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 September 30, 2016

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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

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

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 October 28, 2016, the number of outstanding shares of the registrant's common stock, par value $0.001 per share, was 37,092,441.

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)

	September 30, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 30,084	$ 38,444
Short-term investments	177,506	118,835
Accounts receivable and other receivables	2,248	70,699
Prepaid and other current assets	2,836	3,277
Total current assets	212,674	231,255
Property and equipment, net	4,355	4,825
Other assets	1,159	1,807
Total assets	$ 218,188	$ 237,887
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 5,436	$ 6,660
Accrued liabilities	8,732	11,475
Accrued clinical liabilities	19,731	12,221
Current portion of deferred revenue	20,799	21,543
Current portion of deferred rent	783	738
Liability for shares issued with repurchase rights	-	4
Total current liabilities	55,481	52,641
Deferred revenue, less current portion	164,387	179,612
Deferred rent, less current portion	1,132	1,729
Non-current income tax payable	369	354
Total liabilities	221,369	234,336
Commitments and contingencies		
Stockholders' equity (deficit):		
Preferred stock, $0.001 par value; 5,000,000 shares authorized at September 30, 2016 and December 31, 2015; no shares issued and outstanding at September 30, 2016 and December 31, 2015	—	—
Common stock, $0.001 par value; 145,000,000 shares authorized at September 30, 2016 and December 31, 2015; 37,084,959 shares and 30,116,633 shares issued and outstanding at September 30, 2016 and December 31, 2015, respectively	37	30
Additional paid-in capital	387,201	313,344
Accumulated other comprehensive income	191	20
Accumulated deficit	(390,610)	(309,843)
Total stockholders' equity (deficit)	(3,181)	3,551
Total liabilities and stockholders' equity (deficit)	$ 218,188	$ 237,887

See accompanying notes.

OncoMed Pharmaceuticals, Inc.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Revenue:				
Collaboration revenue	$ 5,279	$ 4,687	$ 15,976	$ 19,060
Other revenue	640	—	2,959	—
Total revenue	5,919	4,687	18,935	19,060
Operating expenses:				
Research and development	27,361	24,712	85,467	66,190
General and administrative	4,493	4,536	14,464	13,607
Total operating expenses	31,854	29,248	99,931	79,797
Loss from operations	(25,935)	(24,561)	(80,996)	(60,737)
Interest and other income, net	80	94	247	143
Loss before income taxes	(25,855)	(24,467)	(80,749)	(60,594)
Income tax provision	9	12	15	35
Net loss	$ (25,864)	$ (24,479)	$ (80,764)	$ (60,629)
Net loss per common share, basic and diluted	$ (0.77)	$ (0.81)	$ (2.57)	$ (2.02)
Shares used to compute net loss per common share, basic and diluted	33,758,423	30,072,662	31,435,446	30,001,697

See accompanying notes.

OncoMed Pharmaceuticals, Inc.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Net loss	$ (25,864)	$ (24,479)	$ (80,764)	$ (60,629)
Other comprehensive income:				
Unrealized gain on available-for-sale securities, net of tax	29	20	171	141
Total comprehensive loss	$ (25,835)	$ (24,459)	$ (80,593)	$ (60,488)

See accompanying notes.

OncoMed Pharmaceuticals, Inc.

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

	Nine Months Ended September 30,	
	2016	**2015**
Operating activities		
Net loss	$ (80,764)	$ (60,629)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,328	1,216
Stock-based compensation	8,775	7,315
Changes in operating assets and liabilities:		
Income tax refund receivable	—	7,102
Accounts receivable and other receivables	68,451	(273)
Prepaid and other current assets	441	(85)
Other assets	648	(276)
Accounts payable	(1,224)	(906)
Accrued liabilities	(2,731)	(129)
Accrued clinical liabilities	7,510	3,824
Deferred revenue	(15,969)	(14,060)
Deferred rent	(552)	(508)
Net cash used in operating activities	(14,087)	(57,409)
Investing activities		
Purchases of property and equipment	(858)	(1,178)
Purchases of short-term investments	(207,282)	(118,820)
Maturities of short-term investments	148,782	178,865
Net cash provided by (used in) investing activities	(59,358)	58,867
Financing activities		
Proceeds from issuance of common stock related to the exercise of options and employee stock plan purchases	1,176	1,684
Net proceeds from issuance of common stock	63,909	—
Net cash provided by financing activities	65,085	1,684
Net increase in cash and cash equivalents	(8,360)	3,142
Cash and cash equivalents at beginning of period	38,444	28,138
Cash and cash equivalents at end of period	$ 30,084	$ 31,280

See accompanying notes.

1. Organization

OncoMed Pharmaceuticals, Inc. ("OncoMed", the "Company", "we", "us", or "our") is a biopharmaceutical company focused on discovering and developing novel anti-cancer therapeutics, including anti-cancer stem cell ("anti-CSC") and immuno-oncology product candidates. Our approach has been to address fundamental biologic pathways and targets thought to drive cancer's growth, recurrence and metastases. We have seven internally discovered product candidates in clinical development. We have two biologic product candidates in the immuno-oncology field advancing toward Investigational New Drug application filings with the U.S. Food and Drug Administration. We are also pursuing discovery of additional novel approaches to cancer treatment including anti-CSC and immuno-oncology product 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, 2016 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, 2015 was derived from the audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2015. 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, 2015, filed with the Securities and Exchange Commission (the "SEC") on March 10, 2016.

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 September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
GlaxoSmithKline LLC ("GSK")	*	*	*	31%
Bayer Pharma AG ("Bayer")	10%	24%	*	18%
Celgene Corporation ("Celgene")	88%	70%	88%	51%

* 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 ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers* (Topic 606). Areas of revenue recognition that will be affected include, but are not limited to, transfer of control, variable consideration, allocation of transfer pricing, licenses, time value of money, contract costs and disclosures. In August 2015, the FASB issued ASU No. 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of Effective Date, which defers the effective date of ASU 2014-09 by one year allowing early adoption as of the original effective date of fiscal years and interim reporting periods beginning after December 15, 2016, at which time companies may adopt the new standard update under the full retrospective method or the modified retrospective method. The deferral results in the new revenue standard being effective for us for fiscal years and interim reporting periods beginning after December 15, 2017. We are currently evaluating the impact that the adoption of ASU 2014-09 will have on our financial statements and related disclosures.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting,* related to simplifications of employee share-based payment accounting. This pronouncement eliminates the APIC pool concept and requires that excess tax benefits and tax deficiencies be recorded in the statement of operation when awards are settled. The pronouncement also addresses simplifications related to statement of cash flows classification, accounting for forfeitures, and minimum statutory tax withholding requirements. The pronouncement is effective for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2016. Early adoption is permitted. The Company is currently evaluating the impact that the adoption of ASU 2016-09 will have on our financial statements and related disclosures.

3. Cash Equivalents and Investments

The fair value of securities, not including cash at September 30, 2016 and December 31, 2015, were as follows (in thousands):

	September 30, 2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Money market funds	$ 282	$ —	$ —	$ 282
U.S. treasury bills	177,315	191	—	177,506
Total available-for-sale securities	$ 177,597	$ 191	$ —	$ 177,788
Classified as:				
Cash equivalents				$ 282
Short-term investments				177,506
Total cash equivalents and investments				$ 177,788

As of September 30, 2016, the Company had a total of $207.6 million in cash, cash equivalents, and short-term investments, which includes $29.8 million in cash and $177.8 million in cash equivalents and short-term investments.

	December 31, 2015			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. treasury bills	$ 118,815	$ 40	$ (20)	$ 118,835
Total available-for-sale securities	$ 118,815	$ 40	$ (20)	$ 118,835
Classified as:				
Short-term investments				$ 118,835

As of December 31, 2015, the Company had a total of $157.3 million in cash, cash equivalents, and short-term investments, which includes $38.5 million in cash and $118.8 million in cash equivalents and short-term investments.

All available-for-sale securities held as of September 30, 2016 and December 31, 2015 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 accounting guidance establishes a three-tiered hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value 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):

	September 30, 2016			
	Level 1	Level 2	Level 3	Total
Assets:				
Money market funds	$ 282	$ —	$ —	$ 282
U.S. treasury bills	—	177,506	—	177,506
Total	$ 282	$ 177,506	$ —	$ 177,788

	December 31, 2015			
	Level 1	Level 2	Level 3	Total
Assets:				
U.S. treasury bills	$ —	$ 118,835	$ —	$ 118,835
Total	$ —	$ 118,835	$ —	$ 118,835

Where quoted prices are available in an active market, securities are classified as Level 1. The Company classifies money market funds as Level 1. When quoted market prices are not available for the specific security, then the Company estimates fair value by using 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 and nine months ended September 30, 2016 and 2015 (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
GSK:				
Recognition of upfront payments	$ 127	$ 312	$ 426	$ 936
Milestone revenue	—	—	—	5,000
Other revenue	—	—	617	—
GSK total	127	312	1,043	5,936
Bayer:				
Recognition of upfront payments	139	1,111	509	3,333
Other revenue	466	—	773	—
Bayer total	605	1,111	1,282	3,333
Celgene:				
Recognition of upfront payments	5,013	3,264	15,041	9,791
Other revenue	174	—	1,569	—
Celgene total	5,187	3,264	16,610	9,791
Total collaboration related revenue	$ 5,919	$ 4,687	$ 18,935	$ 19,060

GSK Strategic Alliance

As of September 30, 2016, the Company was eligible to receive in its collaboration with GSK up to $76.0 million in future development milestone payments prior to the completion of certain Phase II proof-of-concept ("POC") clinical trials. These remaining potential development milestones include up to $60.0 million if GSK exercises its options for tarextumab and brontictuzumab, including a $10.0 million bonus payment, and up to $16.0 million for the start of certain Phase II clinical trials associated with the development of brontictuzumab, including a $5.0 million bonus payment. GSK has the option to license tarextumab at the end of the Phase II "PINNACLE" clinical trial. GSK has the option to license the brontictuzumab program as early as the end of Phase Ia or at the end of Phase II clinical trials. Following exercise of the option, GSK will be responsible for all further development and commercialization following such option exercise. If GSK successfully develops and commercializes both candidates for more than one indication, the Company could receive contingent consideration payments of up to $309.0 million for the achievement of certain post-option exercise development and regulatory events and up to $280.0 million upon the achievement of certain levels of worldwide net sales, for a total of $665.0 million of potential future payments. In addition, the Company can earn royalty payments on all future collaboration product sales, if any. As all contingent consideration payments are based solely on the performance of GSK, the milestone method of accounting will not be applied to such amounts.

On October 31, 2016, GSK provided written notice to the Company that it is terminating its option to obtain an exclusive license to develop and commercialize brontictuzumab, effective 90 days after the date of the notice, and plans to focus the collaboration on the tarextumab program. After such termination becomes effective, the Company will retain worldwide rights to develop brontictuzumab. The Company will no longer be eligible to receive the $25.0 million development milestone for GSK's exercise of its option for brontictuzumab or the $10.0 million bonus payment associated with GSK's exercise of its options for tarextumab and brontictuzumab described above. The Company will also no longer be eligible to receive the development milestones described above of up to $16.0 million for the start of certain Phase II clinical trials associated with the development of brontictuzumab, including the $5.0 million bonus payment. Furthermore, the Company will no longer be eligible to receive $294.5 million, in the aggregate, of the potential post-option exercise payments described above. Under certain circumstances, the Company may owe GSK single-digit percentage royalties on net product sales of brontictuzumab. The Company's current efforts with investigators on planning the conduct of a Phase Ib trial of brontictuzumab combined with chemotherapy in colorectal cancer continue.

Bayer Strategic Alliance

As of September 30, 2016, 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 product candidates, prior to the point that Bayer exercises its options. Bayer can elect to exercise its options on vantictumab and ipafricept, two candidates currently in clinical development, through completion of certain Phase I trials, provided that such options are exercised by a certain date in 2017. The Company is

eligible to receive up to $55.0 million if Bayer exercises its options for biologic product candidates, including opt-in payment of $25.0 million for vantictumab and $15.0 million for ipafricept. Bayer will be responsible for all further development and commercialization following the exercise of an option for a product 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 develops and commercializes all of the product candidates for more than one indication, the Company could receive contingent consideration payments of up to $185.0 million for the achievement of certain later-stage development and regulatory events (up to $135.0 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 can earn royalty payments on all future collaboration product sales, if any. As all contingent consideration is based solely on the performance of Bayer, 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 Bayer.

Celgene Strategic Alliance

As of September 30, 2016, the Company was eligible to receive in its collaboration with Celgene up to $15.0 million in future development milestones across all 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.

6. Stock Incentive Plans

Equity Incentive Award and Stock Incentive Plans

As of September 30, 2016, a total of 4,192,996 shares of common stock have been authorized under the 2013 Equity Incentive Award Plan (the "2013 Plan"), including the additional 1,204,665 shares of common stock that became available for future issuance under the 2013 Plan as of January 1, 2016 as a result of an annual automatic increase provision in the 2013 Plan. As of September 30, 2016, a total of 2,698,011 shares are subject to options outstanding under the 2013 Plan. There are 1,790,403 shares subject to options outstanding under the 2004 Stock Incentive Plan (the "2004 Plan") as of September 30, 2016, 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 activity under the 2004 Plan and 2013 Plan during the nine months ended September 30, 2016, including grants to nonemployees and restricted stock units ("RSUs") granted:

(In thousands)	Shares Available for Grant of Options and Awards	Options and Awards Outstanding
Balance at December 31, 2015	145	4,694
Additional shares authorized	1,205	—
Options granted	(203)	203
Options exercised	—	(71)
Awards vested	—	(71)
Options forfeited	51	(51)
RSUs forfeited	4	(4)
Balance at September 30, 2016	1,202	4,700

The weighted-average grant date estimated fair value of options granted during the nine months ended September 30, 2016 was $13.66 per share.

Employee Stock Purchase Plan

As of September 30, 2016, a total of 1,193,620 shares of common stock have been authorized and 944,852 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 301,166 shares of common stock that became available for future issuance under the ESPP as of January 1, 2016 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 nine months ended September 30, 2016, the Company issued 111,633 shares under the ESPP. The Company used the following assumptions to estimate the fair value of the ESPP offered during the nine months ended September 30, 2016: expected term of 0.5 years, weighted-average volatility of 72.82%, risk-free interest rate of 0.41% and expected dividend yield of zero.

Restricted Stock Units

In March 2014, the Company awarded 293,980 RSUs under the 2013 Plan. Each vested RSU represents the right to receive one share of common stock. The fair value of the RSU awards was calculated based on the NASDAQ quoted stock price on the date of the grant with the expense being recognized over the vesting period. The RSUs are generally scheduled to vest at the end of three years at March 31, 2017. However, the vesting of 25% of the awarded RSUs was accelerated upon the achievement of a designated milestone payment related to safety data from Phase Ib and Phase II clinical trials of demcizumab (anti-DLL4, OMP-21M18). The stock-based compensation expense for the remaining RSUs is being amortized on the straight-line basis over the three-year vesting period. The Company has recognized the stock-based compensation expense of $ 0.5 million and $1.6 million related to these RSUs for the three and nine months ended September 30, 2016, respectively.

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 September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Research and development	$ 1,586	$ 1,402	$ 4,827	$ 4,052
General and administrative	1,243	1,109	3,948	3,263
Total	$ 2,829	$ 2,511	$ 8,775	$ 7,315

As of September 30, 2016, the Company had $18.0 million and $1.1 million of unrecognized stock-based compensation expense related to unvested stock options and RSUs, respectively, which are expected to be recognized over an estimated weighted-average period of 2.45 years and 0.5 years, respectively.

The estimated grant date fair value of employee stock options was calculated using the Black-Scholes option-pricing model, based on the following assumptions:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Weighted-average volatility	—	63.29%	71.70%	63.81%
Weighted-average expected term (years)	—	6.2	5.7	6.2
Risk-free interest rate	—	2.00%	1.40%	2.00%
Expected dividend yield	—	—	—	—

Common Stock Issuance under At-the-Market Agreement

Pursuant to a sales agreement (the "ATM Agreement") with Cantor Fitzgerald & Co. ("Cantor Fitzgerald"), we may issue and sell up to $50 million of our common stock in one or more at-the-market offerings, under our shelf registration statement on Form S-3 filed on June 12, 2015. Under the ATM Agreement, we agreed to pay Cantor Fitzgerald a commission of 3.0% of the aggregate gross proceeds from each sale of our shares thereunder.

For the three and nine months ended September 30, 2016, we sold 310,106 and 388,166 shares, respectively, under the ATM Agreement at a weighted average price of $12.65 and $12.59 per share, respectively, resulting in aggregate net proceeds of approximately $3.8 million and $4.7 million, respectively.

Public Offering of Common Stock

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 our shelf registration statement on Form S-3 filed on June 12, 2015. We received net offering proceeds of approximately $59.2 million after deducting the underwriting discounts and commissions and estimated offering expenses.

7. Income Taxes

During the three and nine months ended September 30, 2016, the Company recorded an income tax provision of $9,000 and $15,000, 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 antidilutive:

	As of September 30,	
	2016	2015
Options to purchase common stock	4,488,414	3,505,346
RSUs	211,015	289,004
	4,699,429	3,794,350

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 product candidates into, and successfully complete, clinical trials; our receipt of future milestone payments and/or royalties, and the expected timing of such payments; our collaborators' exercise of their license options; the commercialization of our product candidates; the implementation of our business model, strategic plans for our business, product candidates and technology; the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology; estimates of our expenses, future revenues, capital requirements and our needs for additional financing; the timing or likelihood of regulatory filings and approvals; our ability to maintain and establish collaborations or obtain additional government grant funding; our use of proceeds from our initial public offering ("IPO"), our at-the-market offering, and our underwritten public offering; our financial performance; 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, 2015 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 biopharmaceutical company focused on discovering and developing novel treatments for patients with cancer including anti-cancer stem cell and immuno-oncology product candidates. Our approach has been to address fundamental biologic pathways and targets thought to drive cancer's growth, recurrence and metastases. 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 cancer stem cell 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 product 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 product candidates were discovered internally.

We have seven product candidates in clinical development and have treated over one thousand patients across all of our clinical trials. We have two biologic product candidates in immuno-oncology that we plan to advance towards Investigational New Drug, or IND, application filings with the U.S. Food and Drug Administration, or FDA, within the next nine months. We are also pursuing discovery of additional novel anti-cancer stem cell and immuno-oncology product candidates. Our most advanced therapeutic candidate, demcizumab (anti-DLL4, OMP-21M18), is being studied in three clinical trials, a randomized Phase II trial in pancreatic cancer, a randomized Phase II trial in non-small cell lung cancer (NSCLC) and a Phase Ib trial combining demcizumab and pembrolizumab (anti-PD1, Keytruda®). We have decided to close the Phase II NSCLC clinical trial to further enrollment and plan to analyze data from patients already enrolled in the clinical trial in the first half of 2017 to coincide with the anticipated results of the Phase II pancreatic trial. This would enable results from both trials, along with data from the ongoing Phase Ib demcizumab/pembrolizumab trial, to be included in a potential opt-in package to our partner Celgene. Demcizumab has received orphan drug designation for pancreatic cancer from the FDA. A second candidate, tarextumab (anti-Notch2/3, OMP-59R5), is being studied in a randomized Phase II clinical trial in combination with platinum chemotherapy and etoposide in small cell lung cancer (SCLC) patients. Tarextumab has received orphan drug designation from the FDA for SCLC. We have completed enrollment in the Phase II clinical trials of demcizumab in pancreatic cancer and tarextumab in SCLC. We are currently enrolling patients in two Phase Ib clinical trials of vantictumab (anti-Fzd7, OMP-18R5) in combination with standard-of-care therapies in breast cancer and pancreatic cancer. Ipafricept (Fzd8-Fc, OMP-54F28) is being tested in combination with standard-of-care therapies in two Phase Ib trials, one in pancreatic cancer and the second in ovarian cancer. A fifth candidate, brontictuzumab (anti-Notch1, OMP-52M51), has completed Phase Ia clinical testing, and we are currently planning to conduct a Phase Ib clinical trial of brontictuzumab combined

with chemotherapy in third-line colorectal cancer patients. GSK provided written notice to us that it is terminating its option to obtain an exclusive license to develop and commercialize brontictuzumab, effective 90 days after the date of the notice, and plans to focus the collaboration on the tarextumab program. After such termination becomes effective, we will retain worldwide rights to develop brontictuzumab. Our current efforts with investigators on planning the conduct of a Phase Ib trial of brontictuzumab combined with chemotherapy in colorectal cancer continue. The sixth product candidate, anti-DLL4/VEGF bispecific (OMP-305B83), is currently in a single-agent Phase Ia trial that is enrolling patients with advanced solid tumors, and we are making preparations to initiate Phase Ib clinical trials. Anti-RSPO3 (OMP-131R10), our seventh product candidate to enter the clinic, is in a Phase Ia/Ib clinical trial. The Phase Ia portion is in solid tumor patients and the Phase Ib portion is in metastatic colorectal cancer patients in combination with standard-of-care chemotherapy. Data for all seven of these product candidates are being gathered to inform our advancement of the product candidates into later stage clinical trials and toward product approval.

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.

The following table summarizes our revenue for the three and nine months ended September 30, 2016 and 2015, which is related to the recognition of upfront payments and milestone payments received under our various collaboration arrangements (in thousands):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
GSK:				
Recognition of upfront payments	$ 127	$ 312	$ 426	$ 936
Milestone revenue	—	—	—	5,000
Other revenue	—	—	617	—
GSK total	127	312	1,043	5,936
Bayer:				
Recognition of upfront payments	139	1,111	509	3,333
Other revenue	466	—	773	—
Bayer total	605	1,111	1,282	3,333
Celgene:				
Recognition of upfront payments	5,013	3,264	15,041	9,791
Other revenue	174	—	1,569	—
Celgene total	5,187	3,264	16,610	9,791
Total collaboration related revenue	$ 5,919	$ 4,687	$ 18,935	$ 19,060

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 from our collaborations with GSK, Bayer and Celgene or any new collaboration we may enter into, and any new government grants that we may receive in the future.

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 and nine months ended September 30, 2016 and 2015 (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 September 30,		Nine Months Ended September 30,	
	2016	2015	2016	2015
Internal Costs:				
Cancer biology, pathology and toxicology	$ 4,068	$ 4,110	$ 12,245	$ 11,944
Molecular and cellular biology	1,927	1,944	5,741	5,911
Process development and manufacturing	1,431	1,572	4,762	4,308
Product development	3,132	2,612	9,555	7,533
Subtotal internal costs	10,558	10,238	32,303	29,696
External Program Costs:				
Manufacturing	4,168	3,678	15,400	6,977
Clinical	10,240	9,378	31,121	25,779
Translational medicine	1,039	1,107	3,309	2,959
Toxicology	1,356	311	3,334	779
Subtotal external program costs	16,803	14,474	53,164	36,494
Total research and development expense	$ 27,361	$ 24,712	$ 85,467	$ 66,190

The process of conducting preclinical studies and clinical trials necessary to obtain regulatory approval is costly and time-consuming. Our research and development expenses have increased as our product candidates have progressed, and we expect that these expenses may continue to increase with continued pipeline advancement and conduct of our development activities unless and until GSK, Bayer, and Celgene exercise their options under our agreements with them, and through commercialization for any programs we choose to co-develop with Celgene.

For the biologic programs covered under our strategic alliances with GSK, Bayer and Celgene, we are responsible for development of each product candidate prior to the exercise of GSK's, Bayer's or Celgene's option to exclusively license such product candidate. GSK and Bayer 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, Bayer and Celgene are through the end of certain Phase I or Phase II trials, depending on the applicable product candidate or program. If GSK exercises its option for a product candidate, all further development obligations for such product candidate are assumed by GSK. If Bayer exercises its option for a product candidate, all development obligations for such product candidate after such product candidate reaches a defined early development stage are assumed by Bayer. 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 product 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 product candidates, with Celgene bearing the remaining two-thirds of such costs, and we will be entitled to participate in the commercialization activities for such product candidates in the United States, and to share 50% of all profits and losses arising from U.S. sales of such product candidates. Otherwise, we may enter into a license agreement with Celgene for such product 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 product candidates is highly uncertain and may not result in approved products. We or our partners may never succeed in achieving marketing approval for any of our product candidates. The probability of success of each product candidate may be affected by numerous factors, including preclinical data, clinical data, competition, manufacturing capability and commercial viability. Completion dates and completion costs can vary significantly for each product 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 product candidates or if and to what extent we will generate revenues from the

commercialization and sale of any of our product 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 product candidate, as well as an ongoing assessment as to each product 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 product candidates.

General and Administrative

Our general and administrative expenses consist primarily of personnel costs, allocated facilities costs and other expenses for outside professional services, including legal, human resource, audit, tax and accounting services. Personnel costs consist of salaries, benefits and stock-based compensation.

Interest and Other Income, net

Interest and other income consist primarily of interest received on our cash equivalents 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 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 and nine months ended September 30, 2016, 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, 2015.

Results of Operations

Comparison of the Three Months Ended September 30, 2016 and 2015

(In thousands)	Three Months Ended September 30, 2016	2015	Dollar Change
Revenue:			
Collaboration revenue	$ 5,279	$ 4,687	$ 592
Other revenue	640	—	640
Total revenue	5,919	4,687	1,232
Operating expenses:			
Research and development	27,361	24,712	2,649
General and administrative	4,493	4,536	(43)
Total operating expenses	31,854	29,248	2,606
Loss from operations	(25,935)	(24,561)	(1,374)
Interest and other income, net	80	94	(14)
Loss before income taxes	(25,855)	(24,467)	(1,388)
Income tax provision	9	12	(3)
Net loss	$ (25,864)	$ (24,479)	$ (1,385)

Revenue

Total revenue for the three months ended September 30, 2016 was $5.9 million, an increase of $1.2 million, or 26%, compared to total revenue of $4.7 million for the three months ended September 30, 2015. This increase was primarily due to the $70.0 million safety milestone achieved in the fourth quarter of 2015, which was recorded as deferred revenue and is being amortized over the estimated performance period, offset by a decrease related to the change in amortization of the upfront fees we received under our agreement with Bayer, each as further described below. Under the Bayer agreement, as amended, we recognized $0.1 million in the three months ended September 30, 2016 from the amortization of upfront fees compared to $1.1 million in the three months ended September 30, 2015. This $1.0 million decrease was a result of a change to the estimated period of performance for the Bayer collaboration. The estimated period of performance for the Bayer collaboration was revised as a result of the November 2015 amendment to the Company's agreement with Bayer, under which the Company and Bayer agreed to enroll up to 12 additional patients in each of the Phase Ib trials of vantictumab in combination with standard-of-care therapy in breast cancer and ipafricept in combination with standard-of-care therapy in ovarian cancer. Under the Celgene agreement, we recognized $5.0 million in the three months ended September 30, 2016 from the amortization of upfront fees and milestone payment compared to $3.3 million in the three months ended September 30, 2015. The $1.7 million increase was a result of the $70.0 million safety milestone achieved in the fourth quarter of 2015, which was recorded as deferred revenue and is being amortized over the estimated period of performance. In addition, we recognized $0.6 million in revenue for the reimbursement of research and development costs for services performed in the third quarter of 2016.

Research and Development

Research and development expenses were $27.4 million for the three months ended September 30, 2016, an increase of $2.7 million, or 11%, compared to research and development expenses of $24.7 million for the three months ended September 30, 2015. The increase was comprised of a $2.3 million increase in our external program costs and a $0.4 million increase in our internal program costs. The increase in our external program costs of $2.3 million was due to an increase of $2.9 million in manufacturing cost and toxicology expenses for our GITRL-Fc product candidate and an undisclosed immuno-oncology candidate, which achieved program designation under our Celgene collaboration in December 2015, as well as an increase of $1.0 million in clinical activities under our vantictumab (anti-Fzd7, OMP-18R5) and anti-RSPO3 (OMP-131R10) programs. This was offset by a decrease of $1.6 million in clinical costs mainly related to our tarextumab (anti-Notch2/3, OMP-59R5) program. We expect that our external program costs will increase in future periods as we continue to advance our pipeline, enroll patients in various programs and initiate new clinical trials.

The increase in our internal costs of $0.4 million was primarily due to an increase of $0.1 million in personnel costs related to an increase in headcount and also $0.3 million for stock-based compensation, including new stock option grants.

General and Administrative

General and administrative expenses were $4.5 million for the three months ended September 30, 2016 and September 30, 2015. Employee related costs increased by $0.3 million due to an increase in headcount and stock-based compensation. The increase was offset by $0.3 million financing costs related to our registration statement on Form S-3 filed in June 2015 that were previously capitalized in other long-term assets and were subsequently expensed in the third quarter of 2015 because the offering was not consummated.

Comparison of the Nine Months Ended September 30, 2016 and 2015

(In thousands)	Nine Months Ended September 30, 2016	2015	Dollar Change
Revenue:			
Collaboration revenue	$ 15,976	$ 19,060	$ (3,084)
Other revenue	2,959	—	2,959
Total revenue	18,935	19,060	(125)
Operating expenses:			
Research and development	85,467	66,190	19,277
General and administrative	14,464	13,607	857
Total operating expenses	99,931	79,797	20,134
Loss from operations	(80,996)	(60,737)	(20,259)
Interest and other income, net	247	143	104
Loss before income taxes	(80,749)	(60,594)	(20,155)
Income tax provision	15	35	(20)
Net loss	$ (80,764)	$ (60,629)	$ (20,135)

Revenue

Total revenue for the nine months ended September 30, 2016 was $18.9 million, a decrease of $0.2 million, or 1%, compared to total revenue of $19.1 million for the nine months ended September 30, 2015. This decrease was primarily due to the recognition of a $5.0 million development milestone for dosing the first patient in the Phase I expansion portion of the brontictuzumab (anti-Notch1, OMP-52M51) clinical trial in the first quarter of 2015. This decrease is offset by an increase in revenue amortization primarily due to the $70.0 million safety milestone achieved in the fourth quarter of 2015, which was recorded as deferred revenue and amortized over the estimated performance period. Under the Bayer agreement, we recognized $0.5 million in the nine months ended September 30, 2016 from the amortization of upfront fees compared to $3.3 million in the nine months ended September 30, 2015. This $2.8 million decrease was a result of a change to the estimated period of performance for the Bayer collaboration. The estimated period of performance for the Bayer collaboration was revised as a result of the November 2015 amendment to the Company's agreement with Bayer, under which the Company and Bayer agreed to enroll up to 12 additional patients in each of the Phase Ib trials of vantictumab in combination with standard-of-care therapy in breast cancer and ipafricept in combination with standard-of-care therapy in ovarian cancer. Under the Celgene agreement, we recognized $15.0 million in the nine months ended September 30, 2016 from the amortization of upfront fees and milestone payments compared to $9.8 million in the nine months ended September 30, 2015. The $5.2 million increase was a result of the $70.0 million safety milestone achieved in the fourth quarter of 2015, which was recorded as deferred revenue and amortized over the estimated period of performance. In addition, we recognized $3.0 million in revenue for the reimbursement of research and development costs for services performed in the first nine months of 2016.

Research and Development

Research and development expenses were $85.5 million for the nine months ended September 30, 2016, an increase of $19.3 million, or 29%, compared to research and development expenses of $66.2 million for the nine months ended September 30, 2015. The increase was comprised of a $16.7 million increase in our external program costs and a $2.6 million increase in our internal program costs. The increase in our external program costs of $16.7 million was due to an increase of $12.1 million in manufacturing and Phase II clinical activities under our demcizumab (anti-DLL4, OMP-21M18) program and costs associated with our anti-DLL4/VEGF bispecific (OMP-305B83), vantictumab (anti-Fzd7, OMP-18R5), ipafricept (Fzd8-Fc, OMP-54F28) and anti-RSPO3 (OMP-131R10) programs, as well as an increase of $8.2 million due to manufacturing costs and toxicology expenses for our GITRL-Fc product candidate and an undisclosed immuno-oncology candidate, which achieved program designation under our Celgene collaboration in December 2015. This was offset by a decrease of $3.2 million in clinical costs related to our tarextumab (anti-Notch2/3, OMP-59R5) program and a net decrease of $0.4 million in clinical costs mainly related to our brontictuzumab (anti-Notch1, OMP-52M51) program. We expect that our external program costs will increase in future periods as we continue to advance our pipeline, enroll patients in various programs and initiate new clinical trials.

The increase in our internal costs of $2.6 million was primarily due to an increase of $1.1 million in personnel costs related to an increase in headcount and also $1.5 million for stock-based compensation, including new stock option grants.

General and Administrative

General and administrative expenses were $14.5 million for the nine months ended September 30, 2016, an increase of $0.9 million, or 7%, compared to general and administrative expenses of $13.6 million for the nine months ended September 30, 2015. Employee related costs increased by $1.3 million due to an increase of $0.6 million in personnel costs related to an increase in headcount and also $0.7 million for stock-based compensation, including new stock option grants. We also incurred $0.2 million higher expenses in consulting and facility charges. The increase is offset by lower legal costs of $0.3 million and financing costs of $0.3 million related to our registration statement on Form S-3 filed in June 2015 that were previously capitalized in other long-term assets and were subsequently expensed in the third quarter of 2015 because the offering was not consummated.

Liquidity and Capital Resources

As of September 30, 2016, we had cash, cash equivalents, and short term investments totaling $207.6 million. In connection with our IPO in July 2013, we received cash proceeds of $82.7 million, net of underwriters' discounts and commissions and expenses paid by us. Prior to the IPO, we funded our operations primarily with cash flows from the sales of our convertible preferred stock in private placements and received upfront and milestone payments and other collaboration related payments under the GSK, Bayer and Celgene collaborative arrangements.

In June 2015, we filed a shelf registration statement on Form S-3 (the "Shelf Registration Statement") 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. The Shelf Registration Statement was declared effective by the SEC on July 22, 2015. As of September 30, 2016, we had sold 388,166 shares 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 approximately $4.7 million.

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 after deducting the underwriting discounts and commissions and estimated offering expenses.

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 believe that our existing cash, cash equivalents and short-term investments as of September 30, 2016 will be sufficient to meet our anticipated cash requirements through at least the third quarter of 2018, 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 and/or exercise of options under our agreements with GSK, Bayer and Celgene;
- the initiation, progress, timing and completion of preclinical studies and clinical trials for our product candidates and potential product candidates;
- the number and characteristics of product 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 product candidates.

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

	Nine Months Ended September 30,	
	2016	2015
Cash used in operating activities	$ (14,087)	$ (57,409)
Cash (used in) provided by investing activities	(59,358)	58,867
Cash provided by financing activities	65,085	1,684

Cash Flows from Operating Activities

Cash used in operating activities for the nine months ended September 30, 2016 was $14.1 million. The net loss of $80.8 million was offset by non-cash charges of $1.3 million for depreciation and amortization and $8.8 million for stock-based compensation. The change in net operating assets and liabilities of $56.6 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 which was offset by a $15.9 million decrease in deferred revenue. There was also a $7.5 million increase in accrued clinical liabilities and a $3.9 million decrease in accrued liabilities and accounts payable driven by the timing of our vendor payments. The remaining net decrease of $0.5 million was due to changes in prepaid and other current assets, other assets and deferred rent.

Cash used in operating activities for the nine months ended September 30, 2015 was $57.4 million. The net loss of $60.6 million was offset by non-cash charges of $1.2 million for depreciation and amortization and $7.3 million for stock-based compensation. The change in net operating assets of $(5.3) million was due primarily to a decrease of $14.1 million in deferred revenue due to the amortization of upfront and milestone payments from GSK, Bayer and Celgene; tax receivables decreased by $7.1 million due to our receipt of an income tax refund during the second quarter of 2015; and the net increase of $2.8 million in accounts payable and accrued liabilities was a result of the timing of our vendor payments.

Cash Flows from Investing Activities

Cash used in investing activities of $59.4 million for the nine months ended September 30, 2016 was primarily due to maturities of short-term investments of $148.8 million, offset by purchases of short-term investments of $207.3 million and our acquisition of property and equipment of $0.9 million.

Cash provided by investing activities of $58.9 million for the nine months ended September 30, 2015 was primarily due to maturities of short-term investments of $178.9 million, offset by purchases of short-term investments of $118.8 million and our acquisition of property and equipment of $1.2 million.

Cash Flows from Financing Activities

Cash provided by financing activities of $65.1 million for the nine months ended September 30, 2016 consisted of $63.9 million related to the sale of shares of our common stock through our underwritten public offering that closed on August 23, 2016 and our at-the-market offering program and $1.2 million in 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.

Cash provided by financing activities of $1.7 million for the nine months ended September 30, 2015 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, 2015, filed with the SEC on March 10, 2016.

Interest Rate Sensitivity

We had cash, cash equivalents and short-term investments of $207.6 million as of September 30, 2016, which consisted of bank deposits, money market funds 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 September 30, 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 nine months ended September 30, 2016. 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 September 30, 2016. 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 September 30, 2016, 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 September 30, 2016, 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, 2015 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, 2015, 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, 2015, other than as described in the updated risk factors provided below.

We or our collaborators may become subject to third parties' claims alleging infringement of their patents and proprietary rights, which could be costly or delay or prevent the development and commercialization of our product candidates, or we may need to become involved in legal proceedings to invalidate the patents or proprietary rights of third parties.

Our success will depend, in part, on our ability to operate without infringing upon the proprietary rights of others. Litigation relating to infringement or misappropriation of patent and other intellectual property rights in the pharmaceutical and biotechnology industries is common. We or our collaborators may be subject to third-party claims in the future that would cause us to incur substantial expenses and which, if successful, could cause us to pay substantial damages, if we or our collaborators are found to be infringing a third party's patent rights. These damages potentially include increased damages and attorneys' fees if we are found to have infringed such rights willfully. Further, if a patent infringement suit is brought against us or our collaborators, our research, development, manufacturing or sales activities relating to the product or product candidate that is the subject of the suit may be delayed or terminated. As a result of patent infringement claims, or in order to avoid potential infringement claims, we or our collaborators may choose to seek, or be required to seek, a license from the third party, which would be likely to include a requirement to pay license fees or royalties or both. These licenses may not be available on acceptable terms, or at all. Even if a license can be obtained on acceptable terms, the rights may be nonexclusive, which would give our competitors access to the same intellectual property rights. If we are unable to enter into a license on acceptable terms, we or our collaborators could be prevented from commercializing one or more of our product candidates, or forced to modify such product candidates, or to cease some aspect of our business operations, which could harm our business significantly.

We are aware of U.S. and foreign issued patents and pending patent applications controlled by third parties that may relate to the areas in which we are developing product candidates. Because all issued patents are entitled to a presumption of validity in many countries, including the United States and many European countries, issued patents held by others that claim our products or technology may limit our freedom to operate unless and until these patents expire or are declared invalid or unenforceable in a court of applicable jurisdiction, if we do not obtain a license or other right to practice the claimed inventions. Pending patent applications controlled by third parties may result in additional issued patents claiming our products and technology. In addition, the publication of patent applications occurs with a certain delay after the date of filing, so we may not be aware of all relevant patent applications of third parties at a given point in time. Further, publication of discoveries in the scientific or patent literature often lags behind actual discoveries, so we may not be able to determine whether inventions claimed in patent applications of third parties have been made before or after the date on which inventions claimed in our patent applications and patents have been made. If U.S. patent applications filed by third parties claim technology or therapeutics that are also claimed by our patent applications or patents, we may, under certain circumstances, have to participate in interference proceedings in the U.S. Patent and Trademark Office, or USPTO, to determine the priority of invention. We may also become involved in opposition proceedings in the European Patent Office, or EPO, or other proceedings before patent offices in the U.S. or foreign countries, regarding the intellectual property rights of third parties. An unfavorable outcome in these proceedings regarding the intellectual property rights of a third party could require us to attempt to license rights from the prevailing party, or to cease using the related technology or developing or commercializing the related product candidate.

For example, we successfully opposed European Patent No. 2152748 (the '748 patent), a European patent owned by a third party that relates to certain anti-Notch1 antibodies, resulting in revocation of the patent. Nonetheless, the ultimate outcome of this

opposition is uncertain because the patent holder has appealed the revocation decision. If we are not ultimately successful in the appeal proceeding, and if the issued claims of the '748 patent are determined to be valid and construed to cover brontictuzumab, we and our collaborators may not be able to commercialize brontictuzumab in some or all European countries prior to expiration of the patent without obtaining a license to the patented technology, which may cause us to incur licensing-related costs. Also, a license may not be available under acceptable terms, or at all. In addition, even if we are ultimately successful in an appeal proceeding regarding the revoked patent, such result would be limited to our activities in Europe. The third party that owns the '748 patent also has an issued U.S. patent with similar claims and has pursued in other countries claims that are similar to those granted by the EPO in the '748 patent. We may need to initiate or engage in opposition proceedings or other legal proceedings in such other countries with respect to patents that have issued or may issue with claims similar in scope to those of the '748 patent. If we are unsuccessful in challenging a patent similar to the '748 patent in a country, and if a valid claim of the similar patent is construed to cover brontictuzumab, we may be required to obtain a license to continue developing and commercializing brontictuzumab in that country, which may not be available under acceptable terms, or at all.

We also initiated an opposition proceeding at the EPO to narrow or invalidate the claims of European Patent No. 2157192 (the '192 patent), a European patent owned by a third party that relates to certain anti-RSPO3 antibodies. The ultimate outcome of this opposition is uncertain, but the EPO has, in a first instance, found the patent, as amended during the opposition proceeding, to be valid. While we are appealing this decision, the EPO Board of Appeal will not be expected to issue a final decision for several more years. If we are not ultimately successful in the appeal proceeding and the issued claims of the '192 patent are determined to be valid and construed to cover our anti-RSPO3 antibody (OMP-131R10), we and our collaborators may not be able to commercialize anti-RSPO3 in some or all European countries prior to expiration of the patent without obtaining a license to the patented technology, which may cause us to incur licensing-related costs. Also, a license may not be available under acceptable terms, or at all. In addition, even if we are ultimately successful in the appeal proceeding, such result would be limited to our activities in Europe. The third party that owns the '192 patent has pursued, in other countries including the U.S., claims that are similar to those granted by the EPO in the '192 patent, and we may need to initiate or engage in opposition proceedings or other legal proceedings in such other countries with respect to patents that have issued or may issue with claims similar in scope to those of the '192 patent. If we are unsuccessful in challenging a patent similar to the '192 patent in a country, and if a valid claim of the similar patent is construed to cover anti-RSPO3, we may be required to obtain a license to continue developing and commercializing anti-RSPO3 in that country, which may not be available under acceptable terms, or at all.

We may become subject to third parties' claims seeking to invalidate our patents or proprietary rights, or we may need to become involved in lawsuits or other legal proceedings to protect or enforce our patents, which could put our patents and other proprietary rights at risk.

Competitors may infringe our patents, or misappropriate or violate our other intellectual property rights. To counter infringement or unauthorized use, we may find it necessary to file infringement or other claims to protect our intellectual property rights. In addition, in any infringement proceeding brought by us against a third party to enforce our rights, a court may decide that a patent of ours is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the basis that our patents do not cover the technology in question. In patent litigation in the U.S., defendant counterclaims alleging invalidity or unenforceability are commonplace, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. An adverse result in any patent litigation proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly, which could open us up to additional competition and have a material adverse effect on our business.

Third parties may also raise claims alleging the invalidity or unenforceability of our patents in other forms of proceedings, including proceedings before administrative bodies in the U.S. or abroad, even outside the context of patent litigation. The use of administrative proceedings for challenging patents, including interference, derivation, and reexamination proceedings before the USPTO or oppositions and other comparable proceedings in foreign jurisdictions, is common in the biotechnology and pharmaceutical industries. For instance, we may be involved in opposition proceedings in the EPO regarding our intellectual property rights with respect to our product candidates. Due to recent changes in U.S. patent law, new procedures including inter partes review and post-grant review have been implemented and are now also available for use in patent challenges, and the use of inter partes review to challenge the validity of patents in the biotechnology and pharmaceutical industries has become increasingly common.

For example, an anonymous third party has filed an opposition against one of our European patents that relates in part to certain anti-RSPO antibodies and anti-LGR antibodies, and the use of these antibodies in treatment of cancer. The ultimate outcome of the opposition and any potential subsequent appeal is uncertain. If we are unsuccessful in defending this European patent, the patent may be revoked or the claims of the patent may be narrowed. A revocation of the patent or narrowing of the claims could weaken our intellectual property position on antibodies that disrupt RSPO-LGR pathway signaling, reduce in part some of the patent protection on our anti-RSPO3 antibody (OMP-131R10), and potentially open us up to additional competition.

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

(a)

Not applicable.

(b)

On July 23, 2013, we closed our IPO, in which we sold an aggregate of 5,520,000 shares of common stock at a price to the public of $17.00 per share. The aggregate offering price for shares sold in the offering was $93.9 million. The offer and sale of all of the shares in the IPO were registered under the Securities Act of 1933, as amended, pursuant to a registration statement on Form S-1 (File No. 333-181331), which was declared effective by the Securities and Exchange Commission on July 17, 2013 (the "Registration Statement").

There has been no material change in the planned use of proceeds from our IPO as described in the Registration Statement or related prospectus. We invested the funds received in short-term, interest-bearing investment-grade securities and government securities.

(c)

Not applicable.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

(a)

Not applicable.

(b)

Not applicable.

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: November 1, 2016

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
10.1†	Amendment 4 to the Collaboration and Option Agreement, dated July 21, 2016, by and between the Registrant and Bayer Pharma AG.
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 September 30, 2016, formatted in eXtensible Business Reporting Language (XBRL) includes: (i) Condensed Balance Sheets at September 30, 2016 (unaudited) and December 31, 2015, (ii) Condensed Statements of Operations and Comprehensive Loss (unaudited) for the three and nine months ended September 30, 2016 and 2015, (iii) Condensed Statements of Cash Flows (unaudited) for the nine months ended September 30, 2016 and 2015, and (iv) Notes to the Condensed Financial Statements.

† Certain portions have been omitted pursuant to a confidential treatment request. Omitted information has been filed separately with the Securities and Exchange Commission.

Exhibit 10.1

AMENDMENT 4 TO THE COLLABORATION AND OPTION AGREEMENT

This Amendment 4 to the Collaboration and Option Agreement (the **"Amendment"**) is made and entered into by and between **OncoMed Pharmaceuticals, Inc.**, a Delaware corporation located at 800 Chesapeake Drive, Redwood City, California 94063, United States of America (**"OncoMed"**), and **Bayer Pharma AG**, a German corporation located at Müllerstrasse 178, 13353 Berlin, Germany which previously acted under the name Bayer Schering Pharma AG (**"BSP"**). OncoMed and BSP are sometimes referred to herein individually as a **"Party"** and collectively as the **"Parties."**

RECITALS

Whereas, OncoMed and BSP entered into a Collaboration and Option Agreement effective as of June 15, 2010 and amended various times (as amended, the "**Agreement**") pursuant to which they agreed to collaborate to discover and develop biologic and small molecule compounds directed to targets within the Wnt cellular pathway;

Whereas, the discovery of small molecule compounds, [***]; and

Whereas, the Parties have agreed to adjust the Small Molecule Research Term.

AMENDMENT

Now, Therefore, in consideration of the foregoing and the mutual agreements set forth below, the Parties agree as follows:

1. Any capitalized terms used in this Amendment shall have the meaning set forth in the Agreement, unless otherwise defined herein.

2. Section 1.137 of the Agreement shall be amended and restated in its entirety to read as follows:

"1.137 **"Small Molecule Research Term"** means the period commencing from the Effective Date and ending upon the [***] to occur of either (a) [***]"

3. All other terms and conditions of the Agreement shall remain in full force and effect.

4. This Amendment shall come into force retroactively with effect as of June 15, 2016.

5. This Amendment may be executed in counter-parts with the same effect as if both Parties had signed the same document. All such counterparts shall be deemed an original, shall be construed together and shall constitute one and the same instrument. Signatures to this Amendment transmitted by facsimile, by email in "portable document format" (".pdf"), or by any other

[***] Certain information in this document has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

electronic means intended to preserve the original graphic and pictorial appearance of this Amendment shall have the same effect as physical delivery of the paper document bearing original signature.

6. This Amendment and the Agreement and all Exhibits thereto, constitutes the entire agreement between the Parties as to the subject matter of this Amendment, and supersedes and merges all prior and contemporaneous negotiations, representations, agreements and understandings regarding the same.

[Next page is the signature page.]

IN WITNESS WHEREOF, the Parties have caused this Amendment to be executed by their respective duly authorized officers as of the date of last signature below.

OncoMed Pharmaceuticals, Inc.

By: /s/ Paul J. Hastings

Name: Paul J. Hastings

Title: President and CEO

Date: 07/21/16

Bayer Pharma AG

By: ppa. /s/ Andreas Busch

Name: Prof. Dr. Andreas Busch

Title: Head Drug Discovery

Date: 12 Juli 2016

By: ppa. /s/ Hans Lindner

Name: Dr. Hans Lindner

Title: Head GEIRA

Date: 12 Juli 2016

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

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

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

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

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

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

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

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

Date: November 1, 2016

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

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

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

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

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

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

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

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

Date: November 1, 2016

/s/ Sunil Patel
Sunil Patel
Senior Vice President and Chief Financial Officer
(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 September 30, 2016, as filed with the Securities and Exchange Commission (the "Report"), Paul J. Hastings, Chairman and Chief Executive Officer of the Company, and Sunil Patel, Senior Vice President and Chief Financial Officer 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: November 1, 2016

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

/s/ Sunil Patel
Sunil Patel
Senior Vice President and Chief Financial Officer
(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.