UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2017

OR

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

For the transition period from _____ to _____

Commission file number: 001-35993

OncoMed Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**38-3572512**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
800 Chesapeake Drive Redwood City, California	**94063**
(Address of Principal Executive Offices)	**(Zip Code)**

(650) 995-8200
(Registrant's Telephone Number, Including Area Code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

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

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐
Emerging growth company	☒		

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

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

As of May 5, 2017, the number of outstanding shares of the registrant's common stock, par value $0.001 per share, was 37,623,443.

ONCOMED PHARMACEUTICALS, INC.
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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

OncoMed Pharmaceuticals, Inc.

Condensed Balance Sheets
(Unaudited)
(In thousands, except share and per share amounts)

	March 31, 2017	December 31, 2016 (Note 2)
Assets		
Current assets:		
Cash	$ 39,195	$ 36,953
Short-term investments	117,740	147,620
Accounts receivable and other receivables	1,652	2,515
Prepaid and other current assets	3,203	2,495
Total current assets	161,790	189,583
Property and equipment, net	4,172	4,471
Other assets	984	1,428
Total assets	$ 166,946	$ 195,482
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 3,910	$ 4,890
Accrued liabilities	6,660	8,599
Accrued clinical liabilities	18,708	21,854
Current portion of deferred revenue	20,192	20,510
Total current liabilities	49,470	55,853
Deferred revenue, less current portion	154,360	159,373
Deferred rent, less current portion	3,517	2,917
Non-current income tax payable	371	367
Total liabilities	207,718	218,510
Stockholders' equity (deficit):		
Preferred stock, $0.001 par value; 5,000,000 shares authorized at March 31, 2017 and December 31, 2016; no shares issued and outstanding at March 31, 2017 and December 31, 2016	—	—
Common stock, $0.001 par value; 145,000,000 shares authorized at March 31, 2017 and December 31, 2016; 37,623,443 shares and 37,114,589 shares issued and outstanding at March 31, 2017 and December 31, 2016, respectively	37	37
Additional paid-in capital	394,476	389,620
Accumulated other comprehensive income	268	260
Accumulated deficit	(435,553)	(412,945)
Total stockholders' equity (deficit)	(40,772)	(23,028)
Total liabilities and stockholders' equity (deficit)	$ 166,946	$ 195,482

See accompanying notes to the condensed financial statements.

OncoMed Pharmaceuticals, Inc.

Condensed Statements of Operations
(Unaudited)
(In thousands, except share and per share amounts)

	Three Months Ended March 31,	
	2017	**2016**
Revenue:		
Collaboration revenue	$ 5,302	$ 5,348
Other revenue	911	1,002
Total revenue	6,213	6,350
Operating expenses:		
Research and development	23,987	28,398
General and administrative	4,984	5,199
Total operating expenses	28,971	33,597
Loss from operations	(22,758)	(27,247)
Interest and other income, net	154	37
Loss before provision for income taxes	(22,604)	(27,210)
Provision for income taxes	4	3
Net loss	$ (22,608)	$ (27,213)
Net loss per common share, basic and diluted	$ (0.61)	$ (0.90)
Shares used to compute net loss per common share, basic and diluted	37,271,023	30,221,634

See accompanying notes to the condensed financial statements.

OncoMed Pharmaceuticals, Inc.

Condensed Statements of Comprehensive Loss
(Unaudited)
(In thousands)

	Three Months Ended March 31,	
	2017	**2016**
Net loss	$ (22,608)	$ (27,213)
Other comprehensive income:		
Unrealized gain on available-for-sale securities, net of tax	8	115
Total comprehensive loss	$ (22,600)	$ (27,098)

See accompanying notes to the condensed financial statements.

OncoMed Pharmaceuticals, Inc.

Condensed Statements of Cash Flows
(Unaudited)
(In thousands)

	Three Months Ended March 31,	
	2017	**2016**
Operating activities		
Net loss	$ (22,608)	$ (27,213)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Depreciation and amortization	428	434
Stock-based compensation	3,123	2,995
Changes in operating assets and liabilities:		
Accounts receivable and other receivables	863	69,391
Prepaid and other current assets	(708)	(287)
Other assets	444	160
Accounts payable	(980)	(3,448)
Accrued liabilities	(1,663)	(2,046)
Accrued clinical liabilities	(3,146)	1,428
Deferred revenue	(5,331)	(5,349)
Deferred rent	600	(180)
Net cash (used in) provided by operating activities	(28,978)	35,885
Investing activities		
Purchases of property and equipment	(400)	(516)
Purchases of short-term investments	(9,967)	(30,000)
Maturities of short-term investments	39,854	40,010
Net cash provided by investing activities	29,487	9,494
Financing activities		
Proceeds from issuance of common stock related to the exercise of options and employee stock plan purchases	1,733	740
Net cash provided by financing activities	1,733	740
Net increase in cash	2,242	46,119
Cash at beginning of period	36,953	38,444
Cash at end of period	$ 39,195	$ 84,563
Supplemental cash flow information:		
Accrued liabilities for purchase of property and equipment	$ 30	$ 301

See accompanying notes to the condensed financial statements.

OncoMed Pharmaceuticals, Inc.

Notes to the Unaudited Condensed Financial Statements

1. Organization

OncoMed Pharmaceuticals, Inc. ("OncoMed", the "Company", "us", "we", or "our") is a clinical-stage biopharmaceutical company focused on discovering and developing novel therapeutics that address the fundamental biology driving cancer's growth, resistance, recurrence and metastasis. The Company currently has six internally discovered therapeutic candidates in clinical development targeting cancer stem cell, or CSC, pathways and immuno-oncology. The Company plans to advance a seventh therapeutic candidate toward an investigational new drug, or IND, application with the U.S. Food and Drug Administration, or FDA, in the first half of 2017. The Company is also pursuing discovery of additional novel approaches to cancer treatment, including new immuno-oncology therapeutic candidates. The Company was incorporated in July 2004 in Delaware. The Company's operations are based in Redwood City, California, and it operates in one segment.

2. Summary of Significant Accounting Policies

Basis of Presentation

The Company's financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") for interim reporting. These financial statements have been prepared on the same basis as the Company's annual financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, that are necessary for a fair statement of the Company's financial information. These interim results are not necessarily indicative of the results to be expected for the year ending December 31, 2017 or for any subsequent interim period. Certain prior period amounts reported in our financial statements and notes thereto have been reclassified to conform to the current period presentation, with no impact on previously reported operating results or financial position.

The condensed balance sheet data as of December 31, 2016 was derived from the audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016. The accompanying condensed financial statements and related financial information should be read in conjunction with the audited financial statements and the related notes thereto contained in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, filed with the Securities and Exchange Commission (the "SEC") on March 9, 2017.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and judgments that affect the amounts reported in the financial statements and accompanying notes. On an ongoing basis, management evaluates its estimates, including, but not limited to, those related to revenue recognition, preclinical study and clinical trial accruals, fair value of assets and liabilities, income taxes, and stock-based compensation. Management bases its estimates on historical experience and on various other market-specific and relevant assumptions that management believes to be reasonable under the circumstances. Actual results may differ from those estimates.

Customer Concentration

Customers whose revenue accounted for 10% or more of total revenues were as follows:

	Three Months Ended March 31,	
	2017	2016
GlaxoSmithKline LLC ("GSK")	*	10%
Bayer Pharma AG ("Bayer")	13%	*
Celgene Corporation ("Celgene")	84%	87%

* Less than 10%

Net Loss per Common Share

Basic net loss per common share is calculated by dividing the net loss by the weighted-average number of common shares outstanding during the period, without consideration for common stock equivalents. Diluted net loss per common share is computed by dividing the net loss by the weighted-average number of common shares and common share equivalents outstanding for the period

determined using the treasury-stock method. For purposes of this calculation, potentially dilutive securities consisting of common stock subject to repurchase, stock options and restricted stock units are considered to be common stock equivalents and were excluded in the calculation of diluted net loss per common share because their effect would be anti-dilutive for all periods presented.

Newly Adopted and Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2014-09, *Revenue from Contracts with Customers: Topic 606*, to supersede nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. ASU 2014-09 defines a five-step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than are required under existing U.S. GAAP, including identifying performance obligations in a contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 is effective for the Company in the first quarter of fiscal year 2018 using either of two methods: (i) full retrospective application of ASU 2014-09 to each prior reporting period presented with the option to elect certain practical expedients as defined within ASU 2014-09; or (ii) modified retrospective application of ASU 2014-09 with the cumulative effect of initially applying ASU 2014-09 recognized at the date of initial application and providing certain additional disclosures as defined within ASU 2014-09. In March, April, May and December 2016, the FASB issued ASU 2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations*, ASU 2016-10, *Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing*, ASU 2016-12, *Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients to provide supplemental adoption guidance and clarification to ASU 2014-09* and ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, respectively. The effective date for these new standards is the same as the effective date for ASU 2014-09, within the same transition requirements. The Company will adopt ASU 2014-09 in the first quarter of 2018 using the modified retrospective method.

The adoption of ASU 2014-09 may have a material effect on the Company's financial statements. To date, the Company has derived its revenues from collaboration agreements. The consideration that the Company is eligible to receive under these agreements includes upfront payments, research and development funding, and milestone payments. Each collaboration agreement is unique and will need to be assessed separately under the five-step process under the new standard. The Company has started its preliminary assessment of its active collaboration agreements. The Company expects that its evaluation of the accounting for collaboration agreements under the new revenue standard could identify material changes from the current accounting treatment. ASU 2014-09 differs from the current accounting standard in many respects, such as in the accounting for variable consideration, including milestone payments. Under the Company's current accounting policy, milestone revenue is recognized using the milestone method specified in ASC 605-28, which generally results in the recognition of the milestone payment as revenue in the period that the milestone is achieved. However, under ASU 2014-09, it is possible to start to recognize milestone revenue before the milestone is achieved, subject to management's assessment that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. In addition, ASC 605-28 includes a presumption that revenue from up-front non-refundable fees would be recognized ratably over the performance period, unless another attribution method was determined to more closely approximate the delivery of the goods or services to the customer. ASU 2014-09 does not have a presumption that entities would default to a ratable attribution approach and will require entities to determine an appropriate attribution method using either output or input methods. As such, the amount and timing of revenue recognition for the Company's collaboration agreements may change under ASU 2014-09.

In February 2016, the FASB issued ASU 2016-02, *Leases*. ASU 2016-02 amends a number of aspects of lease accounting, including requiring lessees to recognize almost all leases with a term greater than one year as a right-of-use asset and corresponding liability, measured at the present value of the lease payments. The guidance will become effective for the Company beginning in the first quarter of 2019 and is required to be adopted using a modified retrospective approach, with early adoption permitted. While the Company is currently evaluating the impact of the adoption of this standard on its financial statements, the Company anticipates recognition of additional assets and corresponding liabilities related to leases on its Balance Sheets.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. ASU 2016-09 simplifies several aspects of employee share-based payment accounting, including income tax consequences, classification of awards as either equity or liability and classification on the statement of cash flows. The Company adopted this guidance in the first quarter of 2017. As a result of the adoption, the Company's deferred tax asset increased by $3.9 million, with a corresponding increase to the valuation allowance, accordingly there was no impact to the condensed statement of operations or condensed balance sheet.

3. Cash and Investments

The fair value of securities at March 31, 2017 and December 31, 2016, were as follows (in thousands):

	March 31, 2017			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. treasury bills	$ 117,472	$ 274	$ (6)	$ 117,740
Total available-for-sale securities	$ 117,472	$ 274	$ (6)	$ 117,740
Classified as:				
Short-term investments				$ 117,740

As of March 31, 2017, the Company had a total of $156.9 million in cash and short-term investments, which includes $39.2 million in cash and $117.7 million short-term investments.

	December 31, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. treasury bills	$ 147,360	$ 260	$ —	$ 147,620
Total available-for-sale securities	$ 147,360	$ 260	$ —	$ 147,620
Classified as:				
Short-term investments				$ 147,620

As of December 31, 2016, the Company had a total of $184.6 million in cash and short-term investments, which includes $37.0 million in cash and $147.6 million in short-term investments.

All available-for-sale securities held as of March 31, 2017 and December 31, 2016 had contractual maturities of less than one year. There have been no significant realized gains or losses on available-for-sale securities for the periods presented.

4. Fair Value Measurements

The Company records its financial assets and liabilities at fair value. The accounting guidance for fair value provides a framework for measuring fair value, clarifies the definition of fair value, and expands disclosures regarding fair value measurements. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The Company applies the following hierarchy for disclosure of the inputs used to measure fair value, which prioritizes the inputs used into three broad levels as follows:

- Level 1: Inputs which include quoted prices in active markets for identical assets and 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 and liabilities subject to fair value measurements on a recurring basis and the level of inputs used in such measurements were as follows (in thousands):

	March 31, 2017			
	Level 1	Level 2	Level 3	Total
Assets:				
U.S. treasury bills	$ —	$ 117,740	$ —	$ 117,740
Total	$ —	$ 117,740	$ —	$ 117,740

	December 31, 2016			
	Level 1	Level 2	Level 3	Total
Assets:				
U.S. treasury bills	$ —	$ 147,620	$ —	$ 147,620
Total	$ —	$ 147,620	$ —	$ 147,620

Where quoted prices are available in an active market, securities are classified as Level 1. The Company classifies items within Level 2 if the investments are valued using model driven valuations using observable inputs such as quoted market prices, benchmark yields, reported trades, broker/dealer quotes, and issuer spreads. The Company classifies U.S. Treasury securities as Level 2. There were no transfers between Level 1 and Level 2 during the periods presented.

5. Collaborations

Summary of Collaboration Related Revenue

The Company has recognized the following revenues from its collaboration agreements during the three months ended March 31, 2017 and 2016 (in thousands):

	Three Months Ended March 31,	
	2017	2016
GSK:		
Recognition of upfront payments	$ 150	$ 150
Other revenue	3	466
GSK total	153	616
Bayer:		
Recognition of upfront payments	139	185
Other revenue	698	54
Bayer total	837	239
Celgene:		
Recognition of upfront payments	5,013	5,013
Other revenue	210	482
Celgene total	5,223	5,495
Total collaboration related revenue	$ 6,213	$ 6,350

GSK Strategic Alliance

As of March 31, 2017, the Company was eligible to receive in its collaboration with GSK up to $344.5 million in future development milestone payments and contingent consideration with respect to tarextumab (anti-Notch2/3, OMP-59R5), including a $25.0 million opt-in payment and research, development, regulatory and commercialization payments. The Company is also eligible to receive percentage royalties in the low double digits to high teens on net sales of tarextumab. The Company has earned $25.0 million in the aggregate from GSK with respect to tarextumab through March 31, 2017. GSK has the option to obtain an exclusive license to develop and commercialize tarextumab through the completion of the Phase II "PINNACLE" trial. If GSK elects not to exercise its options for tarextumab during the relevant option period, or if GSK terminates the tarextumab program, the Company would have worldwide rights to tarextumab. On April 17, 2017, the Company announced top-line results from the PINNACLE trial, which have been shared with GSK.

Bayer Strategic Alliance

As of March 31, 2017, the Company was eligible to receive up to $10.0 million in future development milestone payments in its collaboration with Bayer for the Company's development of biologic therapeutic candidates, prior to the point that Bayer exercises its options. Bayer could have elected to exercise its options on vantictumab and ipafricept, two candidates currently in clinical development, through the earlier of completion of certain Phase I trials or June 15, 2017. The Company was eligible to receive up to $55.0 million if Bayer exercised its options for biologic therapeutic candidates, including opt-in payments of $25.0 million for vantictumab and $15.0 million for ipafricept. Bayer would have been responsible for all further development and commercialization following the exercise of an option for a therapeutic candidate. The Company is eligible to receive up to $22.0 million in certain development milestone payments for any small molecule candidates. If Bayer successfully developed and commercialized all of the

therapeutic candidates for more than one indication, the Company could have received contingent consideration payments of up to $195.0 million for the achievement of certain development and regulatory events (up to $145.0 million for biologics and $50.0 million for small molecules) and up to $1.0 billion upon the achievement of specified future product sales (up to $862.5 million for biologics and $140.0 million for small molecules). In addition, the Company could have earned royalty payments on all future collaboration product sales, if any. As all contingent consideration would have been based solely on the performance of Bayer, the Company would have recognized the contingent payments upon receipt immediately as collaboration revenue if the Company had no further performance obligations under the agreement with Bayer.

On April 7, 2017, Bayer notified the Company of its decision not to exercise its option to license vantictumab and ipafricept and of its termination of all Wnt pathway biologic programs under the collaboration, including vantictumab and ipafricept. As a result, effective June 16, 2017, the Company will retain worldwide rights to develop and commercialize vantictumab and ipafricept. The Company will no longer be eligible to receive the $55.0 million in aggregate opt-in payments for Bayer's exercise of its options for biologic therapeutic candidates, including the opt-in payments of $25.0 million for vantictumab and $15.0 million for ipafricept. The Company will also no longer be eligible to receive the $145.0 million, in the aggregate, of potential contingent consideration payments for the achievement of certain development and regulatory events relating to the biologic therapeutic candidates, nor the $862.5 million, in the aggregate, of potential contingent consideration payments for the achievement of future product sales relating to the biologic therapeutic candidates, as described above.

Celgene Strategic Alliance

As of March 31, 2017, the Company was eligible to receive in its collaboration with Celgene up to $15.0 million in future development milestones across all biologic programs, prior to the point that Celgene exercises its options. The Company is also eligible to receive up to $240.0 million of contingent consideration if Celgene exercises all its options for the biologic and small molecule therapeutic programs. Following Celgene's exercise of its option for a biologic therapeutic program, the Company will have co-development and co-commercialization rights for five of the six biologic therapeutic programs in the U.S. Celgene will be responsible for all further development and commercialization following the exercise of the options for specified programs. For programs subject to the Company's co-development and co-commercialization rights, the Company will be responsible for one-third and Celgene will be responsible for two-thirds of worldwide development costs, and the Company and Celgene will share 50% of all product profits and losses in the U.S. Outside the U.S., Celgene will have exclusive development and commercialization rights for such programs, with the Company eligible to receive milestones and tiered royalties on product sales. With respect to one of the six biologic therapeutic programs, and any of the other biologic therapeutic programs if the Company elects not to co-develop and co-commercialize products arising from such program, Celgene will have exclusive development and commercialization rights worldwide, with the Company eligible to receive milestones and tiered royalties on worldwide product sales. If Celgene successfully develops and commercializes all of the product candidates, the Company could receive additional contingent consideration of up to $2.8 billion for the achievement of post-option exercise development, regulatory events and sales milestones (up to $2.7 billion for biologics and $95.0 million for small molecules). As all contingent consideration is based solely on the performance of Celgene, the Company would recognize the contingent payments upon receipt immediately as collaboration revenue if the Company had no further performance obligations under the agreement with Celgene.

On April 10, 2017, the Company announced that the Phase II "YOSEMITE" clinical trial of demcizumab (anti-DLL4, OMP-21M18) in combination with Abraxane® (paclitaxel protein-bound particles for injectable suspension) (albumin bound) plus gemcitabine in previously untreated patients with metastatic pancreatic cancer did not meet its primary endpoint of progression-free survival and that the interim median overall survival analysis did not show a benefit for demcizumab in combination with Abraxane plus gemcitabine compared to the Abraxane, gemcitabine plus placebo arm. On May 8, 2017, the Company announced that the Phase II "DENALI" clinical trial of demcizumab in combination with carboplatin and pemetrexed in front-line non-squamous non-small cell lung cancer failed to meet its efficacy endpoints when compared to placebo, and that the Company is discontinuing the dosing of all patients on its demcizumab clinical trials, including a Phase Ib clinical trial combining demcizumab and pembrolizumab.

6. Stockholder's Equity

Equity Incentive Plans

As of March 31, 2017, a total of 5,694,538 shares of common stock have been authorized under the 2013 Equity Incentive Award Plan (the "2013 Plan"), including the additional 1,484,583 shares of common stock that became available on January 1, 2017 for future issuance under the 2013 Plan as a result of an annual automatic increase provision in the 2013 Plan. As of March 31, 2017, a total of 3,797,479 shares are subject to options and restricted stock units ("RSUs") outstanding under the 2013 Plan. There are 1,478,002 shares subject to options outstanding under the 2004 Stock Incentive Plan (the "2004 Plan") as of March 31, 2017, which will become available for issuance under the 2013 Plan to the extent the options are forfeited or lapse unexercised without issuance of such shares under the 2004 Plan.

The following table summarizes the Company's stock option and RSU award activity under the 2004 Plan and 2013 Plan including grants to nonemployees during the three months ended March 31, 2017 (in thousands):

	Shares Available for Grant of Options and Awards	Options and Awards Outstanding
Balance at December 31, 2016	971	4,900
Additional shares authorized	1,485	—
Options granted	(962)	962
Options exercised	—	(266)
RSUs vested	—	(184)
Options forfeited	128	(128)
RSUs forfeited	9	(9)
Balance at March 31, 2017	1,631	5,275

The weighted-average grant date estimated fair value of options granted during the three months ended March 31, 2017 was $5.11 per share.

Employee Stock Purchase Plan

As of March 31, 2017, a total of 1,543,620 shares of common stock have been authorized and 1,235,717 shares of common stock are available for future issuance under the Company's Employee Stock Purchase Plan (the "ESPP"). This authorized number includes the additional 350,000 shares of common stock that became available for future issuance under the ESPP as of January 1, 2017 as a result of an annual automatic increase provision in the ESPP. The ESPP allows eligible employees to purchase shares of the Company's common stock at a discount through payroll deductions of up to 15% of their eligible compensation, subject to any plan limitations. The ESPP provides for six-month offering periods, and at the end of each offering period, employees are able to purchase shares at 85% of the lower of the fair market value of the Company's common stock on the first trading day of the offering period or on the last day of the offering period.

During the three months ended March 31, 2017, the Company issued 59,135 shares under the ESPP.

Restricted Stock Units

In March 2014, the Company awarded 293,980 RSUs under the 2013 Plan. The RSUs fully vested on March 31, 2017. Each vested RSU represents the right to receive one share of common stock. The Company recognized stock-based compensation expense related to these RSUs of $0.4 million for the three months ended March 31, 2017.

Stock-Based Compensation

Employee stock-based compensation expense was calculated based on awards expected to vest and has been reduced for estimated forfeitures. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures are expected to differ from those estimates.

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

	Three Months Ended March 31,	
	2017	2016
Research and development	$ 1,417	$ 1,371
General and administrative	1,706	1,624
Total	$ 3,123	$ 2,995

As of March 31, 2017, the Company had $16.2 million, $3.5 million and $0.1 million of unrecognized stock-based compensation expense related to stock options, RSUs and ESPP shares, respectively, which are expected to be recognized over an estimated weighted-average period of 2.73 years, 1.78 years and 0.42 years, respectively.

Fair Value Disclosures

The fair value of stock options granted under the 2013 Plan and purchases under the Company's ESPP were estimated at grant date using the Black-Scholes option-pricing model. The fair value of stock-based awards was estimated using the following weighted average assumptions for the three months ended March 31, 2017 and 2016:

	Three Months Ended March 31,	
Stock Options:	**2017**	**2016**
Weighted-average volatility	73.8%	62.4%
Weighted-average expected term (years)	6.2	6.2
Risk-free interest rate	2.3%	1.6%
Expected dividend yield	—	—

	Three Months Ended March 31,	
ESPP:	**2017**	**2016**
Weighted-average volatility	64.4%	45.4%
Weighted-average expected term (years)	0.5	0.5
Risk-free interest rate	0.5%	0.3%
Expected dividend yield	—	—

7. Income Taxes

During the three months ended March 31, 2017 and 2016, the Company recorded an income tax provision of $4,000 and $3,000, respectively, related to discrete items resulting from interest on prior years' uncertain tax positions. The Company's deferred tax assets continue to be fully offset by a valuation allowance.

8. Net Loss per Common Share

The following outstanding common stock equivalents were excluded from the computation of diluted net loss per common share for the periods presented because including them would have been anti-dilutive (in thousands):

	March 31,	
	2017	**2016**
Options to purchase common stock	4,893	4,414
RSUs	382	214
	5,275	4,628

9. Subsequent events

On April 24, 2017, the Company's Board of Directors approved a restructuring plan to reduce operating costs and better align its workforce with the needs of its business following the Company's recent announcements that its Phase II "YOSEMITE" clinical trial of demcizumab (anti-DLL4, OMP-21M18) in combination with Abraxane® plus gemcitabine in previously untreated patients with metastatic pancreatic cancer did not meet its primary endpoint and would be discontinued, its Phase II "PINNACLE" clinical trial of tarextumab (anti-Notch2/3, OMP-59R5) in combination with etoposide plus either cisplatin or carboplatin chemotherapy in previously untreated patients with extensive-stage small cell lung cancer did not meet its endpoints, its partner Bayer had decided not to exercise its option to license vantictumab (anti-Fzd, OMP-18R5) and ipafricept (Fzd8-Fc, OMP-54F28), and enrollment would be discontinued in the Phase Ib clinical trial of brontictuzumab (anti-Notch1, OMP-52M51) in combination with trifluridine/tipiracil (Lonsurf®) in third-line colorectal cancer patients. Under the plan, the Company plans to reduce its workforce by 60 employees (or 48%) to 64 employees. The affected employees were terminated as of April 25, 2017, with certain employees remaining with the Company for a limited time thereafter. As a result, the Company will incur restructuring charges consisting of one-time severance payments and other employee related costs, of which a majority will be paid out in cash during the second quarter of 2017 and the remainder is expected to be paid out during the third and fourth quarters of 2017. The Company may also incur additional costs not currently contemplated due to events that may occur as a result of, or that are associated with, the workforce reduction.

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

You should read the following discussion in conjunction with our condensed financial statements (unaudited) and related notes included elsewhere in this report. This Quarterly Report on Form 10-Q contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical facts contained in this report are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may," "could," "will," "would," "should," "expect," "plan," "anticipate," "believe," "estimate," "intend," "predict," "seek," "contemplate," "potential" or "continue" or the negative of these terms or other comparable terminology. These forward-looking statements, include, but are not limited to, the initiation, timing, progress and results of our preclinical studies and clinical trials, and our research and development programs; our ability to advance therapeutic candidates into, and successfully complete, clinical trials; our receipt of future milestone payments and/or royalties, and the expected timing of such payments; the timing of delivery of data packages to our collaborators for opt-in consideration, and the content of such data packages; our collaborators' exercise of their license options; the commercialization of our therapeutic candidates; the implementation of our business model, strategic plans for our business, therapeutic candidates and technology; the scope of protection we are able to establish and maintain for intellectual property rights covering our therapeutic candidates and technology; estimates of our expenses, future revenues, capital requirements and our needs for additional financing; the timing or likelihood of regulatory filings , including Investigational New Drug, or IND, applications, and approvals; our ability to maintain and establish collaborations or obtain additional government grant funding; our use of proceeds from our at-the-market offering, and our underwritten public offering; our financial performance; the anticipated timing, expected costs and financial impact of our restructuring plan and related reduction in force, and the financial impact of other cost saving initiatives; and developments relating to our competitors and our industry. These statements reflect our current views with respect to future events or our future financial performance, are based on assumptions, and involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under "Item 1A—Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and in this Quarterly Report on Form 10-Q. These forward-looking statements speak only as of the date hereof. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future. Unless the context requires otherwise, in this Quarterly Report on Form 10-Q, the terms "OncoMed," "Company," "OncoMed Pharmaceuticals," "we," "us" and "our" refer to OncoMed Pharmaceuticals, Inc., a Delaware corporation, unless otherwise noted.

Overview

OncoMed is a clinical-stage biopharmaceutical company focused on discovering and developing novel therapeutics that address the fundamental biology driving cancer's growth, resistance, recurrence and metastasis. We believe that a key reason for the limitations of many current cancer treatments is that they fail to impede the growth of cancer stem cells, or CSCs, which are responsible for the initiation, metastasis and recurrence of many cancers. Our research into CSC pathways such as Notch, Wnt and RSPO-LGR, has also led us to identify immuno-oncology biologics intended to bolster immune system recognition of cancer cells and/or suppress immune system evasion mechanisms. We believe our therapeutic candidates are quite distinct from current generations of chemotherapies and targeted therapies, and have the potential to significantly impact cancer treatment and the clinical outcome of patients with cancer. All of our therapeutic candidates were discovered internally in our own research laboratories.

We currently have six internally discovered therapeutic candidates in clinical development targeting CSC pathways and immuno-oncology. We are also pursuing discovery of additional novel approaches to cancer treatment including new immuno-oncology therapeutic candidates. On April 10, 2017 we announced top-line results from our randomized Phase II "YOSEMITE" clinical trial of our first therapeutic candidate in the clinic, demcizumab (anti-DLL4, OMP-21M18), in combination with Abraxane® plus gemcitabine in previously untreated patients with metastatic pancreatic cancer. The YOSEMITE trial did not meet its primary endpoint and will be discontinued. On May 8, 2017, we announced top-line results from our randomized Phase II "DENALI" clinical trial of demcizumab in combination with carboplatin and pemetrexed in front-line non-squamous non-small cell lung cancer. The DENALI trial failed to meet its efficacy endpoints when compared to placebo. We are discontinuing the dosing of all patients on our demcizumab clinical trials, including a Phase Ib clinical trial combining demcizumab and pembrolizumab. We are currently completing two Phase Ib clinical trials of our second therapeutic candidate, vantictumab (anti-Fzd, OMP-18R5), in combination with standard-of-care therapies, one in breast cancer and the second in pancreatic cancer. We are currently completing two Phase Ib trials of our third therapeutic candidate, ipafricept (Fzd8-Fc, OMP-54F28), in combination with standard-of-care therapies, one in pancreatic cancer and the second in ovarian cancer. With respect to the fourth therapeutic candidate, navicixizumab (anti-DLL4/VEGF bispecific, OMP-305B83), we are currently enrolling patients in a single-agent Phase Ia clinical trial of navicixizumab in advanced solid tumors, and in two Phase Ib clinical trials of navicixizumab in combination with standard chemotherapy regimens in patients with platinum-resistant ovarian cancer and metastatic colorectal cancer. Regarding the fifth therapeutic candidate, rosmantuzumab

(anti-RSPO3, OMP-131R10), we are currently enrolling patients in both portions of a Phase Ia/b clinical trial. The Phase Ia portion is in solid tumor patients and the Phase Ib portion is in patients with certain colorectal or gastric cancers and combines rosmantuzumab with standard-of-care chemotherapy. Our sixth therapeutic candidate, anti-TIGIT (OMP-313M32), is enrolling patients in a Phase Ia clinical trial in solid tumor patients. Clinical trials for these therapeutic candidates, are ongoing, with the intent of gathering additional data required to proceed to later stage clinical trials and product approval. We plan to file an IND application with the U.S. Food and Drug Administration, or FDA, for our seventh therapeutic candidate, GITRL-Fc (OMP-336B11), in the first half of 2017. On April 17, 2017, we announced top-line results from a randomized Phase II clinical trial known as "PINNACLE" of tarextumab (anti-Notch2/3, OMP-59R5) in combination with platinum chemotherapy and etoposide in small cell lung cancer patients. The PINNACLE trial did not meet its endpoints and we plan to discontinue all clinical activities associated with the tarextumab program. We also announced that we were discontinuing enrollment in our Phase Ib clinical trial of brontictuzumab (anti-Notch1, OMP-52M51) in combination with trifluridine/tipiracil (Lonsurf®) in colorectal cancer patients, and we subsequently decided to discontinue our brontictuzumab program entirely.

Financial Operations Overview

Revenue

We have not generated any revenue from product sales. Our revenue to date has been primarily derived from upfront payments and development milestones received from GlaxoSmithKline, or GSK, Bayer Pharma AG, or Bayer, and Celgene Corporation, or Celgene. We recognize revenue from upfront payments ratably over the term of our estimated period of performance under the agreements. In addition to receiving upfront payments, we may also be entitled to milestone and other contingent payments upon achieving predefined objectives or the exercise of options for specified programs by our strategic partners. Such payments are recorded as revenue when we achieve the underlying milestone if there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved. We also recognize revenue for reimbursements of research and development costs under our collaboration agreements as the services are performed.

The following table summarizes our revenue for the three months ended March 31, 2017 and 2016, which is related to the recognition of upfront payments and reimbursements of research and development costs under our various collaboration arrangements (in thousands):

	Three Months Ended March 31,	
	2017	2016
GSK:		
Recognition of upfront payments	$ 150	$ 150
Other revenue	3	466
GSK total	153	616
Bayer:		
Recognition of upfront payments	139	185
Other revenue	698	54
Bayer total	837	239
Celgene:		
Recognition of upfront payments	5,013	5,013
Other revenue	210	482
Celgene total	5,223	5,495
Total collaboration related revenue	$ 6,213	$ 6,350

We expect that any revenue we generate will fluctuate from period to period as a result of the timing and amount of milestones and other payments that we may receive in the future from our collaborations with GSK, Bayer and Celgene or any new collaboration into which we may enter.

Research and Development

Research and development expenses represent costs incurred to conduct research such as the discovery and development of clinical candidates for GSK, Bayer and Celgene as well as discovery and development of our proprietary un-partnered product candidates. We expense all research and development costs as they are incurred. Our research and development expenses consist of employee salaries and related benefits, including stock-based compensation, third-party contract costs relating to research, manufacturing, preclinical studies, clinical trial activities, laboratory consumables, and allocated facility costs.

At any point in time, we typically have various early stage research and drug discovery projects. Our internal resources, employees and infrastructure are not directly tied to any one research or drug discovery project and are typically deployed across multiple projects. As such, we do not maintain information regarding these costs incurred for these early stage research and drug discovery programs on a project-specific basis.

The following table summarizes our research and development expenses for the three months ended March 31, 2017 and 2016 (in thousands). The internal costs include personnel, facility costs, laboratory consumables and discovery and research related activities associated with our pipeline. The external program costs reflect external costs attributable to our clinical development candidates and preclinical candidates selected for further development. Such expenses include third-party contract costs relating to manufacturing, clinical trial activities, translational medicine and toxicology activities.

	Three Months Ended March 31,	
	2017	2016
Internal Costs:		
Cancer biology, pathology and toxicology	$ 4,489	$ 3,999
Molecular and cellular biology	2,225	1,892
Process development and manufacturing	1,391	1,687
Product development	3,030	3,219
Subtotal internal costs	11,135	10,797
External Program Costs:		
Manufacturing	2,564	5,471
Clinical	8,041	9,719
Translational medicine	1,534	1,271
Toxicology	713	1,140
Subtotal external program costs	12,852	17,601
Total research and development expense	$ 23,987	$ 28,398

Our research and development expenses have increased as we have progressed our therapeutic candidates. The process of conducting preclinical studies and clinical trials necessary to obtain regulatory approval is costly and time-consuming. We or our partners may never succeed in achieving marketing approval for any of our therapeutic candidates. The probability of success of each therapeutic candidate may be affected by numerous factors, including preclinical data, clinical data, competition, manufacturing capability and commercial viability.

For the biologic programs covered under our strategic alliances with GSK and Celgene, we are responsible for development of each therapeutic candidate prior to the exercise of GSK's or Celgene's option to exclusively license such therapeutic candidate. GSK may exercise such an option on a product-by-product basis and Celgene may exercise such option on a program-by-program basis, in each case, during certain time periods, which for GSK and Celgene are through the end of certain Phase I or Phase II trials, depending on the applicable therapeutic candidate or program. If GSK exercises its option for a therapeutic candidate, all further development obligations for such therapeutic candidate are assumed by GSK. With respect to biologic therapeutic programs, if Celgene exercises its option for a given program, we will have the option to co-develop and co-commercialize up to five of the six such therapeutic candidates in the United States. If we do so, we will be responsible for a one-third share of the global development costs of such therapeutic candidates, with Celgene bearing the remaining two-thirds of such costs, and we will be entitled to participate in the commercialization activities for such therapeutic candidates in the United States, and to share 50% of all profits and losses arising from U.S. sales of such therapeutic candidates. Otherwise, we may enter into a license agreement with Celgene for such therapeutic candidate whereupon Celgene would be responsible for all further development costs. In addition, if Celgene exercises its option under the Celgene Agreement to further develop and commercialize small molecule therapeutics directed to targets in an undisclosed pathway, all further development obligations with respect to the small molecule therapeutic program will be assumed by Celgene.

Most of our product development programs are at an early stage; therefore, the successful development of our therapeutic candidates is highly uncertain and may not result in approved products. Completion dates and completion costs can vary significantly for each therapeutic candidate and are difficult to predict. Given the uncertainty associated with clinical trial enrollments and the risks inherent in the development process, we are unable to determine the duration and completion costs of current or future clinical trials of our therapeutic candidates or if and to what extent we will generate revenues from the commercialization and sale of any of our therapeutic candidates. We anticipate that we and our strategic alliance partners will make determinations as to which programs to pursue and how much funding to direct to each program on an ongoing basis in response to the scientific and clinical success of each therapeutic candidate, as well as an ongoing assessment as to each therapeutic candidate's commercial potential. We may need to raise additional capital or may seek additional strategic alliances in the future in order to complete the development and commercialization of our therapeutic candidates.

General and Administrative

Our general and administrative expenses consist primarily of personnel costs, allocated facilities-related expenses, depreciation of capital equipment and other expenses for outside professional services. Personnel costs consist of salaries, benefits and stock-based compensation. General and administrative personnel include our executive, finance, human resources, information technology and legal organizations. Our professional fees principally consist of outside legal, human resource, audit, tax and accounting services and other consulting costs.

Interest and Other Income, net

Interest and other income consist primarily of interest received on our cash and investment income from short-term investments.

Critical Accounting Polices and Estimates

Our condensed financial statements are prepared in accordance with generally accepted accounting principles in the United States, or U.S. GAAP. The preparation of these condensed financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. In many instances, we could have reasonably used different accounting estimates, and in other instances changes in the accounting estimates are reasonably likely to occur from period to period. Accordingly, actual results could differ significantly from the estimates made by our management. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

There have been no significant and material changes in our critical accounting policies during the three months ended March 31, 2017, as compared to those disclosed in *"Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates"* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

Recent Accounting Pronouncements

See Note 2 to the notes to the condensed financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q for information regarding recent accounting pronouncements.

Results of Operations

Comparison of the Three Months Ended March 31, 2017 and 2016

(In thousands)	Three Months Ended March 31, 2017	2016	Dollar Change
Revenue:			
Collaboration revenue	$ 5,302	$ 5,348	$ (46)
Other revenue	911	1,002	(91)
Total revenue	6,213	6,350	(137)
Operating expenses:			
Research and development	23,987	28,398	(4,411)
General and administrative	4,984	5,199	(215)
Total operating expenses	28,971	33,597	(4,626)
Loss from operations	(22,758)	(27,247)	4,489
Interest and other income, net	154	37	117
Loss before provision for income taxes	(22,604)	(27,210)	4,606
Provision for income taxes	4	3	1
Net loss	$ (22,608)	$ (27,213)	$ 4,605

Revenue

Total revenue was $6.2 million for the three months ended March 31, 2017, a decrease of $0.1 million, or 2%, compared to $6.4 million for the three months ended March 31, 2016. Revenue recognized from amortization of upfront fees of $5.3 million under our collaborations in the first quarter of 2017 remained constant compared to the same period in 2016. The year-over-year decrease of

$0.1 million in other revenue during the first quarter of 2017 compared to 2016 was due to slightly lower revenue recognized from reimbursement of research and development costs for services performed for Bayer and Celgene in the first quarter of 2017.

Research and Development

Research and development expenses were $24.0 million for the three months ended March 31, 2017, a decrease of $4.4 million, or 16%, compared to $28.4 million for the three months ended March 31, 2016. The decrease was comprised of a $4.7 million decrease in external program costs, offset by $0.3 million increase in internal program costs. The year-over-year decrease of $4.7 million in our external program costs in the first quarter of 2017 compared to the same period in 2016 was primarily attributable to decrease in manufacturing costs by $2.9 million due to the timing of production of materials used in the various clinical studies and $1.7 million primarily due to decrease in the Phase II clinical trial costs for demcizumab and tarextumab programs. The increase in our internal costs of $0.3 million was primarily due to higher facilities-related expense in relation to the execution of an amendment to our lease agreement in November 2016. We expect that our research and development expenses will continue to be substantial for the remaining quarters in 2017 but less than the expense levels incurred in prior periods, as our clinical activities decrease and as we realize the cost savings expected from the restructuring plan that we implemented in April 2017.

General and Administrative

General and administrative expenses were $5.0 million for the three months ended March 31, 2017, a decrease of $0.2 million, or 4%, compared to $5.2 million for the three months ended March 31, 2016. The year-over-year decrease in general and administrative expense in the first quarter of 2017 compared to 2016 was primarily attributable to a decrease in consulting and outside professional service costs.

Liquidity and Capital Resources

As of March 31, 2017, we had cash and short term investments totaling $156.9 million.

In June 2015, we filed a shelf registration statement on Form S-3, that permits: (a) the offering, issuance and sale by us of up to a maximum aggregate offering price of $250.0 million of our common stock, preferred stock, debt securities, warrants, purchase contracts and/or units; and (b) as part of the $250.0 million, the offering, issuance and sale by us of up to a maximum aggregate offering price of $50.0 million of our common stock that may be issued and sold under a sales agreement with Cantor Fitzgerald & Co. in one or more at-the-market offerings. Through March 31, 2017, we have sold 388,166 shares of common stock pursuant to our at-the-market program at a weighted average price of $12.59 per share, resulting in aggregate net proceeds to us of $4.7 million, net of offering costs. In the quarter ended March 31, 2017, we did not sell any shares pursuant to our at-the-market program.

On August 23, 2016, we closed the sale of an aggregate of 6,325,000 shares of our common stock at a public offering price of $10.00 per share. The shares were issued pursuant to a prospectus supplement filed with the SEC on August 17, 2016, and related prospectus, pursuant to the shelf registration statement. We received net offering proceeds of approximately $59.2 million, net of underwriting discounts and commissions and offering costs.

Our primary uses of cash are to fund operating expenses, primarily related to research and development product candidate expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable and accrued expenses. We expect that operating expenses will constitute a material use of our cash balances. We intend to continue to manage our operating expenses in line with our existing cash and available financial resources. We believe the restructuring actions and other cost saving initiatives we have taken will enable us to significantly reduce our operating expenses for the rest of 2017 compared to prior periods.

We believe that our existing cash and short-term investments as of March 31, 2017 will be sufficient to meet our anticipated cash requirements through the third quarter of 2019, even without taking into account potential future milestone payments to us or proceeds to us from any future sales of our securities pursuant to our shelf registration statement including our at-the-market program. However, our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially.

Our future capital requirements are difficult to forecast and will depend on many factors, including:

- the achievement of milestones, the exercise of options, and/or the advancement of the small molecule programs into further development and potential commercialization under our agreements with GSK, Bayer and Celgene;
- the initiation, progress, timing and completion of preclinical studies and clinical trials for our therapeutic candidates and potential therapeutic candidates;

- the number and characteristics of therapeutic candidates that we pursue;
- the progress, costs and results of our clinical trials;
- the outcome, timing and cost of regulatory approvals;
- delays that may be caused by changing regulatory requirements;
- funding we may receive under any new collaborations we may enter into or new government grants we may be awarded in the future;
- the costs and timing of hiring new employees to support our continued growth; and
- the costs and timing of procuring clinical supplies of our therapeutic candidates.

The following table summarizes our cash flows for the periods indicated (in thousands):

	Three Months Ended March 31,	
	2017	2016
Cash (used in) provided by operating activities	$ (28,978)	$ 35,885
Cash provided by investing activities	29,487	9,494
Cash provided by financing activities	1,733	740

Cash Flows from Operating Activities

Cash used in operating activities for the three months ended March 31, 2017 was $29.0 million. The net loss of $22.6 million was offset by non-cash charges of $0.4 million for depreciation and amortization and $3.1 million for stock-based compensation. The change in net operating assets and liabilities of $9.9 million was primarily due to a decrease in accrued liabilities of $1.7 million, accrued clinical liabilities of $3.1 million due to timing of payments, and a decrease in deferred revenue of $5.3 million due to the amortization of upfront and milestone payment from our collaboration arrangements with GSK, Bayer and Celgene.

Cash provided by operating activities for the three months ended March 31, 2016 was $35.9 million. The net loss of $27.2 million was offset by non-cash charges of $0.4 million for depreciation and amortization and $3.0 million for stock-based compensation. The change in net operating assets of $59.7 million was due primarily to receipt of the $70.0 million safety milestone from Celgene based on an analysis of Phase Ib and blinded interim Phase II clinical trial safety data associated with the demcizumab (anti-DLL4, OMP-21M18) program. There was also a $1.4 million increase in accrued clinical liabilities and a $5.5 million decrease in accrued liabilities and accounts payable driven by the timing of our vendor payments. The remaining net decrease of $0.3 million is due to changes in prepaid and other current assets, other assets and deferred rent.

Cash Flows from Investing Activities

Cash provided by investing activities of $29.5 million for the three months ended March 31, 2017 primarily reflects maturities of short-term investments of $39.9 million, offset by purchases of short-term investments of $10.0 million and acquisition of property and equipment of $0.4 million.

Cash provided by investing activities of $9.5 million for the three months ended March 31, 2016 was primarily due to maturities of short-term investments of $40.0 million, offset by purchases of short-term investments of $30.0 million and our acquisition of property and equipment of $0.5 million.

Cash Flows from Financing Activities

Cash provided by financing activities of $1.7 million and $0.7 million for the three months ended March 31, 2017 and 2016, respectively, was due to the proceeds from the issuance of common stock upon the exercise of stock options and from purchases of common stock under our Employee Stock Purchase Plan.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risks in the ordinary course of our business. These risks primarily include risk related to interest rate sensitivities and foreign currency exchange rate sensitivity. There have been no material quantitative or qualitative changes in our market risk exposures compared to the disclosures in Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 9, 2017.

Interest Rate Sensitivity

We had cash and short-term investments of $156.9 million and $184.6 million as of March 31, 2017 and December 31, 2016, respectively, which consisted of bank deposits and U.S. Treasury Bills. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant. We had no outstanding debt as of March 31, 2017 and December 31, 2016.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. We have not been exposed nor do we anticipate being exposed to material risks due to changes in interest rates. A hypothetical 10% change in interest rates during any of the periods presented would not have had a material impact on our financial statements.

Foreign Currency Exchange Rate Sensitivity

We face foreign exchange risk as a result of entering into transactions denominated in currencies other than U.S. dollars, particularly in Euro and British Sterling. Due to the uncertain timing of expected payments in foreign currencies, we do not utilize any forward foreign exchange contracts, nor did we in the three months ended March 31, 2017. All foreign transactions settled on the applicable spot exchange basis at the time such payments were made.

An adverse movement in foreign exchange rates could have a material effect on payments we make to foreign suppliers. The impact of an adverse change in foreign exchange rates may be offset in the event we receive a milestone payment from a foreign partner. A hypothetical 10% change in foreign exchange rates during any of the preceding periods presented would not have a material impact on our financial statements.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2017. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to its management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of March 31, 2017, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting during the quarter ended March 31, 2017, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

From time to time, we may become involved in legal proceedings and claims arising in the ordinary course of our business. We are not currently a party to any legal proceedings the outcome of which, if determined adversely to us, we believe would individually or in the aggregate have a material adverse effect on our business, operating results, financial condition or cash flows.

ITEM 1A. RISK FACTORS

In addition to the other information set forth in this report, you should carefully consider the factors discussed in "Item 1A—Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and in our other public filings with the SEC. The risks described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, in this Quarterly Report on Form 10-Q and in our other public filings with the SEC are not the only risks facing the Company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

There have been no material changes to our risk factors from those set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, other than as described in the updated risk factors provided below.

We anticipate that we will continue to incur significant losses for the foreseeable future, and if we are unable to achieve and sustain profitability, the market value of our common stock will likely decline.

We are a clinical-stage biopharmaceutical company. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We do not currently have any therapeutic candidates in pivotal clinical trials or approved for sale, and we continue to incur significant research and development and general and administrative expenses related to our operations. We are not profitable and have incurred losses in each year since our founding in 2004. We have incurred net losses of $103.1 million and $85.4 million and for the years ended December 31, 2016 and 2015, respectively, and $22.6 million for the three months ended March 31, 2017. We had an accumulated deficit of $435.5 million as of March 31, 2017.

We expect to continue to incur significant losses for the foreseeable future. We expect these losses and our cash utilization to continue in the near term as we continue to conduct clinical trials for demcizumab (anti-DLL4, OMP-21M18), vantictumab (anti-Fzd, OMP-18R5), ipafricept (Fzd8-Fc, OMP-54F28), navicixizumab (anti-DLL4/VEGF bispecific, OMP-305B83), rosmantuzumab (anti-RSPO3, OMP-131R10), and anti-TIGIT (OMP-313M32), file Investigational New Drug, or IND, applications for additional therapeutic candidates such as GITRL-Fc (OMP-336B11) and conduct research and development of our other therapeutic candidates. We are collaborating with GlaxoSmithKline LLC (formerly SmithKline Beecham Corporation), or GSK, to develop tarextumab, which targets the Notch signaling pathway. We are also collaborating with Celgene Corporation, or Celgene, to discover, develop and commercialize certain anti-cancer stem cell, or anti-CSC, or immuno-oncology biologic therapeutic candidates, including demcizumab, navicixizumab, rosmantuzumab and anti-TIGIT, and, if Celgene exercises its option to do so, to discover and develop small molecule therapeutics targeting an undisclosed pathway. Under these agreements, GSK and Celgene have certain options to obtain exclusive licenses for the development and commercialization of the therapeutic candidates being developed in the collaboration. If GSK exercises its option to obtain a license to develop and commercialize tarextumab, GSK will assume responsibility for funding obligations with respect to further clinical development and commercialization of tarextumab. If Celgene exercises its option to obtain a license to develop and commercialize biologic therapeutic candidates for a program under its agreement with us, then, on a program by program basis, unless we elect not to co-develop and co-commercialize the therapeutic candidates for the applicable program in the United States, or if such program is the one program targeting either the RSPO-LGR pathway or the undisclosed pathway to which we have no co-development and co-commercialization rights, which is expected to be our anti-TIGIT program, we will be responsible for a one-third share of the global development costs of therapeutic candidates for such program, with Celgene bearing the remaining two-thirds of such costs, and we will be entitled to participate in the commercialization activities for therapeutic candidates for such program in the United States, and to share 50% of all profits and losses arising from U.S sales of such therapeutic candidates. If we elect not to co-develop and co-commercialize the therapeutic candidates for a program, or the program is the one program to which we do not have co-development and co-commercialization rights, which is expected to be our anti-TIGIT program, then Celgene will generally assume responsibility for funding obligations with respect to clinical development and commercialization of the therapeutic candidate for such program after option exercise, with the exception of certain costs for certain continuing clinical trials for which we were responsible prior to option exercise. Also, if Celgene exercises its option to obtain a license to discover, develop and commercialize small molecule therapeutic candidates, we will collaborate with Celgene on the discovery of and research on small molecule therapeutics, but Celgene will be solely responsible for development and commercialization of such therapeutics. However, if GSK or Celgene do not exercise their options, or if our collaborations with our strategic partners terminate, we will be responsible for funding further development of the relevant biologic

therapeutic candidates unless we enter into another collaboration for such biologic therapeutic candidates. In addition, we are responsible for all costs associated with the development of any unpartnered therapeutic candidate. GITRL-Fc is not currently partnered, and, effective June 16, 2017, neither vantictumab nor ipafricept will be partnered. Unless and until we enter into another collaboration with respect to these unpartnered therapeutic candidates, which we may never do, any ongoing or future development of these therapeutic candidates, including any activities associated with the completion of ongoing clinical trials, will generally be funded entirely by us.

All of our therapeutic candidates are in development, and none has been approved for sale. To date, we have derived all of our revenues from upfront payments, milestone payments and other payments we received under our collaborations with GSK, Bayer and Celgene, and have also supported our research and development efforts by utilizing certain government grants for research and development. We do not anticipate that we will generate revenue from the sale of our therapeutic candidates for the foreseeable future. If any of our therapeutic candidates receive regulatory approval, we may incur significant costs to commercialize our therapeutic candidates. Even after obtaining such regulatory approval, our products may never gain sufficient market acceptance and adequate market share. If our therapeutic candidates fail to demonstrate safety and efficacy in clinical trials, do not gain regulatory approval, or do not achieve market acceptance following regulatory approval and commercialization, we may never become profitable. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. If we are unable to achieve and sustain profitability, the market value of our common stock will likely decline. Because of the numerous risks and uncertainties associated with developing biopharmaceutical products, we are unable to predict the extent of any future losses or whether we will become profitable.

We depend on the successful development of our programs and therapeutic candidates. The development of new drugs and biologics is a highly risky undertaking, which involves a lengthy process, and the results of preclinical and early clinical trials are not necessarily predictive of future results. Our product discovery and development activities, or those of our collaborators, therefore may not be successful on the time schedule we have planned, or at all.

Our programs and therapeutic candidates are in the early stages of drug discovery or clinical trials and are subject to the risks of failure inherent in drug development. As of the date of this Quarterly Report on Form 10-Q, six of our current therapeutic candidates, demcizumab (anti-DLL4, OMP-21M18), vantictumab (anti-Fzd, OMP-18R5), ipafricept (Fzd8-Fc, OMP-54F28), navicixizumab (anti-DLL4/VEGF bispecific, OMP-305B83), rosmantuzumab (anti-RSPO3, OMP-131R10), and anti-TIGIT (OMP-313M32) have been tested in cancer patients. We and/or our collaborators will need to conduct significant additional preclinical studies and/or clinical trials before we can demonstrate that any of our therapeutic candidates is safe and effective to the satisfaction of the FDA and other regulatory authorities. Preclinical studies and clinical trials are expensive and uncertain processes that may take years to complete. For example, we incurred significant expenses related to the clinical development of demcizumab, one of our most advanced therapeutic candidates. Demcizumab advanced into Phase II clinical trials in early 2015 despite having entered Phase Ia in 2008. The delay of entry into Phase II trials is attributable to the occurrence of cardiopulmonary events in the Phase I trials, including hypertension, which required the administration of one or more anti-hypertensive medications. Further, in certain patients in the Phase Ia and Phase Ib trials for demcizumab, pulmonary hypertension and/or heart failure were seen, particularly in patients who were treated with demcizumab for prolonged periods of time (more than 100 days). These events were considered treatment-related, resulted in demcizumab being placed on partial clinical hold, meaning that patients on study could continue to receive treatment, but new patients could not be started on study, in our Phase Ia trial in the United States. We believe that the cardiopulmonary toxicity of demcizumab is reversible upon cessation of dosing, and we implemented a risk mitigation plan involving intermittent and truncated dosing of demcizumab, cardiac monitoring, and early intervention with cardioprotective medication, if indicated, in our Phase Ib trials to enhance the therapeutic index of demcizumab by maximizing efficacy and managing tolerability. Following our submission of a data package to the FDA including data from the Phase Ib trials, the FDA notified us that demcizumab was no longer on partial clinical hold in the United States and enrollment was completed in the Phase Ib trials in pancreatic cancer and non-small cell lung cancer. In early 2015, we initiated and began enrolling patients in the Phase II "DENALI" trial of demcizumab in combination with carboplatin and pemetrexed in non-small cell lung cancer and the Phase II "YOSEMITE" trial of demcizumab in combination with gemcitabine plus Abraxane® in pancreatic cancer. On April 10, 2017 we announced that the YOSEMITE trial did not meet its primary endpoint and will be discontinued. On May 8, 2017, we announced that the DENALI trial failed to meet its efficacy endpoints when compared to placebo, and that we are discontinuing the dosing of all patients on our demcizumab trials, including our Phase Ib trial combining demcizumab and pembrolizumab.

Success in preclinical studies and early clinical trials does not ensure that later clinical trials will generate adequate data to demonstrate the efficacy and safety of a therapeutic candidate. A number of companies in the biotechnology industry, including those with greater resources and experience than us, have suffered significant setbacks in Phase II and Phase III clinical trials, despite promising results in earlier clinical trials. We have completed and reported top-line data from three Phase II clinical trials and received unfavorable results in all three clinical trials. On April 10, 2017 we announced that our Phase II YOSEMITE clinical trial did not meet the primary endpoint of progression-free survival and that the interim median overall survival analysis did not show a benefit for demcizumab in combination with Abraxane plus gemcitabine compared to the Abraxane, gemcitabine plus placebo arm in patients

with first-line metastatic pancreatic cancer. On April 17, 2017 we announced that our Phase II PINNACLE clinical trial of tarextumab (anti-Notch2/3, OMP-59R5) in combination with etoposide plus either cisplatin or carboplatin chemotherapy in previously untreated patients with extensive-stage small cell lung cancer did not meet its primary endpoint of progression-free survival or secondary endpoints of overall survival and biomarkers reflective of Notch pathway gene activation. On May 8, 2017 we announced that our Phase II DENALI clinical trial did not meet its efficacy endpoints when compared with placebo. We do not know whether any Phase II, Phase III or other clinical trials we may conduct, or our collaborators may conduct, will demonstrate adequate efficacy and safety to result in regulatory approval to market any of our therapeutic candidates. If later stage clinical trials do not produce favorable results, our ability, or the ability of our collaborators, to achieve regulatory approval for any of our therapeutic candidates may be adversely impacted.

In addition, even if initial or interim data from a clinical trial appear encouraging, subsequent analyses of the mature data from the same trial at a later time point may or may not be favorable. For example, even if interim median overall survival data from a clinical trial appear positive or encouraging, the final median overall survival data obtained from the trial at a later date may be less favorable.

Delays in the commencement or completion of clinical testing could significantly affect our product development costs or the product development costs of our collaborators. We do not know whether planned clinical trials will begin on time or be completed on schedule, if at all. The commencement and completion of clinical trials can be delayed for a number of reasons, including delays related to:

- obtaining regulatory authorization to commence a clinical trial or complying with conditions imposed by a regulatory authority regarding the scope or design of a clinical trial;
- reaching agreement on acceptable terms with prospective clinical research organizations, or CROs, and trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- manufacturing, including manufacturing sufficient quantities of a therapeutic candidate or other materials for use in clinical trials;
- obtaining IRB approval or the approval of other reviewing entities to conduct a clinical trial at a prospective site;
- recruiting and enrolling patients to participate in clinical trials for a variety of reasons, including size of patient population, complexity of clinical trial protocol, the availability of approved effective treatments for the relevant disease, changed standards of care during the conduct of the trial, and competition from other clinical trial programs for similar indications;
- severe or unexpected drug-related adverse effects experienced by patients in a clinical trial; and
- retaining patients who have initiated a clinical trial, but may withdraw due to treatment protocol, adverse effects from the therapy, lack of efficacy from the treatment, personal issues or who are lost to further follow-up.

Clinical trials may also be delayed, suspended or terminated as a result of ambiguous or negative interim results, or results that are inconsistent with earlier results. For example, in January 2016, feedback received from a pre-planned interim analysis by the data safety monitoring board, or DSMB, of the ALPINE Phase II clinical trial of tarextumab in combination with chemotherapy in pancreatic cancer indicated there was a statistically significant worsening of response rate and progression-free survival in the treatment arm in the overall intent-to-treat population, as well as a negative trend in Notch biomarker subgroups. The feedback from the DSMB also indicated that there was a strong trend to lack of benefit in the treatment arm for overall survival, or OS, regardless of Notch biomarker levels, suggesting a low probability of achieving a statistically significant OS benefit based on analyses reviewed by the DSMB. Following receipt of that feedback, we promptly discontinued patient dosing in the ALPINE trial and proceeded to unblind the study. Subsequently, based on our own initial analysis of unblinded interim Phase II data, we confirmed key findings by the DSMB regarding futility of the ALPINE trial. Post-hoc, exploratory analyses conducted by OncoMed revealed subgroups of pancreatic cancer patients with decreased survival and a subgroup of pancreatic cancer patients which appears to exhibit improved survival with tarextumab in combination with chemotherapy. As an additional example, on April 10, 2017 we announced that our Phase II YOSEMITE clinical trial did not meet the primary endpoint of progression-free survival and that the interim median overall survival analysis did not show a benefit for demcizumab in combination with Abraxane plus gemcitabine compared to the Abraxane, gemcitabine plus placebo arm in patients with first-line metastatic pancreatic cancer. As a further example, on April 17, 2017 we announced that our Phase II PINNACLE clinical trial did not meet its primary endpoint of progression-free survival or secondary endpoints of overall survival and biomarkers reflective of Notch pathway gene activation. As a final example, on May 8, 2017, we

announced that the Phase II DENALI clinical trial failed to meet its efficacy endpoints when compared to placebo. We cannot assure you that any of our clinical trials will succeed or that any of our therapeutic candidates will reach the point where they are able to be successfully commercialized.

In addition, a clinical trial may be suspended or terminated by us, the FDA, the IRB or other reviewing entity overseeing the clinical trial at issue, any of our clinical trial sites with respect to that site, or other regulatory authorities due to a number of factors, including:

- failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols;
- inspection of the clinical trial operations or trial sites by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;
- unforeseen safety issues or any determination that a clinical trial presents unacceptable health risks; and
- lack of adequate funding to continue the clinical trial, including the incurrence of unforeseen costs due to enrollment delays, requirements to conduct additional clinical trials and increased expenses associated with the services of our CROs and other third parties.

Product development costs to us and our collaborators will increase if we or our collaborators have delays in testing or approval of our therapeutic candidates or if we or they need to perform more or larger clinical trials than planned. Additionally, changes in regulatory requirements and policies may occur in any jurisdiction and we or our collaborators may need to amend clinical trial protocols to address these changes. Amendments may require us to resubmit our clinical trial protocols to IRBs for reexamination, which may impact the costs, timing or successful completion of a clinical trial. If we or our collaborators experience delays in completion of, or if we, the FDA or other regulatory authorities, the IRB or other reviewing entities, or any of our clinical trial sites suspend or terminate any of our clinical trials, the commercial prospects for our therapeutic candidates may be harmed and our ability to generate product revenues will be delayed. In addition, many of the factors that cause, or lead to, termination or suspension of, or a delay in the commencement or completion of, clinical trials may also ultimately lead to the denial of regulatory approval of a therapeutic candidate. Also, if one or more clinical trials are delayed, our competitors may be able to bring products to market before we do, and the commercial viability of our therapeutic candidates could be significantly reduced.

If a clinical trial of a therapeutic candidate that is part of one of our collaborations is delayed, suspended, or terminated for any reason, any potential future opt-in, milestone, and contingent consideration payments to OncoMed under that collaboration may be delayed or may not occur at all. Also, a delay, suspension, or termination of a clinical trial for a therapeutic candidate prior to option exercise, or the factors that led to such delay, suspension or termination, may negatively impact the decision by our collaborator as to whether or not to exercise its option to license the therapeutic candidate.

If we or our collaborators are required to suspend or discontinue clinical trials due to side effects or other safety risks, or if we or they are required to conduct studies on the long-term effects associated with the use of our therapeutic candidates, our ability to commercialize our therapeutic candidates could be adversely affected or delayed.

Our clinical trials, and any clinical trials with our therapeutic candidates that may be run by our collaborators, may be suspended, delayed, or terminated at any time for a number of safety-related reasons. For example, we may voluntarily suspend, delay, or terminate our clinical trials if at any time we believe that our therapeutic candidates present an unacceptable safety risk to the clinical trial patients, and our collaborators may voluntarily suspend, delay, or terminate clinical trials they may run with our therapeutic candidates, if at any time they believe that our therapeutic candidates present an unacceptable safety risk to the clinical trial patients. In addition, IRBs or regulatory agencies may order the temporary discontinuation or termination of our clinical trials at any time if they believe that the clinical trials are not being conducted in accordance with applicable regulatory requirements, including if they present an unacceptable safety risk to patients. Administering any therapeutic candidate to humans may produce undesirable side effects. The existence of undesirable side effects resulting from our therapeutic candidates could cause us, or our collaborators, or regulatory authorities, such as the FDA, to interrupt, delay or halt clinical trials of our therapeutic candidates and could result in the FDA or other regulatory agencies denying further development or approval of our therapeutic candidates for any or all targeted indications. This, in turn, could affect whether GSK and/or Celgene exercise their development options under our strategic collaborations and could prevent us from commercializing our therapeutic candidates. Further, our programs modulate novel classes of targets and/or modulate targets in novel ways. As a result, we may experience unforeseen adverse side effects with our existing and future therapeutic candidates, including demcizumab (anti-DLL4, OMP-21M18), vantictumab (anti-Fzd, OMP-18R5), ipafricept (Fzd8-Fc, OMP-54F28), navicixizumab (anti-DLL4/VEGF bispecific, OMP-305B83), rosmantuzumab (anti-RSPO3, OMP-131R10), anti-TIGIT (OMP-313M32), and GITRL-Fc (336B11).

The pharmacokinetic, pharmacodynamic, and safety profile of preclinical studies may not be indicative of results in any clinical trial. As of the date of this Quarterly Report on Form 10-Q, six of our current therapeutic candidates have been tested in cancer patients. We have observed adverse events in clinical trials for five of our six most advanced therapeutic candidates in the clinic, and we expect to observe adverse events in clinical trials for our sixth therapeutic candidate, anti-TIGIT, as such clinical trials progress. We currently believe these adverse events are manageable. Nevertheless, such adverse events may cause challenges in development, approval and/or commercialization.

For example, following the occurrence of certain bone-related adverse events, we voluntarily halted enrollment and dosing in our ongoing Phase I clinical trials of our vantictumab and ipafricept programs until revised protocols and risk mitigation plans could be submitted to and concurred with by the FDA and the study sites' IRBs. In view of our voluntary halting of these programs, the FDA subsequently placed these programs on partial clinical hold. After review of our revised protocols and risk mitigation plans, the FDA removed its partial clinical holds on our vantictumab and ipafricept programs. Despite these measures, we were recently notified that a patient with HER2-negative breast cancer in our Phase Ib clinical trial of vantictumab in combination with standard-of-care chemotherapy suffered a grade 3 hip fracture that was considered potentially treatment-related. Failure can occur at any stage of the drug development process, and we cannot assure you that vantictumab, ipafricept or any of our therapeutic candidates will reach the point where they are able to be successfully commercialized.

The toxicity profile of demcizumab has been shown to include cardiopulmonary events, including hypertension that was generally manageable. In certain patients treated with demcizumab, reversible pulmonary hypertension and/or heart failure have been observed, resulting in the implementation of a risk mitigation strategy including limiting the intermittent and truncated dosing of demcizumab, cardiac monitoring, and early intervention with cardioprotective medication, if indicated. The most common treatment-related adverse events experienced by patients treated in our Phase Ib trials for demcizumab include fatigue, vomiting, hypertension and nausea. The most common treatment-related adverse events experienced by patients treated with brontictuzumab (anti-Notch1, OMP-52M51) in the Phase Ia clinical trial include diarrhea, nausea, fatigue and vomiting. In April 2017, we decided to discontinue our brontictuzumab program because the combination of brontictuzumab plus chemotherapy was found to not be tolerable in our Phase Ib clinical trial of brontictuzumab in combination with trifluridine/tipiracil (Lonsurf®) in colorectal cancer patients. The toxicity profile of vantictumab has been shown to include certain bone effects, including mild to moderate grade bone adverse events, resulting in the implementation of a bone risk mitigation plan involving monitoring, prophylactic supplements and administration of zoledronic acid, if indicated, in our vantictumab trials. The most common treatment-related adverse events experienced by patients treated with vantictumab include fatigue, nausea, diarrhea, constipation, and dysgeusia (altered taste sensation). The most common treatment-related adverse events experienced by patients treated with ipafricept include decreased appetite, fatigue, nausea, vomiting and dysgeusia. The toxicity profile of ipafricept has also been shown to include certain bone effects, including mild to moderate grade bone adverse events, and a bone risk mitigation plan that involves monitoring, prophylactic supplements and administration of zoledronic acid, if indicated, has been implemented in our ipafricept trials. In addition, treatment-related adverse events have also been experienced by patients treated with navicixizumab, including hypertension, infusion reactions, headache, fatigue, and pulmonary hypertension, and by patients treated with rosmantuzumab, including fatigue and nausea. The presence of anti-drug antibodies was observed in a subset of patients receiving navicixizumab in the Phase Ia clinical trial. In at least some instances, the anti-drug antibodies were associated with infusion reactions to the drug resulting in suspension or termination of navicixizumab administration. Additionally, anti-drug antibodies negatively impacted the pharmacokinetics of navicixizumab in some patients,

Further treatment of patients in the ongoing trials or subsequent trials of any of our therapeutic candidates could reveal significant harmful side effects. We have not conducted complete studies on the long-term effects associated with the use of all of our therapeutic candidates. Studies of these long-term effects may be required for regulatory approval and such requirement would delay the introduction of our therapeutic candidates, including those under our collaborations with GSK and/or Celgene, into the market. These studies could also be required at any time after regulatory approval of any of our therapeutic candidates. Absence of long-term data may also limit the approved uses of our products, if any, to short-term use. Some or all of our therapeutic candidates may prove to be unsafe for human use, which would materially harm our business.

The successful development and commercialization of our independent programs and any therapeutic candidate over which GSK or Celgene declines to exercise an option, for which we do not obtain anticipated research or development milestone payments prior to a decision by Celgene to exercise such option, or which we choose to co-develop and co-commercialize with Celgene after option exercise, will depend in large part on our ability either to raise capital to advance development of those programs or to secure collaborations with strategic partners that have the capital and expertise to bring products to market. We may be unable to secure such funds and/or secure such future collaborations.

If GSK or Celgene declines to exercise its options with respect to one or more therapeutic candidates covered by its collaboration agreement, terminates one or more programs under its collaboration agreement with us or terminates the entire agreement, we will need to secure funding to advance development of those programs on our own and/or secure relationships with collaborators that have the necessary capital and expertise. For example, GSK terminated its option to obtain an exclusive license to

develop and commercialize brontictuzumab (OMP-52M51, anti-Notch1), effective January 29, 2017. Unless and until we enter into another collaboration for brontictuzumab, which we may never do, we are responsible for funding further development of brontictuzumab. On April 17, 2017 we announced that we were discontinuing enrollment in our Phase Ib clinical trial of brontictuzumab in combination with trifluridine/tipiracil (Lonsurf®) in colorectal cancer patients, and we subsequently decided to discontinue our brontictuzumab program entirely. As a further example, on April 7, 2017 Bayer notified us of its decision not to exercise its option to license vantictumab and ipafricept and of its termination of all Wnt pathway biologic programs under the collaboration. As a result, effective June 16, 2017, we will retain worldwide rights to develop and commercialize vantictumab and ipafricept and will be responsible for funding further development of vantictumab and ipafricept unless and until we enter into another collaboration for these therapeutic candidates, which we may never do. In addition, if we are unable to achieve or are delayed in achieving anticipated research or development milestones, and unable to obtain or are delayed in obtaining the applicable milestone payments, for any biologic therapeutic candidate under our collaboration agreement with Celgene, we are likely to need additional funding to advance such therapeutic candidate prior to our achievement of such research or development milestones or Celgene's decisions regarding option exercise with respect to such therapeutic candidate if development of that program is not discontinued. Under our collaboration agreements, we are not eligible to receive any further research or development milestone payments for any of our therapeutic candidates currently in clinical trials prior to our partners' decisions regarding option exercise with respect to such therapeutic candidates. In addition, if Celgene exercises its option to any of the programs to which we have co-development and co-commercialization rights, and we retain our option to co-develop and co-commercialize that program, then, despite having certain mechanisms in place in our collaboration agreement with Celgene to control expenses, we may need to secure additional funding to support our obligations to pay one-third of global development costs for such program. If we are unable to secure such additional funding or are otherwise unable or unwilling to support our obligations for a program to which we have co-development and co-commercialization rights, we may need to opt out of our co-development and co-commercialization rights for the program and instead enter into an exclusive license agreement with Celgene regarding the program. We may also choose to advance our therapeutic candidates and programs that are not part of the GSK or Celgene collaborations independently without partnering such therapeutic candidates and programs, which will require substantial funds. We are currently independently advancing GITRL-Fc (OMP-336B11) towards the clinic, which is currently being funded entirely by us. Effective June 16, 2017, we will be independently completing two Phase Ib clinical trials of vantictumab in combination with standard-of-care therapies, one in breast cancer and the second in pancreatic cancer, and two Phase Ib trials of ipafricept in combination with standard-of-care therapies, one in pancreatic cancer and the second in ovarian cancer, and the completion of all four Phase Ib trials will be funded entirely by us. If any of our independent therapeutic candidates receive regulatory approval and are commercialized, substantial expenditures will also be required. As of March 31, 2017, we had $156.9 million in cash and short-term investments. We believe that our available cash and short-term investments will be sufficient to fund our anticipated level of operations through the third quarter of 2019, even without taking into account potential future milestone payments to us. Our future financing requirements will depend on many factors, some of which are beyond our control, including:

- the rate of progress and cost of our clinical trials, preclinical studies and other discovery and research and development activities;
- the timing of, and costs involved in, seeking and obtaining FDA and other regulatory approvals;
- the continuation and success of our strategic alliances with GSK, Bayer and Celgene and future collaboration partners, including the exercise or non-exercise of further development options or the advancement or non-advancement of the small molecule programs into further development and potential commercialization by GSK, Bayer and/or Celgene under their respective agreements;
- the costs of preparing, filing, prosecuting, maintaining, defending and enforcing any patent claims and other intellectual property rights, including litigation costs and the results of such litigation;
- our ability to enter into additional collaboration, licensing, government or other arrangements and the terms and timing of such arrangements;
- the potential need to acquire, by acquisition or in-licensing, other products or technologies; and
- the emergence of competing technologies, changes in standard-of-care treatment, or other adverse market developments.

Future capital requirements will also depend on the extent to which we acquire or invest in additional complementary businesses, products and technologies. We currently have no understandings, commitments or agreements relating to any of these types of transactions.

Until we can generate a sufficient amount of product revenue to finance our cash requirements, which we may never do, we expect to finance future cash needs primarily through public or private equity offerings, debt financings, a credit facility, government grants and contracts and/or strategic collaborations. Additional financing may not be available to us when we need it or it may not be available to us on favorable terms, if at all. Additionally, to the extent that we seek a new strategic partner to develop any of our programs, we may not be able to secure a collaboration on favorable terms, if at all. A collaboration may not provide sufficient funding or value to bring a product to market, and further funding and/or collaborations may be required. The terms of any such collaboration may also significantly limit our share of potential future profits from the associated program, may require us to relinquish potentially valuable rights to our current therapeutic candidates, potential products or proprietary technologies, or may grant licenses on terms that are not favorable to us. If we are unable to obtain adequate financing or form favorable collaborations, when needed, we may have to delay, reduce the scope of, or eliminate one or more of our clinical trials or research and development programs or our commercialization efforts.

If GSK and/or Celgene do not exercise their options or if they or Bayer terminate any development program under their collaborations with us, whether as a result of our inability to meet milestones or otherwise, any potential revenue from those collaborations will be significantly reduced or non-existent, and our results of operations and financial condition will be materially and adversely affected.

Since our founding, we have invested a significant portion of our time and financial resources in the development of multiple biologic therapeutic candidates that are now included in our GSK and Celgene collaborations. Our GSK collaboration consists of our tarextumab (OMP-59R5, anti-Notch2/3) program. Our Celgene collaboration includes our demcizumab (anti-DLL4, OMP-21M18), navicixizumab (anti-DLL4/VEGF bispecific, OMP-305B83), rosmantuzumab (anti-RSPO3, OMP-131R10) and anti-TIGIT (OMP-313M32) programs, plus additional biologic and small molecule programs. In addition, our Bayer collaboration consists of a small molecule program. It may not be possible to advance these programs further in development if GSK and Celgene choose not to exercise their options with respect to these programs or if Bayer and Celgene choose not to advance the small molecule programs into further development and potential commercialization. Also, our ability to advance new programs under the Celgene collaboration is highly dependent on us achieving certain development milestones in those programs and triggering related milestone fee payments to us.

Under our collaboration with GSK, during certain time periods through completion of proof-of-concept trials, GSK is entitled to exercise an option to obtain an exclusive license for further development and commercialization of tarextumab on a worldwide basis. GSK may decide not to exercise its option for tarextumab. Although brontictuzumab (OMP-52M51, anti-Notch1) had previously been a part of the GSK collaboration, GSK notified us in October 2016 of its decision to terminate its option for further development and commercialization of brontictuzumab, effective January 29, 2017.

Under the agreement with GSK, we are eligible to receive from GSK, with respect to tarextumab, aggregate payments of up to $344.5 million, including an opt-in payment of $25.0 million and development, regulatory and commercialization milestones, in addition to percentage royalties in the low double digits to high teens on net product sales. We have received $25.0 million in milestone payments for tarextumab to date. However, there is no guarantee that tarextumab will continue to advance in development or that we will receive the opt-in payment or any other payments related to tarextumab on our anticipated timelines or at all. In January 2016, feedback received from a pre-planned interim analysis by the data safety monitoring board, or DSMB, of the ALPINE Phase II clinical trial of tarextumab in combination with chemotherapy in pancreatic cancer indicated there was a statistically significant worsening of response rate and progression-free survival in the treatment arm in the overall intent-to-treat population, as well as a negative trend in Notch biomarker subgroups. Subsequently, based on our own initial analysis of unblinded interim Phase II data, we confirmed key findings by the DSMB regarding futility of the ALPINE trial and discontinued the ALPINE trial. On April 17, 2017 we announced that our Phase II PINNACLE clinical trial of tarextumab in combination with etoposide plus either cisplatin or carboplatin chemotherapy in previously untreated patients with extensive-stage small cell lung cancer did not meet its primary endpoint of progression-free survival or secondary endpoints of overall survival and biomarkers reflective of Notch pathway gene activation. GSK is under no obligation to exercise its option to progress tarextumab development, and even if tarextumab is progressed, there is no guarantee that tarextumab will achieve the relevant regulatory filing or approval milestones. Further, in the event that GSK is required to obtain Hart-Scott-Rodino, or HSR, clearance after exercising options to tarextumab, and such clearance is not obtained, GSK will not participate in further development of tarextumab and the product rights would revert to us. We would then have worldwide rights to tarextumab and be responsible for funding the development of the asset.

GSK may terminate the entire collaboration agreement or the tarextumab program for any or no reason upon written notice to us after expiration of a defined notice period. The agreement or any program under the agreement may also be terminated by either party for material breach by the other party that remains uncured after a specified notice period. The agreement may also be terminated by either party for insolvency of the other party, or by us if GSK challenges the licensed patents. Depending on the timing of any such termination we may not be entitled to receive the opt-in payment for tarextumab, or the potential milestone payments for tarextumab, as these payments terminate with termination of the agreement.

Under our collaboration with Bayer, Bayer had the option to obtain an exclusive license to Wnt pathway biologic therapeutic candidates within defined classes at any point through the earlier of completion of certain Phase I trials or a set date in June 2017. On April 7, 2017, Bayer notified us of its decision not to exercise its option to license vantictumab and ipafricept and of its termination of all Wnt pathway biologic programs under the collaboration, including vantictumab and ipafricept. As a result, effective June 16, 2017, we will retain worldwide rights to develop and commercialize vantictumab and ipafricept, and we will no longer be eligible to receive $1.06 billion, in the aggregate, of potential milestone and contingent consideration associated with biologic therapeutic candidates under the collaboration, including opt-in payments and development, regulatory, and commercialization payments.

Under our agreement with Bayer, if Bayer elects to advance the small molecule program into further development and commercialization, we would be entitled to receive a $10.0 million advancement fee for the small molecule program and, for each small molecule therapeutic candidate, up to $102.0 million in the aggregate for development, regulatory, and commercial milestones, plus single-digit percentage royalties on net product sales. However, Bayer is under no obligation to advance the small molecule program into further development and commercialization, and there is no guarantee that Bayer will elect to do so or that we will receive the advancement fee or any other payments related to the small molecule program on our anticipated timelines or at all. Moreover, there is no guarantee that any such small molecule therapeutic candidate will achieve the relevant further development, regulatory, or commercial milestones.

Bayer may terminate, for any or no reason, the collaboration agreement in its entirety or with respect to a specified therapeutic candidate, in each case upon prior written notice to us. The agreement may also be terminated in its entirety by either party for material breach by the other party that is not cured within a specified cure period. Either party may terminate the agreement for insolvency by the other party, and we may terminate the agreement if Bayer challenges the licensed patents. Depending on the timing of any such termination we may not be entitled to receive the small molecule advancement fee or potential milestone payments, as these payments terminate with termination of the agreement.

Under our agreement with Celgene, Celgene has options to obtain an exclusive license to develop further and commercialize biologic therapeutics in specified programs, which may be exercised during specified time periods through completion of certain clinical trials, provided that such completion occurs within a specified time period. Celgene's options may be exercised on a program-by-program basis for up to six biologic programs, including the demcizumab program, the navicixizumab program, the rosmantuzumab program, the anti-TIGIT program, and up to two additional programs targeting the RSPO-LGR signaling pathway and/or targets in the undisclosed pathway. Celgene also has a seventh option, which, if exercised at any time until the fourth anniversary of the date of the Agreement, would permit Celgene to discover, develop and commercialize small molecule therapeutics directed to targets in an undisclosed pathway under the collaboration. Celgene may decide not to exercise any or all of its options.

In addition to the upfront payment of $177.2 million, including a $22.2 million equity investment, we are eligible to receive opt-in payments upon Celgene's exercise of the option for each biologic therapeutic program (for up to six biologic therapeutic programs). The collaboration also includes milestone payments for achievement of specified development, regulatory and commercial milestones, paid on a per-product and per-program basis. The opt-in payments and payments for achievement of development, regulatory and commercial milestones may total up to (1) $791.0 million for products in the demcizumab program (including payments received as of December 31, 2016), including a $70.0 million opt-in payment, (2) $505.0 million for products in the navicixizumab program, including a $25.0 million opt-in payment, (3) approximately $442.8 million for products in the rosmantuzumab program (including payments received as of December 31, 2016), including an approximately $37.8 million opt-in payment, (4) $440.0 million for products in the anti-TIGIT program (including payments received as of December 31, 2016), including a $35.0 million opt-in payment, and (5) $440.0 million for each of up to two additional biologic programs achieving regulatory approval that are directed to targets in either the RSPO-LGR signaling pathway or the undisclosed pathway for which Celgene exercises its option. We have received $75.0 million in milestone payments related to programs in the Celgene collaboration to date. However, there is no guarantee that any of the programs that are part of our collaboration with Celgene, including the demcizumab program, will continue to advance in development or that we will receive the opt-in payments or other payments related to these programs, including the demcizumab program, on our anticipated timelines or at all. On April 10, 2017, we announced that our Phase II "YOSEMITE" clinical trial of demcizumab in combination with Abraxane® (paclitaxel protein-bound particles for injectable suspension) (albumin bound) plus gemcitabine in previously untreated patients with metastatic pancreatic cancer did not meet its primary endpoint of progression-free survival and that the interim median overall survival analysis did not show a benefit for demcizumab in combination with Abraxane plus gemcitabine compared to the Abraxane, gemcitabine plus placebo arm. On May 8, 2017, we announced that our Phase II "DENALI" clinical trial of demcizumab in combination with carboplatin and pemetrexed in front-line non-squamous non-small cell lung cancer failed to meet its efficacy endpoints when compared to placebo, and that we are discontinuing the dosing of all patients on our demcizumab clinical trials, including our Phase Ib clinical trial combining demcizumab and pembrolizumab. Celgene is under no obligation to exercise its option with respect to any of the biologic candidates, including demcizumab. If Celgene does not exercise its option on a program, we will not receive any opt-in payment for that program. Further, there is no guarantee that any programs under our collaboration with Celgene will successfully advance to achieve the relevant further development, regulatory and commercial milestones and that we will receive the associated milestone payments on our anticipated timelines or at all.

For programs in which we are co-developing and co-commercializing biologic therapeutic products in the United States, we are also entitled to share 50% of all product profits and losses in the United States. For such programs outside the United States, we are eligible to receive tiered royalties equal to a percentage of net product sales outside of the United States for each biologic program as follows: tiered royalties in the double-digits for demcizumab, royalties in the mid-single digits to the mid-teens for navicixizumab, royalties in the mid-single digits to the mid-teens for rosmantuzumab, and royalties in the mid-single digits to the mid-teens for up to two other biologics programs. If we elect not to co-develop or co-commercialize biologic therapeutic products or do not have the right to do so for a given program, which is expected to include the anti-TIGIT program, Celgene is required to pay us tiered royalties equal to a percentage of net product sales worldwide (tiered royalties in the double-digits for demcizumab and royalties in the high-single digits to the high-teens for other biologics programs), with such royalties being increased where we had the right to co-develop and co-commercialize such biologic therapeutic products under such program but elected not to do so. We are responsible for funding all research and development activities for biologic therapeutics under the collaboration prior to Celgene's exercise of the option for such program. We are also entitled to receive payments from Celgene upon exercise of its option for the small molecule program, as well as certain development and regulatory milestone payments through regulatory approval totaling over $100.0 million. We will receive royalties equal to a percentage of worldwide net sales of small molecule products in the low- to mid-single digits.

The agreement with Celgene will terminate upon the expiration of all of Celgene's payment obligations under all license or co-development and co-commercialization agreements entered into with respect to programs following Celgene's exercise of an option for a given program, or if Celgene fails to exercise its options within the relevant option periods. The agreement may be terminated by either party for the insolvency of, or an uncured material breach of the agreement by, the other party. In addition, Celgene may terminate the agreement in its entirety or with respect to one or more programs subject to the collaboration, for any reason, with prior written notice to us. We may also terminate the agreement with respect to one or more programs in the event that Celgene challenges the licensed patents with respect to such program. Depending on the timing of any such termination we may not be entitled to receive the opt-in payments, or potential milestone payments, as these payments terminate with termination of the agreement.

If (1) GSK does not exercise its options with respect to tarextumab, or terminates its rights and obligations with respect to tarextumab or the entire agreement, or (2) Celgene does not exercise its options with respect to demcizumab, rosmantuzumab, navicixizumab, anti-TIGIT, or other development candidates under its agreement with us, or terminates its rights and obligations with respect to a program or the entire agreement, then depending on the timing of such event:

- in the case of GSK, under certain circumstances, we may owe GSK single-digit percentage royalties with respect to tarextumab if we should elect to continue to develop and commercialize the therapeutic candidate, dependent upon the stage of development at which such product commercialization rights reverted back to us, subject to a cap, or additional payments if we license such therapeutic candidates to third parties under specific circumstances;

- in the case of Celgene, under certain circumstances, we may owe Celgene single-digit percentage royalties on therapeutic candidates covered by our agreement with Celgene that we elect to continue to commercialize and are successfully commercialized, subject to a cap;

- the development of our therapeutic candidates subject to the GSK agreement or Celgene agreement, as applicable, may be terminated or significantly delayed;

- our cash expenditures could increase significantly if it is necessary for us to hire additional employees and allocate scarce resources to the development and commercialization of therapeutic candidates that were previously funded by GSK or Celgene, as applicable;

- we would bear all of the risks and costs related to the further development and commercialization of therapeutic candidates that were previously the subject of the GSK agreement or Celgene agreement, as applicable, including the reimbursement of third parties; and

- in order to fund further development and commercialization of new therapeutic candidates or programs, we may need to seek out and establish alternative collaboration arrangements with third-party partners; this may not be possible, or we may not be able to do so on terms which are acceptable to us, in which case, since assumption of sole responsibility for further development and commercialization would greatly increase our expenditures, it may be necessary for us to limit the size or scope of one or more of our programs, seek additional funding by other means, and/or choose to stop work altogether on one or more of the affected therapeutic candidates.

Any of these events could have a material adverse effect on our results of operations and financial condition. For example, on October 31, 2016, GSK provided written notice to us that it was terminating its option to obtain an exclusive license to develop and

commercialize brontictuzumab, effective January 29, 2017. After such termination became effective, we retained worldwide rights to brontictuzumab. We are no longer eligible to receive $330.5 million, in the aggregate, of potential milestone and contingent consideration associated with brontictuzumab, including an opt-in payment and development, regulatory, and commercialization payments. We are also no longer eligible to receive a $5.0 million bonus payment for the start of certain Phase II clinical trials associated with the development of brontictuzumab or a $10.0 million bonus payment associated with GSK's exercise of its options for both tarextumab and brontictuzumab. Under certain circumstances, we may owe GSK single-digit percentage royalties on net product sales of brontictuzumab, subject to a cap. Similarly, on April 7, 2017, Bayer notified us of its decision not to exercise its option to license vantictumab and ipafricept and of its termination of all Wnt pathway biologic programs under the agreement, including vantictumab and ipafricept. As a result, effective June 16, 2017, we will retain worldwide rights to develop and commercialize vantictumab and ipafricept. We will no longer be eligible to receive $1.06 billion, in the aggregate, of potential milestone and contingent consideration associated with biologic therapeutic candidates under the collaboration, including opt-in payments and development, regulatory, and commercialization payments.

We may form additional strategic alliances in the future with respect to our independent programs, including programs for which GSK or Celgene do not exercise their respective options, and we may not realize the benefits of such alliances.

We may form strategic alliances, create joint ventures or collaborations or enter into licensing arrangements with third parties with respect to our independent programs that we believe will complement or augment our existing business. For example, we may attempt to find a partner for licensing, development and/or commercialization of our unpartnered research, preclinical and clinical assets, or of clinical assets returned to us by GSK, Bayer, or Celgene as a result of their decision to terminate our respective collaboration agreement with respect to such assets or to not exercise their respective options for such assets. GITRL-Fc (OMP-336B11) is currently unpartnered, and, effective June 16, 2017, both vantictumab (anti-Fzd, OMP-18R5) and ipafricept (Fzd8-Fc, OMP-54F28) will be unpartnered. We routinely engage in partnering discussions with a range of pharmaceutical and biotechnology companies and could enter into new collaborations at any time. We face significant competition in seeking appropriate strategic partners, and the negotiation process to secure appropriate terms is time-consuming and complex. Any delays in identifying suitable development partners and entering into agreements to develop our therapeutic candidates could also delay the commercialization of our therapeutic candidates, which may reduce their competitiveness even if they reach the market. Moreover, we may not be successful in our efforts to establish such a strategic partnership for any future therapeutic candidates and programs on terms that are acceptable to us, or at all. This may be because our therapeutic candidates and programs may be deemed to be at too early of a stage of development for collaborative effort, our research and development pipeline may be viewed as insufficient, and/or third parties may not view our therapeutic candidates and programs as having sufficient potential for commercialization, including the likelihood of an adequate safety and efficacy profile. Even if we are successful in entering into a strategic alliance or license arrangement, there is no guarantee that the collaboration will be successful, or that any future partner will commit sufficient resources to the development, regulatory approval, and commercialization effort for such products, or that such alliances will result in us achieving revenues that justify such transactions.

We may experience difficulties in managing our current activities and growth given our level of managerial, operational, financial and other resources.

On April 24, 2017, our Board of Directors approved a restructuring plan, pursuant to which we plan to reduce our workforce by 48 percent, resulting in 64 remaining employees as of December 31, 2017. We will need to manage our operations and clinical trials, continue our development activities and commercialize our therapeutic candidates with this reduced workforce. Our management and personnel, systems and facilities currently in place may not be adequate to support our current activities or future growth. Our need to effectively execute our business strategy requires that we:

- manage our clinical trials effectively, including two Phase Ib trials each for vantictumab (anti-Fzd, OMP-18R5) and ipafricept (Fzd8-Fc, OMP-54F28), a Phase Ia and two Phase Ib trials for navicixizumab (anti-DLL4/VEGF bispecific, OMP-305B83), a Phase Ia/b trial for rosmantuzumab (anti-RSPO3, OMP-131R10), and a Phase Ia trial for anti-TIGIT (OMP-313M32), all of which are being conducted at multiple trial sites, as well as additional clinical trials we expect to initiate in the future;
- manage our internal research and development efforts effectively while carrying out our contractual obligations to licensors, contractors, collaborators, government agencies and other third parties;
- continue to improve our operational, financial and management controls, reporting systems and procedures; and
- maintain and motivate our remaining employees and potentially identify, recruit, and integrate additional employees.

If we are unable to maintain or expand our managerial, operational, financial and other resources to the extent required to manage our development and commercialization activities, our business will be materially adversely affected.

We are highly dependent on the services of our Chairman and Chief Executive Officer, Paul J. Hastings, our Executive Vice President, Research and Development, John Lewicki, Ph.D., and other key executives, and if we are not able to retain these members of our management or retain or recruit additional management, clinical and scientific personnel, our business will suffer.

On April 24, 2017, our Board of Directors approved a restructuring plan, pursuant to which we plan to reduce our workforce by 48 percent by December 31, 2017. We may not be able to retain our remaining management and scientific and clinical personnel, or attract qualified management and scientific and clinical personnel in the future, due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses, particularly in the San Francisco Bay Area. Our industry has experienced a high rate of turnover of management personnel in recent years. If we are not able to attract, retain and motivate necessary personnel to accomplish our business objectives, we may experience constraints that will significantly impede the achievement of our development objectives, our ability to raise additional capital and our ability to implement our business strategy.

We are highly dependent on the principal members of our management and scientific staff. The loss of service of any of our management could harm our business. In addition, we are dependent on our continued ability to retain and motivate our existing management, clinical and scientific personnel, and to potentially attract highly qualified additional management, clinical and scientific personnel. The competition for qualified personnel in the pharmaceutical industry is intense. Due to our limited resources, we may not be able to effectively retain our existing personnel or attract and recruit additional qualified personnel. If we are not able to retain our management, particularly our Chairman and Chief Executive Officer, Mr. Hastings, and our Executive Vice President, Research and Development, Dr. Lewicki, and to attract, on acceptable terms, additional qualified personnel necessary for the continued development of our business, we may not be able to sustain our operations or grow. Although we have executed employment agreements with each member of our current executive management team, including Mr. Hastings and Dr. Lewicki, these agreements are terminable at will with or without notice and, therefore, we may not be able to retain their services as expected. In addition to the competition for personnel, the San Francisco Bay area in particular is characterized by a high cost of living. As such, we could have difficulty attracting experienced personnel to our company and may be required to expend significant financial resources in our employee recruitment and retention efforts.

For example, on December 31, 2016, Jakob Dupont, M.D., our Senior Vice President and Chief Medical Officer, resigned from the company due to personal and family-related issues. Although we have initiated a process to identify candidates to fill the position of Chief Medical Officer, we may have difficulty filling this position, including for the reasons identified above.

In addition, we have scientific and clinical advisors who assist us in formulating our product development and clinical strategies. These advisors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us, or may have arrangements with other companies to assist in the development of products that may compete with ours.

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

None.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

ITEM 4. MINE SAFETY DISCLOSURES

None.

ITEM 5. OTHER INFORMATION

None.

ITEM 6. EXHIBITS

See the Exhibit Index on the page immediately following the signature page to this Quarterly Report on Form 10-Q for a list of the exhibits filed as part of this Quarterly Report, which Exhibit Index is incorporated herein by reference.

SIGNATURES

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

OncoMed Pharmaceuticals, Inc.

Date: May 8, 2017

By: /s/ Sunil Patel

Sunil Patel
Chief Financial Officer, Senior Vice President, Corporate Development and Finance
(principal financial and accounting officer)

EXHIBIT INDEX

Listed and indexed below are all Exhibits filed as part of this report.

Exhibit No.	Description of Exhibit
31.1	Certification of Principal Executive Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Principal Financial Officer Required Under Rule 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1	Certification of Principal Executive Officer and Principal Financial Officer Required Under Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. §1350.
101	The following materials from Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, formatted in eXtensible Business Reporting Language (XBRL) includes: (i) Condensed Balance Sheets at March 31, 2017 (unaudited) and December 31, 2016, (ii) Condensed Statements of Operations and Comprehensive Loss (unaudited) for the three months ended March 31, 2017 and 2016, (iii) Condensed Statements of Cash Flows (unaudited) for the three months ended March 31, 2017 and 2016, and (iv) Notes to the Condensed Financial Statements.

Exhibit 31.1

CERTIFICATION

I, Paul J. Hastings, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: May 8, 2017

/s/ Paul J. Hastings
Paul J. Hastings
Chairman and Chief Executive Officer
(principal executive officer)

Exhibit 31.2

CERTIFICATION

I, Sunil Patel, certify that:

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

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

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

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

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

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

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

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

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

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

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

Date: May 8, 2017

/s/ Sunil Patel
Sunil Patel
Chief Financial Officer, Senior Vice President, Corporate Development and Finance
(principal financial and accounting officer)

Exhibit 32.1

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

In connection with the Quarterly Report of OncoMed Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the fiscal quarter ended March 31, 2017, as filed with the Securities and Exchange Commission (the "Report"), Paul J. Hastings, Chairman and Chief Executive Officer of the Company, and Sunil Patel, Chief Financial Officer, Senior Vice President, Corporate Development and Finance of the Company, respectively, do each hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- The information in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 8, 2017

/s/ Paul J. Hastings
Paul J. Hastings
Chairman and Chief Executive Officer
(principal executive officer)

/s/ Sunil Patel
Sunil Patel
Chief Financial Officer, Senior Vice President, Corporate Development and Finance
(principal financial and accounting officer)

This certification is being furnished to accompany the Report pursuant to 18 U.S.C. § 1350 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.