, affect the ease of use, affect the price or have difficulties gaining acceptance of the use of the companion diagnostics in the clinical community.

If companion diagnostics for use with our product candidates fail to gain market acceptance, our ability to derive revenues from sales of our product candidates could be harmed. If insurance reimbursement to the laboratories who perform the companion diagnostic tests is inadequate, utilization may be low, and patient tumors may not be comprehensively screened for the presence of the genomic markers that predict response to our product candidates. If we or our collaborators fail to commercialize these companion diagnostics, we may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with our product candidates or do so on commercially reasonable terms, which could adversely affect and delay the development or commercialization of our product candidates.

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

If we or our collaborators are not able to obtain, or if there are delays in obtaining, required regulatory approvals, we will not be able to commercialize our product candidates, and our ability to generate revenue will be materially impaired.

Our product candidates must be approved by the FDA pursuant to an NDA in the United States and by the European Medicines Agency (EMA) and similar regulatory authorities outside the United States prior to commercialization. The process of obtaining marketing approvals, both in the United States and abroad, is expensive and takes many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate. We have not received approval to market any of our product candidates from regulatory authorities in any jurisdiction. We have little experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third-party CROs and our collaborators to assist us in this process. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate s safety and efficacy. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the regulatory authorities, among other requirements. Our product candidates may not be effective, may be only moderately effective, may not have an acceptable durability of response, may not have an acceptable risk-benefit profile, or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other studies. For example, development programs that span many tumor types are relatively novel, and to date, the FDA has approved only one therapy to treat multiple tumor types based on a common biomarker. We cannot be sure that the FDA will approve our NDA for larotrectinib or our other product candidates. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may also cause delays in or prevent the approval of an application.

New cancer drugs frequently are indicated only for patient populations that have not responded to an existing therapy or have relapsed. If any of our product candidates receives marketing approval, the accompanying labeling may limit the approved use of our drug in this way, which could limit sales of the product.

Any marketing approval we or our collaborators ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

If we experience delays in obtaining approval or if we or our collaborators fail to obtain approval of our product candidates, the commercial prospects for our product candidates may be harmed and our ability to generate revenues will be materially impaired.

We may seek Orphan Drug Exclusivity for some of our product candidates, and we may be unsuccessful.

Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a disease with a patient population of fewer than 200,000 individuals in the United States. In 2015, the FDA granted larotrectinib orphan drug designation for the treatment of soft tissue sarcoma. In 2016, the European Commission designated larotrectinib as an orphan medicinal product for treatment of patients with soft tissue sarcoma. In 2017, the FDA granted orphan drug designation to larotrectinib for the treatment of solid tumors with NTRK-fusion proteins. In 2018, the FDA granted LOXO-195 orphan drug designation for the treatment of solid tumors with NTRK-fusion

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proteins that have developed acquired resistance to prior TRK inhibitor therapy. In October 2018, the FDA granted orphan drug designation for LOXO-292 for the treatment of pancreatic cancer. There can be no assurance that any of our other product candidates will be designated as an orphan drug.

Generally, if a product with an Orphan Drug Designation subsequently receives the first marketing approval for the indication for which it has such designation, the product is entitled to a period of marketing exclusivity, which precludes the EMA or the FDA from approving another marketing application for the same drug for the same indication during the period of exclusivity. The applicable period is seven years in the United States and ten years in Europe. The European exclusivity period can be reduced to six years if a drug no longer meets the criteria for Orphan Drug Designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. Orphan Drug Exclusivity may be lost if the FDA or EMA determines that the request for designation was materially defective, or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition.

Orphan Drug Exclusivity of our product candidates may not effectively protect the product candidate from competition because different drugs can be approved for the same orphan condition. In addition, after an orphan drug is approved and granted exclusivity, the FDA can subsequently approve a different drug containing the same active moiety for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. The FDA can also approve drugs containing the same active moiety for different indications.

A Fast Track Designation by the FDA, even if granted for any of our product candidates, may not lead to a faster development or regulatory review or approval process and does not increase the likelihood that our product candidates will receive marketing approval.

We do not currently have Fast Track Designation for any of our product candidates but we may seek such designation, if we believe such a designation is warranted. If a drug is intended for the treatment of a serious or life-threatening condition and the drug demonstrates the potential to address unmet medical needs for this condition, the drug sponsor may apply for Fast Track Designation with the FDA. The FDA has broad discretion whether or not to grant this designation. Even if we believe a particular product candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive Fast Track Designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development program. Many drugs that have received Fast Track Designation have failed to obtain drug approval.

A Breakthrough Therapy Designation by the FDA may not lead to a faster development or regulatory review or approval process, and does not increase the likelihood that our product candidates will receive marketing approval.

In July 2016, we announced that the FDA granted Breakthrough Therapy Designation to larotrectinib for the treatment of unresectable or metastatic solid tumors with NTRK-fusion proteins in adult and pediatric patients who require systemic therapy and who have either progressed following prior treatment or who have no acceptable alternative treatments. In September 2018, we announced that the FDA granted Breakthrough Therapy Designation to LOXO-292 for the treatment of patients with metastatic RET-fusion-positive non-small cell lung cancer who require systemic therapy and have progressed following platinum-based chemotherapy and an anti-PD-1 or anti-PD-L1 therapy ; and for the treatment of patients with RET-mutant medullary thyroid cancer who require systemic therapy, have progressed following prior treatment and have no acceptable alternative treatment options. In addition, in October 2018, we announced that the FDA granted Breakthrough Therapy Designation to LOXO-292 for the treatment of patients with advanced RET-fusion-positive thyroid cancer who require systemic therapy, have progressed following prior treatment and have no acceptable alternative treatment options. There can be no assurance that our products will be approved by the FDA with these indications or at all. There can be no assurance that any of our other product candidates will receive

Breakthrough Therapy Designation. A Breakthrough Therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs that have received a Breakthrough Therapy Designation, interaction and communication between the FDA and the sponsor can help to identify the most efficient path for development.

The receipt of a Breakthrough Therapy Designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if our product candidates receive a Breakthrough Therapy Designation, the FDA may later decide that such product candidates no longer meet the conditions for qualification.

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Failure to obtain marketing approval in international jurisdictions would prevent our product candidates from being marketed abroad.

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

Any product candidate for which we obtain marketing approval will be subject to extensive post-approval regulatory requirements and could be subject to post-approval restrictions or withdrawal from the market, and we may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, when and if any of them are approved.

Our product candidates and the activities associated with their development and commercialization, including their testing, manufacturing, recordkeeping, labeling, storage, approval, advertising, promotion, sales and distribution, are subject to comprehensive regulation by the FDA and other regulatory authorities. These requirements include submissions of safety and other post-approval information and reports, registration and listing requirements, current good manufacturing practices (cGMP) requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, including periodic inspections by the FDA and other regulatory authority, restrictions or requirements regarding the distribution of samples to physicians and recordkeeping requirements.

The FDA may also impose requirements for costly post-marketing studies or clinical trials, diagnostic approval, and surveillance to monitor the safety or efficacy of the product. The FDA closely regulates the post-approval marketing and promotion of drugs to ensure drugs are marketed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA imposes stringent restrictions on manufacturers communications regarding use of their products and if we promote our products beyond their approved indications, we may be subject to enforcement action for off-label promotion. Violations of the Federal Food, Drug and Cosmetic Act relating to the promotion of prescription drugs may lead to investigations alleging violations of federal and state healthcare fraud and abuse laws, as well as state consumer protection laws.

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

- restrictions on such products, manufacturers or manufacturing processes;

- restrictions on the labeling or marketing of a product;
- restrictions on product distribution or use;
- requirements to conduct post-approval studies or clinical trials;
- warning or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- fines, restitution or disgorgement of profits or revenues;

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- suspension or withdrawal of marketing approvals;

- refusal to permit the import or export of our products;

- product seizure; or

- injunctions or the imposition of civil or criminal penalties.

Noncompliance with European Union requirements regarding safety monitoring or pharmacovigilance, and with requirements related to the development of products for the pediatric population, can also result in significant financial penalties. Similarly, failure to comply with the European Union s requirements regarding the protection of personal information can also lead to significant penalties and sanctions.

Our relationships with customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

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

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

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

- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;

- federal law requires applicable manufacturers of covered drugs to report payments and other transfers of value to physicians and teaching hospitals, which includes data collection and reporting obligations. The information was to be made publicly available on a searchable website in September 2014; and

- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers.

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

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and

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regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion of products from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Recently enacted and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and affect the prices we may obtain.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product candidates for which we obtain marketing approval.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sales prices for physician-administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and price that we receive for any approved products. While the MMA only applies to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors.

In March 2010, former President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively the PPACA) a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for the healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms.

Among the provisions of the PPACA of importance to our potential product candidates are the following:

- an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents;

- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program;

- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;

- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices;

- extension of manufacturers Medicaid rebate liability;

- expansion of eligibility criteria for Medicaid programs;

- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;

- new requirements to report financial arrangements with physicians and teaching hospitals;

- a new requirement to annually report drug samples that manufacturers and distributors provide to physicians; and

- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

In addition, other legislative changes have been proposed and adopted since the PPACA was enacted. These changes included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. In January 2013, former

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President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. The Tax Cuts and Jobs Act of 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the PPACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the individual mandate . These new laws may result in additional reductions in Medicare and other healthcare funding. In 2016, the U.S. Congress held hearings on the rising costs of prescription drugs and in October 2017, President Trump issued the Executive Order Promoting Healthcare Choice and Competition, directing certain federal agencies to modify their implementation of the PPACA. Future legislation could potentially change drug pricing dynamics.

We expect that the PPACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products.

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

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

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

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

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

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

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

Risks Related to Our Dependence on Third Parties

Our existing collaboration with Bayer is important to our business. If we are unable to maintain this or any other collaboration, or if this or any other collaboration is not successful, our business could be adversely affected.

We have entered into collaborations with other companies to develop or commercialize several of our product candidates. We cannot predict the success of any current or future collaborations.

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On November 14, 2017, we entered into the Bayer Agreement pursuant to which we will collaborate with Bayer to develop and commercialize larotrectinib and LOXO-195. Pursuant to the Bayer Agreement, we have granted co-exclusive development and commercialization licenses to Bayer for both larotrectinib and LOXO-195. We will lead global development activities and U.S. regulatory activities. Bayer will lead ex-U.S. regulatory activities, and global commercial activities. We will co-promote the products with Bayer in the United States. See Note 3 to our unaudited condensed consolidated financial statements.

Under the Bayer Agreement, we are eligible to receive $450.0 million in milestone payments upon larotrectinib regulatory approvals and first commercial sale events in certain major markets and an additional $200.0 million in milestone payments upon LOXO-195 regulatory approvals and first commercial sale events in certain major markets. Bayer will also pay us a $25.0 million milestone upon achieving a certain U.S. net sales threshold. We may not receive royalty or milestone revenue under the Bayer Agreement for several years, or at all.

Under the terms of the Bayer Agreement, Bayer will have significant discretion in determining the efforts and resources that they will apply to their marketing efforts and their management of the ex-U.S. regulatory activities and they may not perform their obligations as expected. Disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of our medicines or product candidates or that result in costly litigation or arbitration that diverts management attention and resources. Furthermore, they may have changes in their strategic focus or available funding, or experience external factors, such as an acquisition, may divert resources or create competing priorities. Any of these events would have a material adverse effect on our results of operations and financial condition.

The Bayer Agreement may be terminated by either party for material breach or bankruptcy. In addition, Bayer may terminate the Bayer Agreement after the fourth anniversary of the effective date upon written notice to us, or in the event that we receive a complete response letter from the U.S. FDA with respect to larotrectinib, or if we do not receive marketing approval for larotrectinib by December 31, 2018.

If the Bayer Agreement is terminated, then, depending on the event:

- our cash expenditures could increase significantly if it is necessary for us to hire additional employees and allocate internal resources to the commercialization or regulatory activities that were previously shared by Bayer;

- we would bear all of the risks and costs related to the further development and commercialization, as well as regulatory activities, that were previously the subject of the Bayer Agreement;

- in order to fund further commercialization or regulatory activities, we may need to seek out and establish alternative strategic collaborations with third-party partners, which may not be possible; or

- we may not be able to do so on terms which are acceptable to us, in which case it may be necessary for us to limit the size or scope of one or more of our programs or increase our expenditures and seek additional funding by other means.

Any of these events would have a material adverse effect on our results of operations and financial condition.

Future collaborations may be important to us. If we are unable to maintain these collaborations, or if these collaborations are not successful, our business could be adversely affected.

For some of our product candidates, we may in the future determine to collaborate with pharmaceutical and biotechnology companies for development of products. For example, on July 3, 2013, we entered into the Array Agreement, pursuant to which Array agreed to design, conduct and perform research and preclinical testing for certain compounds that we select, including larotrectinib, targeted at TRKA, TRKB and TRKC, and identify Investigational New Drug candidates for TRK and other targets (including RET and FGFR), while undertaking manufacturing activities sufficient to conduct Phase 1 clinical trials for a subset of these programs. Array granted us exclusive licenses worldwide, for clinical and commercial development of these compounds. See Business Array Collaboration.

We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for any collaboration will depend, among other things, upon our assessment of the collaborator s resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator s evaluation of a number of factors. If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential development schedule or reduce the scope of research activities, or increase our expenditures and undertake discovery or preclinical development activities at our own expense. If we fail to enter into collaborations and do not have sufficient funds or expertise to

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undertake the necessary development activities, we may not be able to further develop our product candidates or continue to develop our product candidates and our business may be materially and adversely affected.

Future development collaborations we may enter into may involve the following risks:

- collaborators may have significant discretion in determining the efforts and resources that they will apply to these collaborations;

- collaborators may not perform their obligations as expected;

- changes in the collaborators strategic focus or available funding, or external factors, such as an acquisition, may divert resources or create competing priorities;

- collaborators may delay discovery and preclinical development, provide insufficient funding for product development of targets selected by us, stop or abandon discovery and preclinical development for a product candidate, repeat or conduct new discovery and preclinical development for a product candidate;

- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed than ours;

- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the development of our product candidates;

- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or termination of the discovery, preclinical development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;

- collaborators may not properly maintain or defend our intellectual property rights or intellectual property rights licensed to us or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;

- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and

- collaborations may be terminated for the convenience of the collaborator and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

Additionally, subject to its contractual obligations to us, if a collaborator of ours is involved in a business combination, the collaborator might deemphasize or terminate the development of any of our product candidates. If one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators and the perception of our company by the business and financial communities could be adversely affected.

If we are unable to maintain our collaborations, development of our product candidates could be delayed and we may need additional resources to develop them. All of the risks relating to product development, regulatory approval and commercialization described in this filing also apply to the activities of our collaborators.

We expect to rely on third-party contractors and organizations to conduct our clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials.

We rely on third-party clinical research contractors and organizations, third-party contractors, clinical data management organizations, independent contractors, medical institutions and clinical investigators to conduct our clinical trials. These agreements may terminate for a variety of reasons, including a failure to perform by the third parties. If we needed to enter into alternative arrangements, our product development activities could be delayed.

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We compete with many other companies, some of which may be our business competitors, for the resources of these third parties. Large pharmaceutical companies often have significantly more extensive agreements and relationships with such third-party providers, and such third-party providers may prioritize the requirements of such large pharmaceutical companies over ours. The third parties on whom we rely may terminate their engagements with us at any time, which may cause delay in the development and commercialization of our product candidates. If any such third party terminates its engagement with us or fails to perform as agreed, we may be required to enter into alternative arrangements, which would result in significant cost and delay to our product development program. Moreover, our agreements with such third parties generally do not provide assurances regarding employee turnover and availability, which may cause interruptions in the research on our product candidates by such third parties.

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

Additionally, we expect to rely substantially on third-party data managers for our clinical trial data. There is no assurance that these third parties will not make errors in the design, management or retention of our data or data systems. There is no assurance that these third parties will pass FDA or other regulatory audits, which could delay or prevent regulatory approval.

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

We contract with third parties for the manufacture of our product candidates for preclinical and clinical testing and expect to continue to do so for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or products at an acceptable cost and quality, which could delay, prevent or impair our development or commercialization efforts.

We do not own or operate facilities for the manufacture of our product candidates, and we rely on outside manufacturing personnel to operate these third-party facilities. We currently have no plans to build our own clinical or commercial scale manufacturing capabilities. We rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for preclinical and clinical testing. We will rely on third parties as well for commercial manufacture if any of our product candidates receive marketing approval. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or products or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval. Arrangements for redundant supply or a source for bulk drug product may be infeasible, too costly, unavailable or inadequate to prevent a delay in clinical development or marketing approval should our existing or future manufacturers experience performance failure. The formulation used in early studies is not necessarily a final formulation for commercialization. Additional, changes may be required by the FDA or other regulatory authorities on specifications and storage conditions. These may require additional studies, and may delay our clinical trials.

We expect to rely on third-party manufacturers or third-party collaborators for the manufacture of commercial supply of any other product candidates for which our collaborators or we obtain marketing approval.

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

We may be unable to establish any agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party;

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- the possible misappropriation of our proprietary information, including our trade secrets and know-how; and

- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside the United States. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our products. In addition, if, during a preapproval inspection or other inspection of our third-party manufacturers facility or facilities, the FDA determines that the facility is not in compliance with cGMP, any of our marketing applications that lists such facility as a manufacturer may not be approved or approval may be delayed until the facility comes into compliance with cGMP and completes a successful reinspection by the FDA.

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

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

Risks Related to the Commercialization of Our Product Candidates

Even if any of our product candidates receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.

If any of our product candidates receives marketing approval, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. For example, current cancer treatments like chemotherapy and radiation therapy are well established in the medical community, and doctors may continue to rely on these treatments to the exclusion of our product candidates. In addition, physicians, patients and third-party payors may prefer other novel products to ours. If our product candidates do not achieve an adequate level of acceptance, we may not generate significant product revenues and we may not become profitable. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety and potential advantages and disadvantages compared to alternative treatments;

- our ability to offer our products for sale at competitive prices;
- the convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of our marketing and distribution support;
- the availability of third-party coverage and adequate reimbursement, including patient cost-sharing programs such as copays and deductibles;
- our ability to develop or partner with third-party collaborators to develop companion diagnostics;
- the prevalence and severity of any side effects; and
- any restrictions on the use of our products together with other medications.

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We currently have a limited commercial team. If we are unable to establish effective sales or marketing capabilities or enter into agreements with third parties to sell or market our product candidates, we may not be able to effectively sell or market our product candidates, if approved, or generate product revenues.

We currently have a limited commercial team for the marketing, sales and distribution of any of our product candidates that are able to obtain regulatory approval. Patient identification will be important in the commercial setting, much as it has been important in the clinical trial setting. Estimates for addressable patient populations relevant to our product candidates are uncertain. The work that informs these estimates is not definitive and future analyses may lead to estimates that are higher or lower than these estimates, making difficult the tasks of sizing of a marketing and sales force or evaluating the attractiveness of a commercial partnership. The utilization of sensitive diagnostic testing in routine clinical practice is likely an important variable in identifying all of the eligible patients that may truly exist. This requirement may cause the potential launch of larotrectinib or our other product candidates to be slower than other commercialized oncology products.

In order to commercialize any product candidates, we, in collaboration with commercial partners as applicable, must build on a territory-by-territory basis marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. If our product candidates receive regulatory approval, we, in collaboration with commercial partners as applicable, intend to establish an internal sales or marketing team with technical expertise and supporting distribution capabilities to commercialize our product candidates, which will be expensive and time consuming and will require significant attention of our executive officers to manage. Capable managers with commercial experience will need to be identified and successfully recruited to the company. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of any of our products that we obtain approval to market. With respect to the commercialization of all or certain of our product candidates, we may choose to collaborate, either globally or on a territory-by-territory basis, with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. Under our collaboration agreement with Bayer, Bayer will lead global commercial and marketing activities for larotrectinib and LOXO-195 outside of the United States, over which we will have limited control. Within the United States, Bayer will lead commercial and marketing activities for larotrectinib and LOXO-195, and we will co-promote the products with Bayer. If we are unable to enter into such arrangements when needed on acceptable terms or at all, or if Bayer breaches our collaboration agreement or is otherwise unsuccessful in marketing our products, we may not be able to successfully commercialize any of our product candidates that receive regulatory approval or any such commercialization may experience delays or limitations. While the U.S. commercial partnership with Bayer is a 50/50 cost and profit split, Bayer has a greater operational role and final decision-making authority on key strategic issues such as spending, strategy, and pricing. If we are not successful in commercializing our product candidates, either on our own or through collaborations with one or more third parties, our future product revenue will suffer and we may incur significant additional losses.

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

The development and commercialization of new drug products is highly competitive. We face competition with respect to our current product candidates, and will face competition with respect to any product candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of the disease indications for which we are developing our product candidates. Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to our approach, and others are based on entirely different approaches. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Specifically, there are a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. In addition, many companies are developing cancer therapeutics that work by inhibiting multiple kinases that may directly compete with our product candidates.

For larotrectinib and LOXO-195, examples of such potential competitors include Daiichi Sankyo and its subsidiary Plexxikon (PLX-7486), Tesaro (TSR-011), Roche (entrectinib), Novartis AG (dovitinib), Mirati (MGDC516), Ono Pharmaceutical (ONO-4474 and ONO-5390556), Chugai Pharmaceutical, a member of the Roche Group (CH7057288), Blueprint Medicines, TP Therapeutics (TPX-0005) and Deciphera.

For LOXO-292, examples of such potential competitors include Eisai (lenvatinib), Exelixis (cabozantinib), AstraZeneca (vandetanib), Ariad (ponatinib), Novartis (dovitinib), Roche (alectinib), Pfizer (sunitinib), Roche (RXDX-105) and Blueprint Medicines (BLU-667). There are no selective RET inhibitors approved in RET-specific indications. Several multikinase inhibitors with anti-RET activity are part of ongoing RET-focused development programs: Eisai (lenvatinib), Exelixis (cabozantinib), AstraZeneca (vandetanib), Ariad (ponatinib), Novartis (dovitinib), Roche (alectinib), Pfizer (sunitinib) and Roche (RXDX-105). A compound from Blueprint Medicines (BLU-667) was developed to be a selective RET inhibitor and is currently in clinical

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development and there are preclinical selective RET inhibitor programs from Taiho Oncology, Nerviano Medical Sciences, and cancer Research UK.

For LOXO-305, examples of such potential competitors include Abbvie/Pharmacyclics (ibrutinib), AstraZeneca (acalabrutinib), Beigene (BGB-3111), Gilead/Ono (GS-4059), ArQule (ARQ-531), Sunesis (SNS-062), Biogen (BIIB-068), Celgene (CC-292), Principia (PRN1008, PRN2246), Bristol-Myers Squibb (BMS-986142), Genentech (GDC-0853), Roche (RN983) and Impetis (PNQ-154). Also, drugs that work by different mechanisms, other than BTK inhibition, are available or could be developed in patient populations relevant to LOXO-305 these include classes such as BCL-2 inhibitors (e.g. Roche/Abbvie, venetoclax), anti-CD20 biologics (e.g. Roche, rituximab), PI3kd inhibitors (e.g. Gilead, idelalisib), CAR-T therapies and cytotoxic chemotherapy.

For the FGFR program, examples of such potential competitors include J&J (JNJ- 42756493), QED Therapeutics (BGJ-398, dovitinib), AstraZeneca (AZD4547), Clovis Oncology (lucitinib), Chugai (CH5183284), Bayer (BAY 1163877, BAY 1179470), Lilly (LY2874455), Eisai (E7090), Taiho (TAS-120), Boehringer Ingelheim (nintedanib), Ariad (ponatinib), FivePrime (FP-1039, FPA144), Incyte (INCB54828), ArQule (ARQ087), BioClinica (MFGR1877S) and Principia (PRN1371).

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

Many of the companies against which we are competing or against which we may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory 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 and other early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

The insurance coverage and reimbursement status of newly-approved products is uncertain. Failure to obtain or maintain adequate coverage and reimbursement for new or current products could limit our ability to market those products and decrease our ability to generate revenue.

The availability and extent of reimbursement by governmental and private payors is essential for most patients to be able to afford expensive treatments. Sales of our product candidates will depend substantially, both domestically and abroad, on the extent to which the costs of our product candidates will be paid by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors. If reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is

provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a sufficient return on our investment.

There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products. In the United States, the principal decisions about reimbursement for new medicines are typically made by the Centers for Medicare & Medicaid Services (CMS) an agency within the U.S. Department of Health and Human Services, as CMS decides whether and to what extent a new medicine will be covered and reimbursed under Medicare. Private payors tend to follow CMS to a substantial degree. It is difficult to predict what CMS will decide with respect to reimbursement for fundamentally novel products such as ours, as there is no body of established practices and precedents for these new products. In 2016, the U.S. Congress held hearings on the rising costs of prescription drugs, and there is increased media attention on the issue. Future legislation could potentially change drug pricing dynamics. Reimbursement agencies in Europe may be more conservative than CMS. For example, a number of cancer drugs have been approved for reimbursement in the United States and have not been approved for reimbursement in certain European countries. Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost containment initiatives in Europe, Canada, and other countries has and will continue to put pressure on the pricing and usage of our product candidates. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. In general, the prices of medicines under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for medicines, but monitor

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and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for our products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenues and profits.

Moreover, increasing efforts by governmental and third-party payors, in the United States and abroad, to cap or reduce healthcare costs may cause such organizations to limit both coverage and level of reimbursement for new products approved and, as a result, they may not cover or provide adequate payment for our product candidates. We expect to experience pricing pressures in connection with the sale of any of our product candidates, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products into the healthcare market.

In addition to CMS and private payors, professional organizations such as the National Comprehensive Cancer Network and the American Society of Clinical Oncology can influence decisions about reimbursement for new medicines by determining standards for care. In addition, many private payors contract with commercial vendors who sell software that provide guidelines that attempt to limit utilization of, and therefore reimbursement for, certain products deemed to provide limited benefit to existing alternatives. Such organizations may set guidelines that limit reimbursement or utilization of our products.

If insurance reimbursement to the laboratories who purchase the companion diagnostic tests is inadequate, utilization may be low, and patient tumors may not be comprehensively screened for the presence of the genomic markers that predict response to our product candidates.

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

We and our collaborators face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if we commercially sell any products that we may develop. If we and our collaborators cannot successfully defend ourselves against claims that our product candidates or products caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;

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

We currently hold $10 million in product liability insurance coverage in the aggregate, with a per incident limit of $10 million, which may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we expand our clinical trials or if we commence commercialization of our product candidates. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. In addition, if one of our collaboration partners were to become subject to product liability claims or were unable to successfully defend themselves against such claims, any such collaboration partner could be more likely to terminate such relationship with us and therefore substantially limit the commercial potential of our products.

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Risks Related to Our Intellectual Property

If we are unable to obtain and maintain intellectual property protection for our technology and products, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired.

Our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our proprietary technology and products, including any companion diagnostic developed by us or a third-party collaborator. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our novel technologies and product candidates. Our patent portfolio includes patents and patent applications we exclusively licensed from Array, exclusive worldwide licenses for all therapeutic indications for new intellectual property developed in our Array collaboration, and patents that we purchased from Redx. This patent portfolio includes issued patents and pending patent applications covering compositions of matter and methods of use.

The patent prosecution process is expensive and time-consuming, and we and our collaborators may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. We may choose not to seek patent protection for certain innovations and may choose not to pursue patent protection in certain jurisdictions, and under the laws of certain jurisdictions, patents or other intellectual property rights may be unavailable or limited in scope. It is also possible that we or our collaborators will fail to identify patentable aspects of our discovery and preclinical development output before it is too late to obtain patent protection. Moreover, in some circumstances, we do not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. For example, India and China do not allow patents for methods of treating the human body. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our and our collaborators patent rights are highly uncertain. Our and our collaborators pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection.

Patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. On September 16, 2011, the Leahy-Smith America Invents Act (the Leahy-Smith Act) was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted and may also affect patent litigation. The U.S. Patent and Trademark Office (U.S. PTO) developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, only became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

Moreover, we may be subject to a third-party pre-issuance submission of prior art to the U.S. PTO, or become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Even if our owned and licensed patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner.

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The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

The risks described elsewhere pertaining to our patents and other intellectual property rights also apply to the intellectual property rights that we license, and any failure to obtain, maintain and enforce these rights could have a material adverse effect on our business. In some cases, we may not have control over the prosecution, maintenance or enforcement of the patents that we license, and our licensors may fail to take the steps that we believe are necessary or desirable in order to obtain, maintain and enforce the licensed patents. Any inability on our part to protect adequately our intellectual property may have a material adverse effect on our business, operating results and financial position.

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

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the U.S. PTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we employ an outside firm and rely on our outside counsel to pay these fees due to non-U.S. patent agencies. The U.S. PTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

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

Because competition in our industry is intense, competitors may infringe or otherwise violate our issued or our collaborators patents, patents of our licensors or other intellectual property. To counter infringement or unauthorized use, we or our collaborators may be required to file infringement claims, which can be expensive and time consuming. Any claims we or our collaborators assert against perceived infringers could provoke these parties to assert counterclaims against us or our collaborators alleging that we infringe their patents. In addition, in a patent infringement proceeding, a court may decide that a patent of ours or licensed to us is invalid or unenforceable, in whole or in part, construe the patent s claims narrowly or refuse to stop the other party from using the technology at issue on the grounds that our or our licensors or collaborators patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our or our licensors or collaborators patents at risk of being invalidated or interpreted narrowly. We may also elect to enter into license agreements in order to settle patent infringement claims or to resolve disputes prior to litigation, and any such license agreements may require us to pay royalties and other fees that could be significant. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure.

We may need to license certain intellectual property from third parties, and such licenses may not be available or may not be available on commercially reasonable terms.

A third party may hold intellectual property, including patent rights, which are important or necessary to the development of our products. It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our products, in which case we would be required to obtain a license from these third parties on commercially reasonable terms, or our business could be harmed, possibly materially. Although we believe that licenses to these patents are available from these third parties on commercially reasonable terms, if we were not able to obtain a license, or were not able to obtain a license on commercially reasonable terms, our business could be harmed, possibly materially.

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Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability, and the ability of our collaborators, to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights of third parties. There is considerable intellectual property litigation in the biotechnology and pharmaceutical industries. We or our collaborators may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our or our collaborators products and technology, including interference or derivation proceedings before the U.S. PTO. Third parties may assert infringement claims against us or our collaborators based on existing patents or patents that may be granted in the future.

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

We may not be successful in obtaining or maintaining necessary rights for our development pipeline through acquisitions and in-licenses.

Presently we have rights to intellectual property to develop our product candidates, including patents and patent applications we exclusively licensed from Array, exclusive worldwide licenses for all therapeutic indications for new intellectual property developed in our Array collaboration, and patents that we purchased from Redx. Because our programs may involve additional product candidates that may require the use of proprietary rights held by third parties, the growth of our business may depend in part on our ability to acquire, in-license or use these proprietary rights. Additionally, a companion diagnostic may require that we or a third-party collaborator developing the diagnostic acquire use or proprietary rights held by third parties. We may be unable to acquire or in-license any compositions, methods of use, or other third-party intellectual property rights from third parties that we identify. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a number of more established companies are also pursuing 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, cash resources and greater clinical development and commercialization capabilities.

For example, we may collaborate with United States and foreign academic institutions to accelerate our discovery and preclinical development work 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 right of first negotiation for intellectual property, we may be unable to negotiate a license within the specified time frame or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to other parties, potentially blocking our ability to pursue our program.

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. If we are unable to successfully obtain rights to required third-party intellectual property rights, our business, financial condition and prospects for growth could suffer.

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

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that these employees or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such employee s former employer. Litigation may be necessary to defend against these claims.

In addition, while it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. Our and their assignment agreements

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may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to management.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to seeking patents for some of our technology and product candidates, we also rely on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We seek to protect our confidential proprietary information, in part, by entering into confidentiality and invention or patent assignment agreements with our employees and consultants, however, we cannot be certain that such agreements have been entered into with all relevant parties. Moreover, to the extent we enter into such agreements, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

Risks Related to Employee Matters, Managing Growth and Macroeconomic Conditions

We are highly dependent on our Chief Executive Officer and our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on the research and development, clinical and business development expertise of Joshua H. Bilenker, M.D., our President and Chief Executive Officer, as well as the other principal members of our management, scientific and clinical team. Although we have entered into employment letter agreements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain key person insurance for any of our executives or other employees.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success as we scale. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our development or commercialization strategies. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. Additionally, if we fail to provide an adequate amount of equity consideration to new and existing employees we may

be unable to compete for new talent and retain our existing talent. We have a certain number of shares available for grant under our 2014 Equity Incentive Plan and it may not be adequate to enable us to continue to competitively compensate our employees in the future, which may prevent us from retaining our employees and could significantly impact our operating results.

We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our discovery and preclinical development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

We expect to expand our development and regulatory capabilities and potentially implement sales, marketing and distribution capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of medical affairs, drug development, regulatory affairs and, if any of our product candidates receives marketing approval, sales, marketing and distribution. To manage our anticipated future growth, we must continue to implement and improve our

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managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

Comprehensive tax reform bills could adversely affect our business and financial condition.

The U.S. government has recently enacted comprehensive tax legislation, the Tax Cuts and Jobs Act of 2017, that includes significant changes to the taxation of business entities. These changes include, among others, (i) a permanent reduction to the corporate income tax rate, (ii) a partial limitation on the deductibility of business interest expense, (iii) a shift of the U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system (along with certain rules designed to prevent erosion of the U.S. income tax base) and (iv) a one-time tax on accumulated offshore earnings held in cash and illiquid assets, with the latter taxed at a lower rate.

Further, the newly enacted comprehensive tax legislation, among other things, reduces the orphan drug credit from 100% to 50% of qualifying expenditures. When and if we become profitable, this reduction in tax credits may result in an increased federal income tax burden on our orphan drug programs as it may cause us to pay federal income taxes earlier under the revised tax law than under the prior law and, despite being partially off-set by a reduction in the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, may increase our total federal tax liability attributable to such programs. The new tax law also eliminates entirely the carry back of net operating losses (NOLs). Companies may no longer carry back NOLs to receive refunds for taxes paid in the previous two years. The new law also changes the rules on the carry forward of NOLs. The previous 20-year limitation was eliminated, giving taxpayers the ability to carry forward losses indefinitely. However, NOL carry forward arising after January 1, 2018, will now be limited to 80 percent of taxable income.

Notwithstanding the reduction in the corporate income tax rate, the overall impact of this tax reform is uncertain, and our business and financial condition could be adversely affected. In addition, it is uncertain if and to what extent various states will conform to the newly enacted federal tax law.

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

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including our ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Failure to protect our information technology infrastructure against cyber-based attacks, network security breaches, service interruptions, or data corruption could significantly disrupt our operations and adversely affect our business and operating results.

We rely on information technology and telephone networks and systems, including the Internet, to process and transmit sensitive electronic information and to manage or support a variety of business processes and activities. We use enterprise information technology systems to record, process, and summarize financial information and results of operations for internal reporting purposes and to comply with regulatory financial reporting, legal, and tax requirements. Our and our collaborators information technology systems, some of which are managed by third-parties, such as those of our CROs, may be susceptible to damage, disruptions or shutdowns due to computer viruses, attacks by computer hackers, failures during the process of upgrading or replacing software, databases or components thereof, power outages, hardware failures, telecommunication failures, user errors or catastrophic events. Although we have developed systems and processes that are designed to protect proprietary or confidential information and prevent data loss and other security breaches, including systems and processes designed to reduce the impact of a security breach at a third-party vendor, such measures cannot provide absolute security. If our or our collaborators systems are breached or suffer severe damage, disruption or shutdown and we or our collaborators are unable to effectively resolve the issues in a timely manner, our business and operating results may significantly suffer and we may be subject to litigation, government enforcement actions or potential liability. Security breaches could also cause us to incur significant remediation costs, result in product development delays, disrupt key business operations, including development of our product candidates, and divert attention of management and key information technology resources.

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Risks Related to Our Common Stock

Provisions in our corporate charter documents and under Delaware law could make an acquisition of our Company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

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

- establish a classified board of directors such that only one of three classes of directors is elected each year;

- allow the authorized number of our directors to be changed only by resolution of our board of directors;

- limit the manner in which stockholders can remove directors from our board of directors;

- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;

- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;

- limit who may call stockholder meetings;

- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a poison pill that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors; and

- require the approval of the holders of at least two-thirds of the voting power of all of the then-outstanding shares of capital stock that would be entitled to vote generally in the election of directors to amend or repeal specified provisions of our certificate of incorporation or bylaws.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans or otherwise, could result in dilution to the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that significant additional capital will be needed in the future to continue our planned operations. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell additional common stock, convertible securities or other equity securities, investors in a prior transaction may be materially diluted. Additionally, new investors could gain rights, preferences and privileges senior to those of existing holders of our common stock. Further, any future sales of our common stock by us or resale of our common stock by our existing stockholders could cause the market price of our common stock to decline.

As of September 30, 2018, there were 1,521,732 shares of our common stock available for future grant under our 2014 Equity Incentive Plan. Additionally, as of September 30, 2018, there were outstanding options to purchase up to 4,176,718 shares of our common stock. Any future grants of options, warrants or other securities exercisable or convertible into our common stock, or the exercise or conversion of such shares, and any sales of such shares in the market, could have an adverse effect on the market price of our common stock.

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The price of our common stock may be volatile and fluctuate substantially.

Our stock price is likely to be volatile. The stock market in general and the market for smaller biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of the underlying companies. As a result of this volatility, the market price of our common stock may fall. The market price for our common stock may be influenced by many factors, including:

- the success of competitive products or technologies;
- results of clinical trials of our product candidates or those of our competitors;
- events affecting our collaboration partners, including Bayer and Array;
- commencement or termination of collaborations for our development programs;
- 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 discover, develop, acquire or in- license additional product candidates or products;

- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;

- variations in our financial results or those of companies that are perceived to be similar to us;

- 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.

We may be subject to securities litigation, which is expensive and could divert management attention.

Our share price may be volatile, and in the past companies that have experienced volatility in the market price of their stock have been subject to an increased incidence of securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management s attention from other business concerns, which could seriously harm our business.

If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. There can be no assurance that analysts will cover us or provide favorable coverage. If one or more of the analysts who cover us downgrade our stock or change their opinion of our stock, our stock price would likely decline. If one or more of these analysts cease coverage of our Company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

A significant portion of our total outstanding shares are eligible to be sold into the market, which could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. Sales of a substantial number of shares of our common stock in the public market could occur at any time.

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

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The Nasdaq Stock Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which in turn could make it more difficult for us to attract and retain qualified members of our board of directors.

We are evaluating these rules and regulations, and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 (Section 404) we are required to furnish a report by our management on our internal control over financial reporting at the end of each fiscal year. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting that results in more than a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented or detected on a timely basis.

To achieve compliance with Section 404, we have been engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we have dedicated and will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, that our internal control over financial reporting is effective as required by Section 404. If we identify one or more material weaknesses, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

Under Section 382 of the Internal Revenue Code of 1986, as amended (Internal Revenue Code), if a corporation undergoes an ownership change, generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation s ability to use its pre-change NOLs and other pre-change tax attributes (such as research tax credits) to offset its post-change income or taxes may be limited. It is possible that we may have triggered an ownership change limitation. We may also experience ownership changes in the future as a result of subsequent shifts in our stock ownership (some of which are outside our control). As a result, if we earn net taxable income, our ability to use our pre-change NOL carryforwards to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

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ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(a) Sales of Unregistered Securities

None.

ITEM 3: DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4: MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

The following is a list of exhibits filed as part of this Quarterly Report on Form 10-Q. Where so indicated by footnote, exhibits that were previously filed are incorporated by reference. For exhibits incorporated by reference, the location of the exhibit in the previous filing is indicated.

Exhibit Number	Description
31.1*	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.
31.2*	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.

32.1*(1)	Certification of the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*(1)	Certification of the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Report Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Calculation Linkbase Document
101.LAB	XBRL Taxonomy Label Linkbase Document
101.PRE	XBRL Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

*Filed herewith.

(1) The certifications on Exhibit 32 hereto are deemed not filed for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of that Section. Such certifications will not be deemed incorporated by reference into any filing under the Securities Act or the Exchange Act.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

Date: November 8, 2018

LOXO ONCOLOGY, INC.

By: /s/ Joshua H. Bilenker, M.D.
Joshua H. Bilenker, M.D.
President, Chief Executive Officer and Director
(Principal Executive Officer)

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

Date: November 8, 2018

LOXO ONCOLOGY, INC.

By: /s/ Jennifer Burstein
Jennifer Burstein
Senior Vice President of Finance
(Principal Accounting Officer and
Principal Financial Officer)