

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

FORM 10-Q

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: 001-33093

LIGAND PHARMACEUTICALS INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

77-0160744
(I.R.S. Employer
Identification No.)

3911 Sorrento Valley Boulevard, Suite 110 San
Diego, CA

92121
(Zip Code)

(Address of principal executive offices)

(858) 550-7500

(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 (§232.405 of this chapter) 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 definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one)

Large Accelerated Filer	<input checked="" type="checkbox"/>	Accelerated Filer	<input type="checkbox"/>
Non-Accelerated Filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller Reporting Company	<input type="checkbox"/>

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 November 1, 2016, the registrant had 20,900,189 shares of common stock outstanding.

LIGAND PHARMACEUTICALS INCORPORATED
QUARTERLY REPORT

FORM 10-Q

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GLOSSARY OF TERMS AND ABBREVIATIONS

Abbreviation	Definition
2019 Convertible Senior Notes	\$245.0 million aggregate principal amount of convertible senior unsecured notes due 2019
Amgen	Amgen, Inc.
AOCI	Accumulated Other Comprehensive Income
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
Company	Ligand Pharmaceuticals Incorporated, including subsidiaries
CorMatrix	CorMatrix Cardiovascular, Inc.
CVR	Contingent value right
CyDex	CyDex Pharmaceuticals, Inc.
DTA	Deferred Tax Asset
Amended ESPP	Employee Stock Purchase Plan, as amended and restated
Eisai	Eisai Incorporated
EMA	European Medicines Agency
FASB	Financial Accounting Standards Board
FDA	Food and Drug Administration
FSGS	Focal segmental glomerulosclerosis
GAAP	Generally accepted accounting principles in the United States
IPO	Initial public offering
IPR&D	In-Process Research and Development
Ligand	Ligand Pharmaceuticals Incorporated, including subsidiaries
LSA	Loan and Security Agreement
Metabasis	Metabasis Therapeutics, Inc.
MLA	Master License Agreement
NOLs	Net Operating Losses
OMT	OMT, Inc. or Open Monoclonal Technology, Inc.
Par	Par Pharmaceuticals, Inc.
Pfizer	Pfizer Inc.
Retrophin	Retrophin Inc.
SEC	Securities and Exchange Commission
Selexis	Selexis, SA
TPE	Third-party evidence
VIE	Variable interest entity
Viking	Viking Therapeutics
Viking IPO	Viking's initial public offering
VSOE	Vendor-specific objective evidence

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

LIGAND PHARMACEUTICALS INCORPORATED CONDENSED CONSOLIDATED BALANCE SHEETS (Unaudited, in thousands, except share data)

	September 30, 2016	December 31, 2015 restated
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 86,580	\$ 97,428
Short-term investments	37,535	102,791
Accounts receivable	6,586	6,170
Note receivable from Viking Therapeutics	3,207	4,782
Inventory	4,027	1,633
Other current assets	2,756	1,908
Total current assets	140,691	214,712
Deferred income taxes	133,486	189,083
Investment in Viking Therapeutics	17,339	29,728
Intangible assets, net	207,435	48,347
Goodwill	72,359	12,238
Commercial license rights, net	25,985	8,554
Property and equipment, net	1,826	372
Other assets	1,744	27
Total assets	\$ 600,865	\$ 503,061
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 2,757	\$ 4,083
Accrued liabilities	6,675	5,397
Current contingent liabilities	5,079	10,414
Current lease exit obligations	—	934
2019 convertible senior notes, net	210,115	201,985
Other current liabilities	1,505	8
Total current liabilities	226,131	222,821
2019 convertible senior notes, net	—	—
Long-term contingent liabilities	3,933	3,033
Other long-term liabilities	408	297
Total liabilities	230,472	226,151
Commitments and Contingencies		
Equity component of currently redeemable convertible notes (Note 5)	32,138	39,628
Stockholders' equity:		
Common stock, \$0.001 par value; 33,333,333 shares authorized; 20,898,889 and 19,949,012 shares issued and outstanding at September 30, 2016 and December 31, 2015, respectively	28	20
Additional paid-in capital	762,576	661,850
Accumulated other comprehensive income	3,652	4,903
Accumulated deficit	(428,001)	(429,491)
Total stockholders' equity attributable to Ligand Pharmaceuticals	338,255	237,282
Total liabilities and stockholders' equity	\$ 600,865	\$ 503,061

See accompanying notes.

LIGAND PHARMACEUTICALS INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)
(in thousands)

	Three months ended September 30,		Nine months ended September 30,	
	2016	2015 restated	2016	2015 restated
Revenues:				
Royalties	\$ 15,698	\$ 9,755	\$ 39,842	\$ 26,648
Material sales	4,219	6,046	13,445	20,456
License fees, milestones and other revenues	1,702	1,900	17,500	3,618
Total revenues	21,619	17,701	70,787	50,722
Operating costs and expenses:				
Cost of sales ⁽¹⁾	999	1,250	2,674	4,923
Amortization of intangibles	2,706	593	7,912	1,780
Research and development	5,898	1,945	14,813	8,730
General and administrative	6,305	4,971	19,995	18,190
Lease exit and termination costs	245	345	863	786
Total operating costs and expenses	16,153	9,104	46,257	34,409
Income from operations	5,466	8,597	24,530	16,313
Other (expense) income:				
Interest expense, net	(3,116)	(2,930)	(9,172)	(8,875)
Increase (decrease) in contingent liabilities	(958)	2,301	(2,595)	(4,976)
Gain on deconsolidation of Viking Therapeutics	—	—	—	28,190
Loss from Viking Therapeutics	(1,396)	(2,169)	(14,139)	(3,040)
Other income, net	1,215	1,485	2,107	1,889
Total other (expense) income, net	(4,255)	(1,313)	(23,799)	13,188
Income before income taxes	1,211	7,284	731	29,501
Income tax benefit (expense)	(160)	191,881	28	191,602
Income from operations	1,051	199,165	759	221,103
Discontinued operations:				
Gain on sale of Oncology Product Line before income taxes	—	—	1,139	—
Income tax expense on discontinued operations	—	—	(408)	—
Income from discontinued operations	—	—	731	—
Net income including noncontrolling interests:	1,051	199,165	1,490	221,103
Less: Net loss attributable to noncontrolling interests	—	—	—	(2,380)
Net income	\$ 1,051	\$ 199,165	\$ 1,490	\$ 223,483
Per share amounts attributable to Ligand common shareholders:				
Basic earnings per share data ⁽²⁾				
Income from continuing operations	\$ 0.05	\$ 10.01	\$ 0.04	\$ 11.32
Income from discontinued operations	—	—	0.04	—
Net income	\$ 0.05	\$ 10.01	\$ 0.07	\$ 11.32
Diluted earnings per share data ⁽²⁾				
Income from continuing operations	\$ 0.05	\$ 9.28	\$ 0.03	\$ 10.58
Income from discontinued operations	—	—	0.03	—
Net (loss) income	\$ 0.05	\$ 9.28	\$ 0.07	\$ 10.58
Shares used for computation (in thousands)				
Basic	20,887	19,887	20,806	19,741
Diluted	22,997	21,460	22,742	21,122

(1) Excludes amortization of intangibles.

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(2) The sum of net income per share amounts may not equal the totals due to rounding

See accompanying notes.

LIGAND PHARMACEUTICALS INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited)
(in thousands)

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2016	2015 restated	2016	2015 restated
Net income:	\$ 1,051	\$ 199,165	\$ 1,490	\$ 223,483
Unrealized net gain on available-for-sale securities, net of tax	978	(3,059)	367	1,978
Less: Reclassification of net realized gains included in net income, net of tax	(1,071)	(606)	(1,670)	(1,591)
Comprehensive income	<u>\$ 958</u>	<u>\$ 195,500</u>	<u>\$ 187</u>	<u>\$ 223,870</u>

(a) See restatement discussion in footnote 1
See accompanying notes.

LIGAND PHARMACEUTICAL INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited, in thousands)

	Nine months ended September 30,	
	2016	2015 Restated
Operating activities		
Net income including noncontrolling interests	\$ 1,490	\$ 221,103
Less: income from discontinued operations	731	—
Income from continuing operations	759	221,103
Adjustments to reconcile net income including noncontrolling interests to net cash provided by operating activities:		
Non-cash change in estimated fair value of contingent liabilities	2,595	4,976
Realized gain on sale of short-term investment	(1,776)	(1,988)
Gain on disposal of assets	183	—
Depreciation and amortization	8,322	1,940
Amortization of discount on investments, net	510	73
Amortization of debt discount and issuance fees	8,130	7,646
Stock-based compensation	13,690	9,511
Deferred income taxes	347	(191,615)
Accretion of note payable	—	16
Gain on deconsolidation of Viking Therapeutics	—	(28,190)
Change in fair value of the Viking convertible debt receivable and warrants	(464)	—
Loss from Viking Therapeutics	14,139	3,040
Changes in operating assets and liabilities:		
Accounts receivable	(411)	7,142
Inventory	(2,394)	(158)
Other current assets	(9)	(438)
Other long-term assets	(31)	(546)
Accounts payable and accrued liabilities	(3,079)	(4,993)
Restricted investments	—	661
Deferred revenue	1,497	(118)
Net cash provided by operating activities	42,008	28,062
Investing activities		
Purchase of commercial license rights	(17,695)	(4,030)
Payments to CVR holders and other contingency payments	(7,055)	(4,941)
Purchases of property and equipment	(1,783)	(27)
Cash paid for acquisition, net of cash acquired	(92,504)	—
Purchase of short-term investments	(73,109)	(111,788)
Purchase of common stock in equity method investment	(1,000)	—
Purchase of Viking common stock and warrants	(700)	(9,000)
Proceeds from sale of property and equipment	—	1
Proceeds received from repayment of Viking note receivable	300	—
Reduction of cash due to deconsolidation of Viking	—	(247)
Proceeds from sale of short-term investments	23,387	5,680
Proceeds from maturity of short-term investments	113,694	22,967
Net cash used in investing activities	(56,465)	(101,385)
Financing activities		
Net proceeds from stock option exercises and ESPP	4,608	7,379
Taxes paid related to net share settlement of equity awards	(999)	—
Share repurchase	—	(489)
Net cash provided by financing activities	3,609	6,890
Net decrease in cash and cash equivalents	(10,848)	(66,433)
Cash and cash equivalents at beginning of period	97,428	160,203
Cash and cash equivalents at end of period	\$ 86,580	\$ 93,770

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Supplemental disclosure of cash flow information

Interest paid	\$	1,838	\$	1,822
Taxes paid		36		19

Supplemental schedule of non-cash activity

Stock issued for acquisition, net of issuance cost		(77,330)		—
Unsettled repurchase of common stock		(1,554)		—
Stock and warrant received for repayment of Viking notes receivable		1,200		—
Accrued inventory purchases		—		—
Unrealized gain (loss) on AFS investments		(271)		3,082

(a) See restatement discussion in footnote 1

See accompanying notes

LIGAND PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements
(Unaudited)

1. Basis of Presentation and Summary of Significant Accounting Policies

Business

Ligand is a biopharmaceutical company with a business model based on developing or acquiring assets which generate royalty, milestone or other passive revenue for the Company and using a lean corporate cost structure. We operate in one business segment: development and licensing of biopharmaceutical assets.

Principles of Consolidation

The accompanying condensed consolidated financial statements include Ligand and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation.

Basis of Presentation

The Company's accompanying unaudited condensed consolidated financial statements have been prepared in accordance with GAAP for interim financial information. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation of the financial position and results of operations of the Company and its subsidiaries, have been included. Interim financial results are not necessarily indicative of the results that may be expected for the full year. These financial statements should be read in conjunction with the consolidated financial statements and notes therein included in the Company's annual report on Form 10-K for the year ended December 31, 2015 filed on November 14, 2016.

Upon the occurrence of certain circumstances, holders of the 2019 Convertible Senior Notes may require us to purchase all or a portion of their notes for cash, which may require the use of a substantial amount of cash. If such cash is not available, we may be required to sell other assets or enter into alternate financing arrangements at terms that may or may not be desirable. The existence of the 2019 Convertible Senior Notes and the obligations that we incurred by issuing them may restrict our ability to take advantage of certain future opportunities, such as engaging in future debt or equity financing activities.

Restatement

The Company is restating its previously issued consolidated financial statements as of and for the year ended December 31, 2015 and the condensed consolidated financial statements as of and for the three and nine months ended September 30, 2015 to correct errors relating to the Company's net operating loss (NOL) carryforward benefits in the United States which resulted in an overstatement of deferred tax assets (DTA). In connection with three acquisitions that were completed prior to February 2010, the Company recognized DTAs for a portion of the NOLs, which included capitalized research and development expenses, obtained from the acquired businesses. From the time of the acquisitions until September 2015, there was a full valuation allowance against all of the Company's NOLs, including those obtained from the entities acquired. In September 2015, the Company concluded that it was more likely than not that a substantial portion of its deferred tax assets would be realized through future taxable income. As a result, the Company released the majority of its DTA valuation allowance, including \$27.5 million related to NOLs recognized as part of the businesses acquired prior to February of 2010.

During the quarter ended September 30, 2016, the Company concluded that for accounting purposes the approximately \$27.5 million of DTAs that were obtained upon acquiring the businesses prior to February of 2010 did not meet the more likely-than-not criterion for recognition in 2015 and that the related valuation allowance should not have been reversed. As a result, the Company's income tax benefit and net income for the year ended December 31, 2015 and the three and nine month periods ended September 30, 2015 were overstated by \$27.5 million each.

The Company also recorded adjustments to the consolidated financial statements as part of this restatement relating to the classification of our 2019 Convertible Senior Notes. As of December 31, 2015, the Company's last reported sale price exceeded the 130% threshold described in Note 5 - "Financing Arrangements" and accordingly the 2019 Convertible Senior Notes have been reclassified as a current liability as of December 31, 2015. As a result, the related unamortized discount of

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\$39.6 million previously classified within stockholders' equity was reclassified as temporary equity component of currently redeemable convertible notes on our Consolidated Balance Sheet.

The account balances labeled As Reported in the following tables as of December 31, 2015 and as of and for the three and nine months ended September 30, 2015 represent the previously reported amounts as presented in the Company's Annual Report on Form 10-K for the year ended December 31, 2015 and the Quarterly Report on Form 10-Q for the three months ended September 30, 2015, respectively.

The effects of these prior period corrections on the statement of operations and comprehensive income are as follows (in thousands except for per share data):

	Nine months ended September 30, 2015		
	As Reported	Adjustments	As Restated
Income tax benefit	\$ 219,083	\$ (27,481)	\$ 191,602
Net income	250,964	(27,481)	223,483
Comprehensive income	251,351	(27,481)	223,870
Basic earnings per share	12.71	(1.39)	11.32
Diluted earnings per share data	11.88	(1.30)	10.58
Basic	19,741	—	19,741
Diluted	21,122	—	21,122

	Three months ended September 30, 2015		
	As Reported	Adjustments	As Restated
Income tax benefit (expense)	\$ 219,362	\$ (27,481)	\$ 191,881
Net income	226,646	(27,481)	199,165
Comprehensive income	222,981	(27,481)	195,500
Basic earnings per share	11.40	(1.39)	10.01
Diluted earnings per share data	10.56	(1.28)	9.28

The effects of these prior period corrections on the consolidated balance sheet is as follows:

	As of December 31, 2015		
	As Reported	Adjustments	As Restated
Deferred income taxes	\$ 216,564	\$ (27,481)	\$ 189,083
Total assets ⁽¹⁾	530,542	(27,481)	503,061
2019 convertible senior notes, net - current	—	201,985	201,985
Total current liabilities	20,836	201,985	222,821
2019 convertible senior notes, net - long term ⁽¹⁾	201,985	(201,985)	—
Equity component of currently redeemable convertible notes (Note 5)	—	39,628	39,628
Additional paid-in capital	701,478	(39,628)	661,850
Accumulated deficit	(402,010)	(27,481)	(429,491)
Total stockholders' equity	304,391	(67,109)	237,282
Total liabilities and stockholders' equity ⁽¹⁾	530,542	(27,481)	503,061

(1) \$3.4 million of unamortized issuance cost was reclassified to debt discount in the concurrently filed 2015 10-K/A form that it is filed after the Company's retrospective adoption of *ASU 2015-03, Interest-Imputation of Interest: Simplifying the Presentation of Debt Issuance Costs* in Q1 2016.

The effects of these prior period corrections on the condensed consolidated balance sheet is as follows:

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	As of September 30, 2015		
	As Reported	Adjustments	As Restated
Deferred income taxes	\$ 208,530	\$ (27,481)	\$ 181,049
Total assets	523,807	(27,481)	496,326
Accumulated deficit	(408,351)	(27,481)	(435,832)
Total stockholders' equity	294,288	(27,481)	266,807
Total liabilities and stockholders' equity	523,807	(27,481)	496,326

The corrections did not have any impact on the company's cash flow statements for any period.

Significant Accounting Policies

We describe our significant accounting policies in Note 1 to the financial statements in Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2015. There have been no changes to our significant accounting policies during the first nine months of fiscal 2016.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires the use of estimates and assumptions that affect the amounts reported in the condensed consolidated financial statements and the accompanying notes. Actual results may differ from those estimates.

Reclassifications

Certain prior period amounts have been reclassified to conform to the current period presentation.

Recent Accounting Pronouncements

During the first quarter of 2016, we adopted a new accounting standard, ASU 2015-03, *Interest-Imputation of Interest: Simplifying the Presentation of Debt Issuance Costs* that amends the presentation for debt issuance costs. see Note 5 for details.

In May 2014, the Financial Accounting Standards Board (FASB) issued a new accounting standard that amends the guidance for the recognition of revenue from contracts with customers to transfer goods and services. The FASB has subsequently issued additional clarifying standards to address issues arising from implementation of the new revenue recognition standard. The new revenue recognition standard and clarifying standards are effective for interim and annual periods beginning January 1, 2018, and may be adopted earlier, but not before January 1, 2017. The revenue standards are required to be adopted by taking either a full retrospective or a modified retrospective approach. We are currently evaluating the impact that the revenue standards will have on our consolidated financial statements and determining the transition method that we will apply.

In February 2016, the FASB issued a new accounting standard that amends the guidance for the accounting and disclosure of leases. This new standard requires that lessees recognize the assets and liabilities that arise from leases on the balance sheet and disclose qualitative and quantitative information about their leasing arrangements. The new standard is effective for interim and annual periods beginning on January 1, 2019. We are currently evaluating the impact that this new standard will have on our consolidated financial statements.

In March 2016, the FASB issued *ASU 2016-09, Compensation – Stock Compensation*, which identifies areas for simplification involving several aspects of accounting for stock-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, an option to recognize gross stock compensation expense with actual forfeitures recognized as they occur, as well as certain classifications on the statement of cash flows. ASU No. 2016-09 is effective for reporting periods beginning after December 31, 2016. Early adoption is permitted. We are currently assessing the potential impact that the adoption of ASU No. 2016-09 will have in our condensed consolidated financial statements.

In June 2016, the FASB issued *ASU No. 2016-13, Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments* which requires that expected credit losses relating to financial assets measured on an amortized cost basis and available-for-sale debt securities be recorded through an allowance for credit losses. ASU 2016-13

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limits the amount of credit losses to be recognized for available-for-sale debt securities to the amount by which carrying value exceeds fair value and also requires the reversal of previously recognized credit losses if fair value increases. The new standard will be effective for us on January 1, 2020. Early adoption will be available on January 1, 2019. We are currently evaluating the effect that the updated standard will have on our consolidated financial statements.

In August 2016 the FASB issued *ASU No. 2016-15 Statement of Cash Flows (Topic 230), Classification of Certain Cash Receipts and Cash Payments*. The guidance addresses the classification of cash flows related to (1) debt prepayment or extinguishment costs, (2) settlement of zero-coupon debt instruments or other debt instruments with coupon rates that are insignificant in relation to the effective interest rate of the borrowing, (3) contingent consideration payments made after a business combination, (4) proceeds from the settlement of insurance claims, (5) proceeds from the settlement of corporate-owned life insurance, including bank-owned life insurance, (6) distributions received from equity method investees and (7) beneficial interests in securitization transactions. The guidance also clarifies how the predominance principle should be applied when cash receipts and cash payments have aspects of more than one class of cash flows. The new guidance will be effective for fiscal years beginning after 15 December 2017, and interim periods within those fiscal years. Early adoption is permitted. We are currently evaluating the effect that the updated standard will have on our consolidated financial statements.

Income (Loss) Per Share

Basic income (loss) per share is calculated by dividing net income by the weighted-average number of common shares outstanding during the period. Diluted income (loss) per share is computed based on the sum of the weighted average number of common shares and potentially dilutive common shares outstanding during the period.

Potentially dilutive common shares consist of shares issuable under 2019 convertible senior notes, stock options and restricted stock. 2019 convertible senior notes have a dilutive impact when the average market price of the Company's common stock exceeds the applicable conversion price of the respective notes. Potentially dilutive common shares from stock options and restricted stock are determined using the average share price for each period under the treasury stock method. In addition, the following amounts are assumed to be used to repurchase shares: proceeds from exercise of stock options; the average amount of unrecognized compensation expense for restricted stock; and estimated tax benefits that will be recorded in additional paid-in capital when expenses related to equity awards become deductible. In loss periods, basic net loss per share and diluted net loss per share are identical because the otherwise dilutive potential common shares become anti-dilutive and are therefore excluded.

The following table presents the calculation of weighted average shares used to calculate basic and diluted earnings per share (in thousands):

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2016	2015	2016	2015
Weighted average shares outstanding:	20,886,705	19,886,877	20,805,604	19,741,081
Dilutive potential common shares:				
Restricted stock	134,008	63,324	102,282	55,899
Stock options	792,474	763,856	788,106	922,051
2019 convertible senior notes	1,184,092	745,591	1,046,257	402,941
Shares used to compute diluted income per share	22,997,279	21,459,648	22,742,249	21,121,972
Potentially dilutive shares excluded from calculation due to anti-dilutive effect	3,540,806	3,343,719	3,522,063	3,803,007

Subsequent to September 30, 2016, the Company repurchased 20,000 shares of its common stock for \$1.9 million in the aggregate.

Cash Equivalents

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Cash equivalents consist of all investments with maturities of three months or less from the date of acquisition.

Short-term Investments

Short-term investments primarily consist of investments in debt securities that have effective maturities greater than three months and less than twelve months from the date of acquisition. The Company classifies its short-term investments as "available-for-sale". Such investments are carried at fair value, with unrealized gains and losses included in the statement of comprehensive income (loss). The Company determines the cost of investments based on the specific identification method.

The following table summarizes the various investment categories at September 30, 2016 and December 31, 2015 (in thousands):

	Amortized cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value
September 30, 2016				
Short-term investments				
Bank deposits	\$ 11,999	\$ 9	\$ (2)	\$ 12,006
Corporate bonds	6,014	31	—	6,045
Commercial paper	13,096	4	(9)	13,091
Asset backed securities	63	—	—	63
Municipal Bonds	1,778	13	—	1,791
Corporate equity securities	1,578	2,961	—	4,539
	<u>\$ 34,528</u>	<u>\$ 3,018</u>	<u>\$ (11)</u>	<u>\$ 37,535</u>
December 31, 2015				
Short-term investments				
Bank deposits	\$ 43,043	\$ —	\$ (4)	\$ 43,039
Corporate bonds	41,238	—	(35)	41,203
Commercial paper	1,747	—	—	1,747
Asset backed securities	10,020	—	(5)	10,015
Corporate equity securities	1,843	4,944	—	6,787
	<u>\$ 97,891</u>	<u>\$ 4,944</u>	<u>\$ (44)</u>	<u>\$ 102,791</u>

Inventory

Inventory, which consists of finished goods, is stated at the lower of cost or market value. The Company determines cost using the first-in, first-out method. Inventory levels are analyzed periodically and written down to net realizable value if it has become obsolete, has a cost basis in excess of its expected net realizable value or is in excess of expected requirements. There were no write downs related to obsolete inventory recorded for the three and nine months ended September 30, 2016 and 2015.

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Goodwill and Other Identifiable Intangible Assets

Goodwill and other identifiable intangible assets consist of the following (in thousands):

	September 30, 2016	December 31, 2015
Indefinite lived intangible assets		
Acquired IPR&D	\$ 12,246	\$ 12,556
Goodwill	72,359	12,238
Definite lived intangible assets		
Complete technology	182,577	15,267
Less: Accumulated amortization	(10,465)	(3,762)
Trade name	2,642	2,642
Less: Accumulated amortization	(751)	(652)
Customer relationships	29,600	29,600
Less: Accumulated amortization	(8,414)	(7,304)
Total goodwill and other identifiable intangible assets, net	<u>\$ 279,794</u>	<u>\$ 60,585</u>

The Company tests the carrying value of goodwill in accordance with accounting rules on impairment of goodwill, which require that the Company estimate the fair value of the reporting unit annually, or when impairment indicators exist, and compare such amounts to their respective carrying values to determine if an impairment is required. The Company performed its annual assessment for goodwill impairment for the year ended December 31, 2015, noting no impairment.

Commercial License Rights

Commercial License Rights consist of the following (in thousands):

	September 30, 2016	December 31, 2015
CorMatrix	\$ 17,696	\$ —
Selexis	8,601	8,602
	26,297	8,602
Less: accumulated amortization	(312)	(48)
Total commercial rights, net	<u>\$ 25,985</u>	<u>\$ 8,554</u>

Commercial license rights represent a portfolio of future milestone and royalty payment rights acquired from Selexis in April 2013 and April 2015 and CorMatrix in May 2016. Individual commercial license rights acquired are carried at allocated cost and approximate fair value. The carrying value of the license rights will be reduced on a pro-rata basis as revenue is realized over the term of the agreement. Declines in the fair value of individual license rights below their carrying value that are deemed to be other than temporary are reflected in earnings in the period such determination is made. As of September 30, 2016, management does not believe there have been any events or circumstances indicating that the carrying amount of its commercial license rights may not be recoverable.

Relationships between the CorMatrix Parties

As previously disclosed in Ligand's filings, Jason Aryeh is a director of both Ligand and CorMatrix. Mr. Aryeh beneficially owns equity of CorMatrix representing less than 1% of CorMatrix's outstanding equity. Mr. Aryeh recused himself from all of the board's consideration of the purchase agreement between the Company and CorMatrix, including any financial analysis, the terms of the purchase agreement and the vote to approve the Purchase Agreement and the related transactions.

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Property and Equipment

Property and equipment is stated at cost and consists of the following (in thousands):

	September 30, 2016	December 31, 2015
Lab and office equipment	\$ 1,068	\$ 2,248
Leasehold improvements	1,686	273
Computer equipment and software	568	632
	3,322	3,153
Less accumulated depreciation and amortization	(1,496)	(2,781)
Total property and equipment, net	\$ 1,826	\$ 372

Depreciation of equipment is computed using the straight-line method over the estimated useful lives of the assets, which range from three to ten years. Leasehold improvements are amortized using the straight-line method over the shorter of the estimated useful lives or the related lease term. Depreciation expense of \$0.1 million was recognized for each of the nine months ended September 30, 2016 and 2015, which is included in operating expenses.

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	September 30, 2016	December 31, 2015
Compensation	\$ 2,150	\$ 1,711
Professional fees	640	726
Amounts owed to former licensees	980	915
Royalties owed to third parties	1,028	823
Other	1,877	1,222
Total accrued liabilities	\$ 6,675	\$ 5,397

Contingent Liabilities

In connection with the Company's acquisition of CyDex in January 2011, the Company recorded a contingent liability, for amounts potentially due to holders of the CyDex CVRs and former license holders. The liability is periodically assessed based on events and circumstances related to the underlying milestones, royalties and material sales. Any change in fair value is recorded in the Company's consolidated statement of operations. The carrying amount of the liability may fluctuate significantly and actual amounts paid under the CVR agreements may be materially different than the carrying amount of the liability. The fair value of the liability at September 30, 2016 and December 31, 2015 was \$6.7 million and \$9.5 million, respectively. The Company recorded a fair-value adjustment to increase the liability by \$1.2 million and \$1.6 million for the three and nine months ended September 30, 2016, respectively. The Company paid CyDex CVR holders \$1.4 million and \$4.4 million for the three and nine months ended September 30, 2016. The Company recorded a fair-value adjustment to increase the liability by \$0.9 million and \$3.1 million for the three and nine months ended September 30, 2015, respectively. The Company paid CyDex CVR holders \$0.8 million and \$3.9 million during the three and nine months ended September 30, 2015, respectively.

In connection with the Company's acquisition of Metabasis in January 2010, the Company issued to Metabasis stockholders four tradable CVRs, one CVR from each of four respective series of CVR, for each Metabasis share. The CVRs will entitle Metabasis stockholders to potential cash payments as frequently as every six months as cash is received by the Company from proceeds from the sale or partnering of any of the Metabasis drug development programs, among other triggering events. The fair values of the CVRs are remeasured at each reporting date through the term of the related agreement. Any change in fair value is recorded in the Company's consolidated statement of operations. The carrying amount of the liability may fluctuate significantly based upon quoted market prices and actual amounts paid under the agreements may be

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materially different than the carrying amount of the liability. The fair value of the liability was estimated to be \$2.3 million and \$4.0 million as of September 30, 2016 and December 31, 2015, respectively. The Company recorded a decrease in the liability for Metabasis-related CVRs of \$0.2 million and an increase of \$1 million for the three and nine months ended September 30, 2016. The Company paid Metabasis CVR holders \$2.6 million for the nine months ended September 30, 2016. No payments were made to Metabasis CVR holders for the three months ended September 30, 2016. The Company recorded a decrease in the liability of Metabasis-related CVRs of \$3.2 million and an increase of \$1.9 million for the three and nine months ended September 30, 2015, respectively. The Company paid Metabasis CVR holders \$0.5 million and \$0.8 million during the three and nine months ended September 30, 2015.

Stock-Based Compensation

Stock-based compensation expense for awards to employees and non-employee directors is recognized on a straight-line basis over the vesting period until the last tranche vests. The following table summarizes stock-based compensation expense recorded as components of research and development expenses and general and administrative expenses for the periods indicated (in thousands):

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2016	2015	2016	2015
Stock-based compensation expense as a component of:				
Research and development expenses	\$ 2,845	\$ 957	\$ 6,112	\$ 3,131
General and administrative expenses	2,486	1,879	7,578	6,380
	<u>\$ 5,331</u>	<u>\$ 2,836</u>	<u>\$ 13,690</u>	<u>\$ 9,511</u>

The fair-value for options that were awarded to employees and directors was estimated at the date of grant using the Black-Scholes option valuation model with the following weighted-average assumptions:

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2016	2015	2016	2015
Risk-free interest rate	1.3%	2%	1.5%	1.7%-2.0%
Dividend yield	—	—	—	—
Expected volatility	49%	50%	50%	50%-58%
Expected term	6.7	6.5	6.6	6.6
Forfeiture rate	5.0%	8.5%	5.0%	8.5%

Lease Obligations

We describe our operating lease obligations in Note 4 to the financial statements in Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2015. As of December 31, 2015, the Company had lease exit obligations of \$0.9 million. As of September 30, 2016, the Company no longer records a lease obligation with respect to its vacated space expiring in June of 2019 as the sublease proceeds offset the estimated lease exist obligation. There were no other significant changes in our operating lease commitments during the first nine months of 2016.

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Convertible Debt

In August 2014, the Company completed a \$245.0 million offering of 2019 Convertible Senior Notes, which bear interest at 0.75%. The Company accounted for the 2019 Convertible Senior Notes by separating the liability and equity components of the instrument in a manner that reflects the Company's nonconvertible debt borrowing rate. As a result, the Company assigned a value to the debt component of the 2019 Convertible Senior Notes equal to the estimated fair value of similar debt instruments without the conversion feature, which resulted in the Company recording the debt instrument at a discount. The Company is amortizing the debt discount over the life of the 2019 Convertible Senior Notes as additional non-cash interest expense utilizing the effective interest method.

2. Business Combination

On January 8, 2016, the Company acquired substantially all of the assets and liabilities of OMT. OMT is a biotechnology company engaged in the genetic engineering of animals for the generation of human therapeutic antibodies through its OmniAb® technology, which currently offers three transgenic animal platforms for license, including OmniRat®, OmniMouse® and OmniFlic®. The transaction, which was accounted for as a business combination, initially added 16 partnerships to the Company's portfolio and provides the Company with opportunities for further licensing and collaborations in the area.

The aggregate acquisition consideration was \$173.4 million, consisting of (in thousands, except per share amounts):

Cash consideration	\$	96,006
Total share consideration:		
Actual number of shares issued		790
Multiplied by: Ligand closing share price on January 8, 2016	\$	97.92
Total share consideration		<u>77,373</u>
Total consideration	\$	<u>173,379</u>

The acquisition consideration is subject to certain customary post-closing adjustments up to 15 months from January 8, 2016, in accordance with the terms and subject to the conditions contained in the merger agreement between the Company and OMT.

The acquisition consideration was preliminarily allocated to the acquisition date fair values of acquired assets and assumed liabilities as follows (in thousands):

Cash and cash equivalents	\$	3,504
Accounts receivable		5
Income tax receivable		140
Prepaid expenses and other current assets		2
Deferred tax liabilities, net		(56,114)
Intangible asset with finite life - core technology		167,000
Liabilities assumed		(1,279)
Goodwill		60,121
Total consideration	\$	<u>173,379</u>

The fair value of the core technology, or OMT's OmniAb technology, was based on the discounted cash flow method that estimated the present value of a hypothetical royalty stream derived from the licensing of the OmniAb technology. These projected cash flows were discounted to present value using a discount rate of 15.5%. The fair value of the core technology is being amortized on a straight-line basis over the estimated useful life of 20 years.

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The excess of the acquisition date consideration over the fair values assigned to the assets acquired and the liabilities assumed was \$60.1 million and was recorded as goodwill, which is not deductible for tax purposes and is primarily attributable to OMT's potential revenue growth from combining the OMT and Ligand businesses and workforce, as well as the benefits of access to different markets and customers.

The purchase price allocations were prepared on a preliminary basis and are subject to change as additional information becomes available concerning the fair value and tax basis of the assets acquired and liabilities assumed. Any measurement period adjustments to the OMT purchase price allocation will be made as soon as practicable but no later than one year from the date of acquisition.

The following table presents supplemental pro forma information for the three and nine months ended September 30, 2016 and September 30, 2015, as if the acquisition of OMT had occurred on January 1, 2015 (in thousands except for income per share):

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2016	2015	2016	2015
Revenue	\$ 21,619	\$ 18,824	\$ 73,263	\$ 55,795
Net (loss) income	\$ 1,051	196,354	\$ 3,759	\$ 216,900
Basic (loss) income per share:	\$ 0.05	\$ 9.87	\$ 0.18	\$ 10.99
Diluted (loss) income per share:	\$ 0.05	\$ 9.15	\$ 0.17	\$ 10.27

The unaudited pro forma consolidated results include pro forma adjustments that assume the acquisition occurred on January 1, 2015. The primary adjustments include: (i) the \$0.3 million and \$0.9 million for the three and nine months ended September 30, 2015, respectively, for share based compensation expenses related to the stock awards issued to the retained OMT employees after the acquisition, (ii) additional intangible amortization expense of \$2.1 million and \$6.3 million was included in the three and nine months ended September 30, 2015, respectively and (iii) a platform license fee of \$3.0 million paid by OMT during the nine months ended September 30, 2015. The license agreement was terminated upon acquisition by Ligand. The adjustments also include \$2.5 million license revenue recognized by OMT from January 1, 2016 to the acquisition date. The unaudited pro forma consolidated results are not necessarily indicative of what our consolidated results of operations actually would have been had we completed the acquisition on January 1, 2015. In addition, the unaudited pro forma consolidated results do not purport to project the future results of operations of the combined company nor do they reflect the expected realization of any cost savings associated with the acquisition.

3. Fair Value Measurements

The Company measures certain financial assets and liabilities at fair value on a recurring basis. Fair value is a market-based measurement that should be determined using assumptions that market participants would use in pricing an asset or liability. The Company establishes a three-level hierarchy to prioritize the inputs used in measuring fair value. The levels are described below with level 1 having the highest level input that is significant to the measurement and level 3 having the lowest:

Level 1 - Quoted prices in active markets;

Level 2 - Quoted prices for similar assets or liabilities in active markets, or quoted prices for identical or similar assets or liabilities in markets that are not active, or Inputs other than the quoted prices in active markets that are observable either directly or indirectly; and

Level 3 - Unobservable inputs in which there is little or no market data, which require the Company to develop its own assumptions.

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The following table provides a summary of the carrying value of assets and liabilities that are measured at fair value on a recurring basis as of September 30, 2016 (in thousands). There were no transfers between Level 1 and Level 2 securities during the nine months ended September 30, 2016:

Fair Value Measurements at Reporting Date Using				
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Short-term investments ⁽²⁾	\$ 37,535	\$ 4,539	\$ 32,996	\$ —
Note receivable Viking ⁽³⁾	3,207	—	—	3,207
Investment in warrants ⁽⁴⁾	684	684	—	—
Total assets	\$ 41,426	\$ 5,223	\$ 32,996	\$ 3,207
Liabilities:				
Current contingent liabilities-CyDex ⁽⁵⁾	\$ 5,079	\$ —	\$ —	\$ 5,079
Long-term contingent liabilities-CyDex ⁽⁵⁾	1,634	—	—	1,634
Long-term contingent liabilities-Metabasis ⁽⁶⁾	2,299	—	2,299	—
Liability for amounts owed to former licensees ⁽⁷⁾	536	536	—	—
Total liabilities	\$ 9,548	\$ 536	\$ 2,299	\$ 6,713

The following table provides a summary of the assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2015 (in thousands):

Fair Value Measurements at Reporting Date Using				
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs * (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash equivalents ⁽¹⁾	\$ 3,015	\$ —	\$ 3,015	\$ —
Short-term investments ⁽²⁾	92,775	6,786	85,989	—
Viking note receivable ⁽³⁾	4,782	—	—	4,782
Total assets	\$ 100,572	\$ 6,786	\$ 89,004	\$ 4,782
Liabilities:				
Current contingent liabilities-CyDex ⁽⁵⁾	\$ 7,812	\$ —	\$ —	\$ 7,812
Current contingent liabilities-Metabasis ⁽⁶⁾	2,602	—	2,602	—
Long-term contingent liabilities-Metabasis ⁽⁶⁾	1,355	—	1,355	—
Long-term contingent liabilities-CyDex ⁽⁵⁾	1,678	—	—	1,678
Liability for amounts owed to former licensees ⁽⁷⁾	794	794	—	—
Total liabilities	\$ 14,241	\$ 794	\$ 3,957	\$ 9,490

- (1) Highly liquid investments with maturities less than 90 days from the purchase date are recorded as cash equivalents that are classified as Level 2 of the fair value hierarchy, as these investment securities are valued based upon quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market.
- (2) Investments in equity securities, which the Company received as a result of event-based and upfront payments from licensees, are classified as level 1 as the fair value is determined using quoted market prices in active markets for the same securities. Short-term investments in marketable securities with maturities greater than 90 days are classified as level 2 of the fair value hierarchy, as these investment securities are valued based upon quoted prices for identical or

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similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market.

- (3) The fair value of the convertible note receivable from Viking was determined using a probability weighted option pricing model using a lattice methodology. The fair value is subjective and is affected by certain significant input to the valuation model such as the estimated volatility of the common stock, which was estimated to be 75% at September 30, 2016. Changes in these assumptions may materially affect the fair value estimate.
- (4) Investment in warrants, which the Company received as a result of Viking's partial repayment of the Viking note receivable and the Company's purchase of Viking common stock and warrants in April 2016, are classified as level 1 as the fair value is determined using quoted market prices in active markets for the same securities.
- (5) The fair value of the liabilities for CyDex contingent liabilities were determined based on the income approach. To the extent the estimated future income may vary significantly given the long-term nature of the estimate, the Company utilizes a Monte Carlo model. The fair value is subjective and is affected by changes in inputs to the valuation model including management's estimates of timing and probability of achievement of certain revenue thresholds and developmental and regulatory milestones which may be achieved and affect amounts owed to former license holders and CVR holders. Changes in these assumptions can materially affect the fair value estimate.
- (6) The liability for CVRs for Metabasis are determined using quoted prices in an market that is not active for the underlying CVR.
- (7) The liability for amounts owed to former licensees are determined using quoted market prices in active markets for the underlying investment received from a partner, a portion of which is owed to former licensees.

The following table represents significant unobservable inputs used in determining the fair value of contingent liabilities assumed in the acquisition of CyDex:

	September 30, 2016	December 31, 2015
Annual revenue subject to revenue sharing ⁽¹⁾	\$28.0 million	\$22.5 million
Revenue volatility	25%	25%
Average probability	92%	73%
Sales beta	0.30	0.40
Credit rating	BB	BB
Equity risk premium	6%	6%

- (1) Revenue subject to revenue sharing represent management's estimate of the total annual revenue subject to revenue sharing (i.e. annual revenues in excess of \$15 million) through December 31, 2016, which is the term of the CVR agreement.

A reconciliation of the level 3 financial instruments as of September 30, 2016 is as follows (in thousands):

Assets:

Fair value of level 3 financial instrument assets as of December 31, 2015	\$ 4,782
Viking note receivable fair market value adjustment	(215)
Cash payment received as partial repayment of note receivable	(300)
Fair market value of stock received as partial repayment of note receivable	(1,060)
Fair value of level 3 financial instrument assets as of September 30, 2016	<u>\$ 3,207</u>

Liabilities:

Fair value of level 3 financial instrument liabilities as of December 31, 2015	\$ 9,490
Payments to CVR and other former license holders	(4,413)
Fair value adjustments to contingent liabilities	1,636
Fair value of level 3 financial instrument liabilities as of September 30, 2016	<u>\$ 6,713</u>

Other Fair Value Measurements

2019 Convertible Senior Notes

In August 2014, the Company issued \$245.0 million aggregate principal amount of its 2019 Convertible Senior Notes. The Company uses a quoted rate in a market that is not active, which is classified as a Level 2 input, to estimate the current fair value of its 2019 Convertible Senior Notes. The estimated fair value of the 2019 Senior Convertible Notes was \$357.6 million as of September 30, 2016. The carrying value of the notes does not reflect the market rate. See Note 5 *Financing Arrangements* for additional information.

Viking Therapeutics

The Company records its investment in Viking under the equity method of accounting. The investment is subsequently adjusted for the Company's share of Viking's operating results, and if applicable, cash contributions and distributions. See Note 4 *Investment in Viking Therapeutics* for additional information. The market value of the Company's investment in Viking was \$8.8 million as of September 30, 2016. The carrying value of the investment in Viking does not reflect the market value.

4. Investment in Viking Therapeutics

In 2014, the Company entered into a MLA with Viking to license the rights to five of the Company's programs to Viking. Under the terms of the MLA, no consideration was exchanged upon execution, but rather Viking agreed to issue shares of Viking common stock with an aggregate value of approximately \$29.2 million upon consummation of Viking's IPO. As part of this transaction, the Company also extended a \$2.5 million convertible loan to Viking under a LSA. As a result of these transactions, the Company determined it held a variable interest in Viking. The Company considered certain criteria in the accounting guidance for VIEs, and determined that Viking was a VIE and Ligand was the primary beneficiary of Viking. As a result, the Company consolidated Viking on its financial statements from May 2014 through May 2015, the effective date of Viking's IPO. The Company recorded 100% of the losses incurred as net loss attributable to noncontrolling interest because it was the primary beneficiary with no equity interest in the VIE.

In May 2015, Viking completed the Viking IPO and issued the Company approximately 3.7 million shares of Viking common stock with an aggregate value of \$29.2 million based on the IPO price of \$8.00 per share. In connection with the Viking IPO, the Company purchased 1.1 million shares of Viking common stock for an aggregate price of \$9.0 million at the initial public offering price. Upon completion of Viking's IPO, the Company determined that Viking was no longer a VIE and the Company did not have any other element of control that would require consolidation of Viking. In May 2015, the Company deconsolidated Viking and began to account for its equity investment in Viking under the equity method and records its proportional share of Viking gains and losses in Loss from Viking Therapeutics in the Company's consolidated statement of operations. The Company owned an aggregate of 31.4% of the outstanding common stock of Viking at September 30, 2016.

In January 2016, the Company entered into an amendment to the LSA with Viking to extend the maturity of the convertible loan to May 2017, reduce the interest rate from 5.0% to 2.5%, and extend the lock up period by one year such that the Company may not sell, transfer, or dispose of any Viking securities prior to January 23, 2017. Additionally, upon the consummation of a subsequent capital financing transaction, Viking will be required to repay \$1.5 million of the Viking Note obligation to the Company, with at least \$0.3 million to be paid in cash and the remaining amount to be paid in the form and at the price of the Viking equity securities sold in the financing transaction. Upon maturity or further payments, the Company may elect to receive equity of Viking common stock or cash equal to 200% of the principal amount plus accrued and unpaid interest. The Company has opted to account for the Viking convertible note receivable at fair value.

In April 2016, Viking closed its underwritten public offering of 7.5 million shares of common stock and warrants to purchase up to 7.5 million shares of its common stock at a price of \$1.25 per share of its common stock and related warrants. The warrant has an exercise price of \$1.50 per share, immediately exercisable and will expire on April 13, 2021. As part of this public offering, the Company purchased 560,000 shares of common stock and warrants to purchase 560,000 shares of Viking's common stock for a total purchase price of \$0.7 million. The purchased shares of common stock and warrants are subject to the same terms as the shares issued in this offering. In addition, on April 13, 2016, pursuant to the terms of the amendment to the LSA that was entered in January 2016 between Ligand and Viking, Viking repaid \$0.3 million of the convertible notes in cash, and issued the Company 960,000 shares of its common stock and warrants to purchase 960,000 shares of its common stock as

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repayment of \$1.2 million of the convertible notes. The shares received as part of the repayment, like all Viking securities held by the Company, are subject to a lock-up period that ends on January 23, 2017 in accordance with the amended LSA. A gain of \$0.2 million representing the fair market value of the warrants is included within other income for the quarter ended September 30, 2016. As of September 30, 2016, the aggregate fair value of the note receivable was \$3.2 million. The Company recorded a \$0.2 million decrease in the fair value of the Viking convertible note in "Other Income" on its Condensed and Consolidated Statement of Operations for the nine months ended September 30, 2016. See Note 3, *Fair Value Measurements* for additional details.

The Company's ownership in Viking decreased to 32.7% after the public offering and the repayment of the convertible notes. Accordingly, the book value of the Company's equity method investment in Viking decreased by \$10.0 million. The resulting net loss was recognized in Loss from Viking Therapeutics in the Company's consolidated statement of operations for the nine months ended September 30, 2016. The Company's ownership in Viking decreased to 31.4% during the third quarter of 2016 resulting in a loss of \$0.3 million which was recognized in Loss from Viking Therapeutics in the Company's consolidated statement of operations for the three months ended September 30, 2016.

The Company reviews its investment in Viking on a regular basis and assesses whether events, changes in circumstances or the passage of time, in management's judgment, indicate that a loss in the market value of the investment may be other than temporary. This might include, but would not necessarily be limited to, the period of time during which the carrying value of our investment is significantly above the observed market value, a deterioration in Viking's financial condition, or an adverse event relating to its lead clinical programs. The Company has the ability to hold its investment in Viking at the current market value, and we do not believe there was an other-than-temporary impairment for the periods ended September 30, 2016 or December 31, 2015.

5. Financing Arrangements

0.75% Convertible Senior Notes Due 2019

In August 2014, the Company issued \$245.0 million aggregate principal amount of its 2019 Convertible Senior Notes, resulting in net proceeds of \$239.3 million. The 2019 Convertible Senior Notes are convertible into common stock at an initial conversion rate of 13.3251 shares per \$1,000 principal amount of convertible notes, subject to adjustment upon certain events, which is equivalent to an initial conversion price of approximately \$75.05 per share of common stock. The notes bear cash interest at a rate of 0.75% per year, payable semi-annually.

Holders of the 2019 Convertible Senior Notes may convert the notes at any time prior to the close of business on the business day immediately preceding May 15, 2019, under any of the following circumstances:

(1) during any fiscal quarter (and only during such fiscal quarter) commencing after December 31, 2014, if, for at least 20 trading days (whether or not consecutive) during the 30 consecutive trading day period ending on the last trading day of the immediately preceding fiscal quarter, the last reported sale price of the Company's common stock on such trading day is greater than 130% of the conversion price on such trading day;

(2) during the five business day period immediately following any ten consecutive trading day period, in which the trading price per \$1,000 principal amount of notes was less than 98% of the product of the last reported sale price of the Company's common stock on such trading day and the conversion rate on each such trading day; or

(3) upon the occurrence of certain specified corporate events as specified in the indenture governing the notes.

As of September 30, 2016, the Company's last reported sale price has exceeded the 130% threshold described above and accordingly the Convertible Notes have been classified as a current liability as of September 30, 2016. As a result, the related unamortized discount of \$32.1 million was classified as temporary equity component of currently redeemable convertible notes on our Condensed Consolidated Balance Sheet. The determination of whether or not the Convertible Notes are convertible as described above is made each quarter until maturity, conversion or repurchase. It is possible that the Convertible Notes may not be convertible in future periods, in which case the Convertible Notes would be classified as long-term debt, unless one of the other conversion events described above were to occur.

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On or after May 15, 2019 until the close of business on the second scheduled trading day immediately preceding August 15, 2019, holders of the notes may convert all or a portion of their notes at any time, regardless of the foregoing circumstances. Upon conversion, Ligand must deliver cash to settle the principal and may deliver cash or shares of common stock, at the option of the Company, to settle any premium due upon conversion.

In accordance with accounting guidance for debt related to conversion and other options, the Company separately accounted for the debt and equity components of the 2019 Convertible Senior Notes by allocating the \$245.0 million total proceeds between the debt component and the embedded conversion option, or equity component, due to Ligand's ability to settle the 2019 Convertible Senior Notes in cash for the principal portion and to settle any premium in cash or common stock, at the Company's election. The debt allocation was performed in a manner that reflected the Company's non-convertible borrowing rate for similar debt of 5.83% derived from independent valuation analysis. The initial debt value of \$192.5 million accretes at 5.83% to reach \$245.0 million at the maturity date. The equity component of the 2019 Convertible Senior Notes was recognized as a debt discount and represents the difference between the \$245.0 million proceeds at issuance of the 2019 Convertible Senior Notes and the fair value of the debt allocation on their respective issuance dates. The debt discount is amortized to interest expense using the effective interest method over the expected life of a similar liability without an equity component. The notes will have a dilutive effect to the extent the average market price per share of common stock for a given reporting period exceeds the conversion price of \$75.05 per share. As of September 30, 2016, the "if-converted value" exceeded the principal amount of the 2019 Convertible Senior Notes by \$88.2 million.

In connection with the issuance of the 2019 Convertible Senior Notes, the Company incurred \$5.7 million of issuance costs, which primarily consisted of underwriting, legal and other professional fees. The portions of these costs allocated to the equity components totaling \$1.2 million were recorded as a reduction to additional paid-in capital. The portions of these costs allocated to the liability components totaling \$4.5 million are recorded net of the liability component on the balance sheet beginning in 2016 in accordance with ASU 2015-03, *Interest-Imputation of Interest: Simplifying the Presentation of Debt Issuance Costs*. The portions allocated to the liability components are amortized to interest expense using the effective interest method over the expected life of the 2019 Convertible Senior Notes.

The Company determined the expected life of the debt discount for the 2019 Convertible Senior Notes to be equal to the original five-year term of the notes. The carrying value of the equity component related to the 2019 Convertible Senior Notes as of September 30, 2016 and December 31, 2015, net of issuance costs, was \$51.3 million.

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Convertible Bond Hedge and Warrant Transactions

In August 2014, in connection with the issuance of the 2019 Convertible Senior Notes, to minimize the impact of potential dilution to the Company's common stock upon conversion of such notes, the Company entered into convertible bond hedges and sold warrants covering approximately 3,264,643 shares of its common stock. The convertible bond hedges have an exercise price of \$75.05 per share and are exercisable when and if the 2019 Convertible Senior Notes are converted. If upon conversion of the 2019 Convertible Senior Notes, the price of the Company's common stock is above the exercise price of the convertible bond hedges, the counterparties will deliver shares of common stock and/or cash with an aggregate value approximately equal to the difference between the price of common stock at the conversion date and the exercise price, multiplied by the number of shares of common stock related to the convertible bond hedge transaction being exercised. The convertible bond hedges and warrants described below are separate transactions entered into by the Company and are not part of the terms of the 2019 Convertible Senior Notes. Holders of the 2019 Convertible Senior Notes and warrants will not have any rights with respect to the convertible bond hedges. The Company paid \$48.1 million for these convertible bond hedges and recorded the amount as a reduction to additional paid-in capital.

Concurrently with the convertible bond hedge transactions, the Company entered into warrant transactions whereby it sold warrants to acquire, approximately 3,264,643 shares of common stock with an exercise price of approximately \$125.08 per share, subject to certain adjustments. The warrants have various expiration dates ranging from November 13, 2019 to April 22, 2020. The warrants will have a dilutive effect to the extent the market price per share of common stock exceeds the applicable exercise price of the warrants, as measured under the terms of the warrant transactions. The Company received \$11.6 million for these warrants and recorded this amount to additional paid-in capital. The common stock issuable upon exercise of the warrants will be in unregistered shares, and the Company does not have the obligation and does not intend to file any registration statement with the SEC registering the issuance of the shares under the warrants.

The carrying values and the fixed contractual coupon rates of the Company's financing arrangements as of September 30, 2016 and December 31, 2015 were as follows (in thousands):

	<u>September 30, 2016</u>	<u>December 31, 2015</u>
<i>2019 Convertible Senior Notes</i>		
Principal amount outstanding	\$ 245,000	\$ 245,000
Unamortized discount	(34,885)	(43,015)
Total notes payable	\$ 210,115	\$ 201,985

6. Income Tax

As of September 30, 2015, the Company concluded that it was more likely than not that a substantial portion of its deferred tax assets would be realized through future taxable income. The Company's income tax provision of \$191.9 million and \$191.6 million for the three and nine months ended September 30, 2015, respectively, included income tax expense and a discrete income tax benefit related to the release of a majority of the Company's valuation allowance and various adjustments to its deferred tax assets, including studies validating the Company's tax attributes and adjustments resulting from the tax return filings during the quarter.

The Company's income tax expense from continuing operations for the three months ended September 30, 2016 was \$0.2 million, or \$0.01 per diluted share. The Company recorded an income tax benefit of \$28.0 thousand for the nine months ended September 30, 2016. The Company's income tax expense from discontinued operations for the nine months ended September 30, 2016 was \$0.4 million.

The Company estimates its annual effective income tax rate for continuing operations to be approximately 42% for 2016, compared to the 509.5% effective income tax rate for 2015. The estimated effective tax rate for 2016 is different from the federal statutory rate primarily as a result of significant permanent book-to-tax differences and state taxes. The permanent differences include non-taxable contingent consideration income (expense) recorded related to the change in market value of contingent liabilities. Any significant contingent consideration expense or income will result in a significantly higher or lower effective tax rate because contingent consideration expense is largely not deductible for tax purposes and contingent consideration income is not taxable. Other permanent differences between financial statement income and taxable income relate to items such as stock compensation, meals and entertainment charges, and compensation of officers. The primary

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difference in the estimated effective tax rate in 2016 compared to 2015 relates to the release of the Company's valuation allowance in 2015.

The Company maintains a valuation allowance in the amount of \$8.9 million against certain U.S. state NOLs, federal NOLs arising from Pre-ASC 718 excess stock compensation benefits and federal research and development tax credits. Each reporting period, the Company evaluates the need for a valuation allowance on our deferred tax assets by jurisdiction and adjusts our estimates as more information becomes available. The Company will reassess the ability to realize the deferred tax assets on a quarterly basis. If it is more likely than not that it will not realize the recognized deferred tax assets, then all or a portion of the valuation allowance may need to be re-established, which would result in a charge to tax expense. Conversely if new events indicate that it is more likely than not that we will realize additional deferred tax assets, then all or a portion of the remaining valuation allowance may be released, which would result in a tax benefit.

As of September 30, 2016, the Company had unrecognized tax benefits of approximately \$33.5 million related to uncertain tax positions that, if recognized, would result in adjustments to the related deferred tax assets and reduce our annual effective tax rate, subject to the remaining valuation allowance.

The Company files income tax returns in the U.S. and in various state jurisdictions with varying statutes of limitations. The Company is no longer subject to income tax examination by tax authorities for years prior to 2011; however, its net operating loss and research credit carry-forwards arising prior to that year are subject to adjustment. It is the Company's policy to recognize interest expense and penalties related to income tax matters as a component of income tax expense. As of September 30, 2016, there was no material accrued interest related to uncertain tax positions.

7. Stockholders' Equity

The Company grants options and awards to employees and non-employee directors pursuant to a stockholder approved stock incentive plan, which is described in further detail in Note 8, Stockholders' Equity, of Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

The following is a summary of the Company's stock option and restricted stock activity and related information:

	Stock Options		Restricted Stock Award	
	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Grant Date Fair Value
Balance as of December 31, 2015	1,683,341	\$ 34.23	130,749	\$ 60.36
Granted	263,489	92.09	234,855	95.31
Exercised	(130,185)	34.65	(53,121)	93.49
Forfeited	(30,115)	60.17	(2,183)	71.03
Balance as of September 30, 2016	1,786,530	\$ 42.29	310,300	\$ 76.02

Net cash received from options exercised during the nine months ended September 30, 2016 and 2015 was approximately \$4.5 million and \$7.3 million, respectively. Tax deductions for stock options and restricted stock which have exceeded stock based compensation expense in previous years have not been recognized by the Company. The Company will monitor the utilization of the net operating losses and recognize the excess tax deduction when that deduction reduces taxes payable.

As of September 30, 2016, 951,526 shares were available for future option grants or direct issuance under the Company's 2002 Stock Incentive Plan, as amended.

Employee Stock Purchase Plan

The Company's Amended ESPP allows participating employees to purchase up to 1,250 shares of Ligand common stock during each offering period, but in no event may a participant purchase more than 1,250 shares of common stock during any calendar year. The length of each offering period is six months, and employees are eligible to participate in the first

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offering period beginning after their hire date. This plan is described in further detail in Note 8, Stockholders' Equity, of Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

There were 1,241 shares of common stock issued under the amended ESPP during the nine months ended September 30, 2016. There were no shares of common stock issued under the amended ESPP plan during the nine months ended September 30, 2015. As of September 30, 2016, 71,126 shares were available for future purchases under the Amended ESPP.

Issuance of common stock

In conjunction with the acquisition of OMT, the Company issued 790,163 shares of its common stock.

8. Litigation

The Company records an estimate of a loss when the loss is considered probable and estimable. Where a liability is probable and there is a range of estimated loss and no amount in the range is more likely than any other number in the range, the Company records the minimum estimated liability related to the claim in accordance with *FASB ASC Topic 450 Contingencies*. As additional information becomes available, the Company assesses the potential liability related to its pending litigation and revises its estimates. Revisions in the Company's estimates of potential liability could materially impact its results of operations.

Securities Litigation

In 2012, a federal securities class action and shareholder derivative lawsuit was filed in Pennsylvania alleging that the Company and its CEO assisted various breaches of fiduciary duties based on the Company's purchase of a licensing interest in a development-stage pharmaceutical program from the Genaera Liquidating Trust in 2010 and the Company's subsequent sale of half of its interest in the transaction to Biotechnology Value Fund, Inc. Plaintiff filed a second amended complaint in February 2015, which the Company moved to dismiss in March 2015. The district court granted the motion to dismiss on November 11, 2015. The plaintiff has appealed that ruling to the Third Circuit. The Company intends to continue to vigorously defend against the claims against the Company and its CEO. The outcome of the matter is not presently determinable.

Paragraph IV Certification by Par Pharmaceuticals

On January 7, 2016, the Company received a paragraph IV certification from Par Sterile Products, LLC, a subsidiary of Par Pharmaceuticals, Inc., or Par, advising us that it had filed an ANDA with the FDA seeking approval to market a generic version of Merck's NOXAFIL-IV product. On October 31, 2016, the parties entered into a consent judgment dismissing all claims, counterclaims, affirmative defenses and demands. The parties have reported to the court that they entered into a confidential settlement agreement, and that they submitted the agreement to the Federal Trade Commission and the United States Department of Justice pursuant to Section 112(a) of the Medicare Prescription Drug, Improvement and Modernization Act of 2003.

ITEM 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Caution: This discussion and analysis may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed in Part II, Item 1A: "Risk Factors." This outlook represents our current judgment on the future direction of our business. These statements include those related to our Captisol-related revenues, our Promacta, Kyprolis, and other product royalty revenues, product returns, and product development. Actual events or results may differ materially from our expectations. For example, there can be no assurance that our revenues or expenses will meet any expectations or follow any trend(s), that we will be able to retain our key employees or that we will be able to enter into any strategic partnerships or other transactions. We cannot assure you that we will receive expected Promacta, Kyprolis, Captisol and other product revenues to support our ongoing business or that our internal or partnered pipeline products will progress in their development, gain marketing approval or achieve success in the market. In addition, ongoing or future arbitration, or litigation or disputes with third parties may have a material adverse effect on us. Such risks and uncertainties, and others, could cause actual results to differ materially from any future performance suggested. We

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undertake no obligation to make any revisions to these forward-looking statements to reflect events or circumstances arising after the date of this quarterly report. This caution is made under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Our trademarks, trade names and service marks referenced herein include Ligand. Each other trademark, trade name or service mark appearing in this quarterly report belongs to its owner.

References to "Ligand Pharmaceuticals Incorporated," "Ligand," the "Company," "we" or "our" include Ligand Pharmaceuticals Incorporated and our wholly owned subsidiaries.

Overview

We are a biotechnology company with a business model based on developing or acquiring assets which generate royalty, milestone or other passive revenue for Ligand and using a lean corporate cost structure. By diversifying our portfolio of assets across numerous technology types, therapeutic areas, drug targets, and industry partners, we offer investors an opportunity for broad exposure to multiple pharmaceutical and biotechnology assets without the risk associated with developing only one or a limited number of drugs. These therapies address the unmet medical needs of patients for a broad spectrum of diseases including thrombocytopenia, multiple myeloma, hepatitis, ventricular fibrillation, muscle wasting, Alzheimer's disease, dyslipidemia, diabetes, anemia, asthma, FSGS, menopausal symptoms and osteoporosis. Our partners include several of the world's leading pharmaceutical companies such as Novartis, Amgen, Merck, Pfizer, Baxter, and Eli Lilly.

Significant Developments

Portfolio Program Progress

Promacta®/Revolade®

- Novartis announced Q3 2016 net sales of Promacta® of \$168 million, a \$51 million or 44% increase over Q3 2015. Novartis also announced that Promacta is now approved in more than 100 countries.

Kyprolis® (carfilzomib), an Amgen Product Utilizing Captisol

- On September 27, 2016, Amgen announced top-line results of the Phase 3 CLARION trial, which evaluated an investigational regimen of Kyprolis® (carfilzomib), melphalan and prednisone (KMP) versus Velcade® (bortezomib), melphalan and prednisone (VMP) for 54 weeks in patients with newly diagnosed multiple myeloma who were ineligible for hematopoietic stem-cell transplant. The trial did not meet the primary endpoint of superiority in progression-free survival (PFS). A Phase 3 study evaluating Kyprolis in combination with lenalidomide plus dexamethasone (KRd) versus Velcade in combination with lenalidomide plus dexamethasone (VRd) in newly diagnosed multiple myeloma patients, called ENDURANCE, is underway independently by the ECOG-ACRIN Cancer Research Group.
- On July 3, 2016, Amgen announced that the European Commission approved an expanded indication for Kyprolis®, to be used in combination with dexamethasone alone, for adult patients with multiple myeloma who have received at least one prior therapy.
- Also, Ono Pharmaceuticals, holder of Kyprolis® marketing rights in Japan, announced approval in Japan for treatment of patients with relapsed or refractory multiple myeloma.

Additional Pipeline and Partner Developments

- Retrophin announced positive top-line results from the Phase 2 DUET study of sparsentan for the treatment of focal segmental glomerulosclerosis. The study achieved statistical significance in the primary efficacy endpoint for the overall sparsentan treatment group, demonstrating a greater than two-fold reduction of proteinuria compared to irbesartan after the eight-week, double-blind treatment period.
- Additional data from the Phase 2 DUET study of sparsentan for the treatment of focal segmental glomerulosclerosis will be presented at the late-breaking High-Impact Clinical Trials oral session at the American Society of Nephrology (ASN) Kidney Week 2016.

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- Lundbeck announced FDA approval of Carnexiv™ (carbamazepine) injection as a short-term replacement therapy for oral carbamazepine formulations in adults with certain seizure types when oral administration is temporarily not feasible. Ligand earned a \$1.25 million milestone payment upon approval and is entitled to receive a royalty of 2.75% on net sales of Carnexiv.
- Melinta Therapeutics announced that it has submitted NDAs to the FDA for approval of IV and oral Baxdela™ (delafloxacin) for the treatment of patients with acute bacterial skin and skin structure infections (ABSSSI). With the submission, Ligand earned a \$1.5 million milestone payment. If approved, Ligand is entitled to receive a 2.5% royalty on net sales of the IV formulation of Baxdela and an additional \$1.5 million approval milestone payment.
- Baxdela was the subject of several poster presentations at IDWeek 2016, held October 26-30 at the New Orleans Ernest N. Morial Convention Center.
- The FDA granted orphan designation to Merck's Noxafil for treatment of invasive aspergillosis.
- Viking Therapeutics announced first patient dosed in the company's Phase 2 clinical trial of VK2809 in patients with primary hypercholesterolemia and non-alcoholic fatty liver disease.
- Viking Therapeutics announced positive top-line results from a proof-of-concept study of VK0214 in a mouse model of X-linked adrenoleukodystrophy (X-ALD), showing VK0214 rapidly reduced plasma very long chain fatty acid levels by more than 25% in treated animals compared with vehicle controls ($p < 0.01$). Detailed study results were presented at the 86th Annual Meeting of the American Thyroid Association.
- Aldeyra Therapeutics announced plans for ADX-102 (formerly NS2) for the first-ever vehicle-controlled Phase 3 clinical trial in noninfectious anterior uveitis, as well as a Phase 3 clinical trial in Sjögren-Larsson Syndrome. Aldeyra also announced the expected advancement of ADX-102 to a Phase 2b clinical trial in allergic conjunctivitis and the addition of a clinical program in dry eye syndrome.
- Eli Lilly presented data on Prexasertib (LY2606368) demonstrating activity in patients with BRCA wild type sporadic high-grade serous ovarian cancer at the European Society for Medical Oncology 2016 Congress.
- Merrimack Pharmaceuticals announced the FDA granted seribantumab (MM-121) Fast Track designation for development in patients with heregulin-positive, locally advanced or metastatic non-small cell lung cancer whose disease has progressed following immunotherapy.
- Lubris BioPharma announced positive results of a clinical trial that showed recombinant human lubricin demonstrated significant improvement in both signs and symptoms of dry eye disease compared to sodium hyaluronate (HA). Results were published in the September issue of *The Ocular Surface*.
- Opthea announced that the Phase 1 dose-escalation study of OPT-302 met its primary objective demonstrating safety and tolerability as monotherapy and in combination with the current wet AMD standard of care Lucentis®. Opthea is recruiting patients for its Phase 2a dose-expansion trial and expects data by the end of 2016.

New Licensing Deals

- Ligand announced worldwide license agreements with Gilead Sciences, F-Star Biotechnology Limited and TeneoBio to use certain or all of the OmniAb platform technologies to discover fully human antibodies. Ligand is eligible to receive annual access payments, sublicensing fees, milestone payments and royalties on future net sales of any antibodies discovered under these licenses.
- Ligand announced licensing rights to four programs to Seelos Therapeutics including aplindore for the treatment of various CNS disorders, a CRTH2 antagonist for the treatment of respiratory disorders, a Captisol-enabled™ acetaminophen program for pain and fever management and an H3 receptor antagonist program for the treatment of narcolepsy. Ligand is entitled to receive milestones and net sales royalties ranging from 4% to 10% for the various programs licensed.
- Ligand announced a license agreement for its LTP technology with Nucorion Pharmaceuticals, a venture-funded biotechnology company focused on developing anti-cancer and anti-viral agents initially directed to China, of which Ligand is a minority shareholder. Three initial programs fall under the license: NUC-202, a targeted anticancer analog for the treatment of hepatocellular carcinoma; NUC-404, a targeted nucleotide analog for the treatment of hepatitis B; and NUC-101, a targeted nucleotide analog for the treatment of hepatitis C. Ligand is eligible to receive milestones in addition to royalties ranging from 5% to 9% on future net sales of any approved program.

Internal Glucagon Receptor Antagonist (GRA) Program

- Ligand announced initiation of a Phase 2 clinical trial with LGD-6972 for the treatment of type 2 diabetes mellitus (T2DM). The randomized, double-blind, placebo-controlled study will evaluate the safety and efficacy of LGD-6972, as an adjunct to diet and exercise, in subjects with T2DM whose blood glucose levels are inadequately controlled with metformin.

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- Results from two Phase 1 clinical trials with LGD-6972 were published in the August issue of the journal *Diabetes, Obesity and Metabolism*.

Results of Operations

QTD 2016 vs QTD 2015 and YTD 2016 vs YTD 2015

Revenue

(Dollars in thousands)	Q3 2016	Q3 2015	Change	% Change	YTD 2016	YTD 2015	Change	% Change
Royalty Revenue	\$ 15,698	\$ 9,755	\$ 5,943	61 %	\$ 39,842	\$ 26,648	\$ 13,194	50 %
Material Sales	4,219	6,046	(1,827)	(30)%	13,445	20,456	(7,011)	(34)%
License fees, milestones and other revenue	1,702	1,900	(198)	(10)%	17,500	3,618	13,882	384 %
Total revenue	\$ 21,619	\$ 17,701	\$ 3,918	22 %	\$ 70,787	\$ 50,722	\$ 20,065	40 %

Total revenue for Q3 2016 increased \$3.9 million or 22% compared with Q3 2015 and increased \$20.1 million or 40% for the first three quarters of 2016 compared to the same period in 2015. Royalty revenue increased in Q3 2016 compared to Q3 2015 and for the first three quarters of 2016 compared to the same period in 2015 primarily due to an increase in Promacta and Kyprolis royalties. Material sales decreased in Q3 2016 compared to Q3 2015 and in the first three quarters of 2016 compared to the same period in 2015 due to timing of customer purchases of Captisol for use in clinical trials and in commercialized products. License fees, milestones and other revenue decreased in Q3 2016 compared to Q2 2015 due to timing of milestones and upfront fees earned. License fees, milestones and other revenue increased in the first three quarters of 2016 compared to the same period in 2015 primarily due to timing of significant milestones and upfront fees earned and revenues from OmniAb partners.

Operating Costs and Expenses

(Dollars in thousands)	Q3 2016	Q3 2015	Change	YTD 2016	YTD 2015	Change
Costs of sales	\$ 999	\$ 1,250	\$ (251)	\$ 2,674	\$ 4,923	\$ (2,249)
Amortization of intangibles	2,706	593	2,113	7,912	1,780	6,132
Research and development	5,898	1,945	3,953	14,813	8,730	6,083
General and administrative	6,305	4,971	1,334	19,995	18,190	1,805
Lease exit and termination costs	245	345	(100)	863	786	77
Total operating costs and expenses	\$ 16,153	\$ 9,104	\$ 7,049	\$ 46,257	\$ 34,409	\$ 11,848

Total operating costs and expenses for Q3 2016 increased \$7.0 million or 77% compared with Q3 2015 and increased \$11.8 million or 34% for the first three quarters of 2016 compared to the same period in 2015. Cost of sales decreased in Q3 2016 compared with Q3 2015 and for the first three quarters of 2016 compared to the same period in 2015 primarily due to lower material sales as a result of timing of customer purchases. Amortization of intangibles increased in Q3 2016 compared with Q3 2015 and for the first three quarters of 2016 compared to the same period in 2015 due to the acquisition of OMT and the amortization of the corresponding definite lived intangible assets. Research and development expenses and General and administrative expenses increased in Q3 2016 compared with Q3 2015 and for the first three quarters of 2016 compared to the same period in 2015 due primarily to an increase in stock-based compensation expense, timing of internal development costs, increase in headcount related expenses and expenses associated with OMT which we acquired in January 2016.

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We do not provide forward-looking estimates of costs and time to complete our ongoing research and development projects as such estimates would involve a high degree of uncertainty. Uncertainties include our inability to predict the outcome of complex research, our inability to predict the results of clinical studies, regulatory requirements placed upon us by regulatory authorities such as the FDA and EMA, our inability to predict the decisions of our collaborative partners, our ability to fund research and development programs, competition from other entities of which we may become aware in future periods, predictions of market potential from products that may be derived from our research and development efforts, and our ability to recruit and retain personnel or third-party research organizations with the necessary knowledge and skills to perform certain research. Refer to “Item 1A. Risk Factors” for additional discussion of the uncertainties surrounding our research and development initiatives.

Other Income (Expense)

(Dollars in thousands)	Q3 2016	Q3 2015	Change	YTD 2016	YTD 2015	Change
Interest expense, net	\$ (3,116)	\$ (2,930)	\$ (186)	\$ (9,172)	\$ (8,875)	\$ (297)
Decrease (increase) in contingent liabilities	(958)	2,301	(3,259)	(2,595)	(4,976)	2,381
Gain on deconsolidation of Viking Therapeutics	—	—	—	—	28,190	(28,190)
Loss from Viking Therapeutics	(1,396)	(2,169)	773	(14,139)	(3,040)	(11,099)
Other income (expense), net	1,215	1,485	(270)	2,107	1,889	218
Total other income (expense), net	\$ (4,255)	\$ (1,313)	\$ (2,942)	\$ (23,799)	\$ 13,188	\$ (36,987)

Interest expense consisted primarily of accretion of discount on our 2019 Convertible Senior Notes. The increase in interest expense in Q3 2016 compared to Q3 2015 and for the first three quarters of 2016 compared to the same period in 2015 was due to a higher outstanding principal balance.

We recorded an increase in contingent liabilities of \$1.0 million for Q3 2016 and a decrease of \$2.3 million for Q3 2015 and for the first three quarters of 2016 and 2015 we recorded an increase of \$2.6 million and \$5.0 million, respectively. The increase for Q3 2016 primarily relates to amounts potentially due to holders of CVRs associated with our CyDex acquisition. The increase for the first three quarters of 2016 ended is primarily due to an increase in amounts potentially due to holders of the CyDex CVRs and CVRs associated with our Metabasis acquisition.

Other income, net consisted primarily of short term investment transactions including, for the first three quarters of 2016, a \$0.5 million gain representing the fair market value of the warrants received as a result of Viking's partial repayment of the Viking note receivable and the Company's purchase of Viking common stock and warrants in April 2016.

Income Tax Expense

(Dollars in thousands)	Q3 2016	Q3 2015	Change	YTD 2016	YTD 2015	Change
Income (loss) before income taxes	\$ 1,211	\$ 7,284	\$ (6,073)	\$ 731	\$ 29,501	\$ (28,770)
Income tax benefit (expense)	(160)	191,881	(192,041)	28	191,602	(191,574)
(Loss) income from operations	1,051	199,165	(198,114)	759	221,103	(220,344)
Effective tax rate	(13.2)%	2,634.3%		3.8%	649.5%	

We recorded an income tax expense of \$0.2 million and \$0.0 million for the three and nine months ended September 30, 2016, respectively compared to income tax expense of \$191.9 million and \$191.6 million for the same periods in 2015. The income tax benefit for the three and nine months ended September 30, 2016 is based on the estimated annual effective tax rate of 42.0%. Income tax benefit for the three and nine months ended September 30, 2015 is primarily the result of releasing a valuation allowance against a significant portion of our deferred tax assets. The tax benefit is primarily comprised

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of U.S. federal and state net operating loss carryforwards, tax credits, and other temporary differences.

Discontinued Operations

In 2006, we entered into a purchase agreement with Eisai pursuant to which Eisai agreed to acquire our Oncology product line which included four marketed oncology drugs: ONTAK, Targretin capsules, Targretin gel and Panretin gel. Certain liabilities were recorded associated with the disposal of the product line. During the first three quarters of 2016 we recognized a \$1.1 million gain due to subsequent changes in certain estimates and liabilities previously recorded.

Liquidity and Capital Resources

We have financed our operations through offerings of our equity securities, issuance of convertible notes, product sales and the subsequent sales of our commercial assets, royalties, collaborative research and development and other revenue, and operating lease transactions.

We had net income of \$1.1 million for the quarter ended September 30, 2016. As of September 30, 2016, our cash, cash equivalents and marketable securities totaled \$124.1 million, and we had a working capital deficit of \$85.4 million. We believe that our currently available funds, cash generated from operations as well as existing sources of and access to financing will be sufficient to fund our anticipated operating, capital requirements and debt service requirement. We expect to build cash in future months as we continue to generate significant cash flow from royalty, license and milestone revenue and Captisol material sales primarily driven by continued increases in Promacta and Kyprolis sales, recent product approvals and regulatory developments, as well as revenue from anticipated new licenses and milestones. In addition, we anticipate that our liquidity needs can be met through other sources, including sales of marketable securities, borrowings through commercial paper and/or syndicated credit facilities and access to other domestic and foreign debt markets and equity markets.

While we believe in the viability of our strategy to generate sufficient operating cash flow and in our ability to raise additional funds, there can be no assurances to that effect.

Investments

We invest our excess cash principally in U.S. government debt securities, investment-grade corporate debt securities and certificates of deposit. We have established guidelines relative to diversification and maturities that maintain safety and liquidity. These guidelines are periodically reviewed and modified to take advantage of trends in yields and interest rates. Additionally, we own certain equity securities as a result of milestones and license fees received from licensees as well as warrants to purchase Viking common stock.

Borrowings and Other Liabilities

2019 Convertible Senior Notes

We have convertible debt outstanding as of September 30, 2016 related to our 2019 Convertible Senior Notes. In August 2014, we issued \$245.0 million aggregate principal amount of convertible senior unsecured notes. The Notes are convertible into common stock upon satisfaction of certain conditions. Interest of 0.75% per year is payable semi-annually on August 15th and February 15th through the maturity of the notes in August 2019.

Repurchases of Common Stock

In September 2015, our Board of Directors authorized us to repurchase up to \$200.0 million of our common stock from time to time over a period of up to three years. During the three months ended September 30, 2016, the Company repurchased 15,500 shares for \$1.6 million in the aggregate. Subsequent to September 30, 2016, the Company repurchased 25,000 shares of its common stock for \$2.3 million in the aggregate.

Contingent Liabilities

CyDex

In connection with the acquisition of CyDex in January 2011, we issued a series of CVRs and also assumed certain contingent liabilities. We may be required to make additional payments upon achievement of certain clinical and regulatory milestones to the CyDex shareholders and former license holders. In addition, we will pay CyDex shareholders, for each respective year through 2016, 20% of all CyDex-related revenue, but only to the extent that, and beginning only when, CyDex-related revenue for such year exceeds \$15.0 million; plus an additional 10% of all CyDex-related revenue recognized during such year, but only to the extent that, and beginning only when aggregate CyDex-related revenue for such year exceeds \$35.0 million. We have paid \$25.0 million to the CyDex shareholders for revenue sharing payments under the terms of the CVR agreement. The estimated fair value of the contingent liabilities recorded as part of the CyDex acquisition at September 30, 2016 was \$6.7 million, and as of December 31, 2015 was \$9.5 million.

Metabasis

In connection with the acquisition of Metabasis in January 2010, we entered into four CVR agreements with Metabasis shareholders. The CVRs entitle the holders to cash payments upon the sale or licensing of certain assets and upon the achievement of specified milestones. The fair value of the liability at September 30, 2016 was \$2.3 million, and as of December 31, 2015 was \$4.0 million.

Leases and Off-Balance Sheet Arrangements

We lease our office and research facilities under operating lease arrangements with varying terms through November 2019. The agreements provide for increases in annual rents based on changes in the Consumer Price Index or fixed percentage increases ranging from 3.0% to 3.5%. We also sublease a portion of our facilities through leases which expire between 2015 and 2023. The sublease agreements provide for a 3% increase in annual rents. We had no off-balance sheet arrangements at September 30, 2016 and December 31, 2015.

Cash Flows

Operating Activities

Net cash provided by operating activities in the first three quarters of 2016 was \$42.0 million compared to \$28.1 million for the first three quarters of 2015.

The net cash provided for the first three quarters of 2016 reflects net income of \$1.5 million, adjusted by \$45.7 million of non-cash items to reconcile net income to net cash generated from operations. These reconciling items primarily reflect stock-based compensation of \$13.7 million, amortization of debt discount and issuance fees of \$8.1 million, depreciation and amortization of \$8.3 million, loss from Viking Therapeutics of \$14.1 million, realized gain on investments of \$1.8 million, \$2.6 million increase in the estimated fair value of contingent liabilities, fair value adjustment for Viking note receivable and warrants of \$0.5 million and deferred income taxes of \$0.3 million. The cash generated during the nine months ended September 30, 2016 is further impacted by changes in operating assets and liabilities due primarily to an increase in accounts receivable of \$0.4 million, a decrease in accounts payable and accrued liabilities of \$3.1 million and an increase in inventory of \$2.4 million.

The net cash provided for the first three quarters of 2015 reflects net income of \$221.1 million, adjusted by \$194.6 million of non-cash items to reconcile net income to net cash generated from operations. These reconciling items primarily reflect stock-based compensation of \$9.5 million, amortization of debt discount and issuance fees of \$7.6 million, depreciation and amortization of \$1.9 million, gain on deconsolidation of Viking of \$28.2 million, loss on equity investment in Viking of \$3.0 million, realized gain on investments of \$2.0 million, \$5.0 million increase in the estimated fair value of contingent liabilities and deferred income taxes of \$191.6 million. The cash generated during the nine months ended September 30, 2015 is further impacted by changes in operating assets and liabilities due primarily to a decrease in accounts receivable of \$7.1 million and a decrease in restricted cash of \$0.7 million. Partially offsetting, cash generated for the period was impacted by an increase in other current assets of \$0.4 million, a decrease in accounts payable and accrued liabilities of \$5.0 million, an increase in other long-term assets of \$0.5 million, and an increase in inventory of \$0.2 million.

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Investing Activities

Net cash used in investing activities in the first three quarters of 2016 was \$56.5 million compared to \$101.4 million for the first three quarters of 2015.

The net cash used for the first three quarters of 2016 primarily reflects cash paid to acquire OMT (net of cash acquired) of \$92.5 million, the purchase of short-term investments of \$73.1 million, purchase of commercial license rights of \$17.7 million, payments to CVR holders and other contingency payments of \$7.1 million, purchase of Viking common stock and warrants of \$0.7 million and purchase of property and equipment, primarily related to our new office headquarters of \$1.8 million, partially offset by proceeds from sales and maturity of short-term investments of \$23.4 million and \$113.7 million respectively.

The net cash used for the first three quarters of 2015 primarily reflects the purchase of short-term investments of \$111.8 million, investment in Viking of \$9.0 million, purchase of commercial license rights of \$4.0 million, payments to CVR holders and other contingency payments of \$4.9 million, and reduction in cash from deconsolidation of Viking of \$0.2 million partially offset by proceeds from sales and maturity of short-term investments of \$5.7 million and \$23.0 million respectively.

Financing Activities

Net cash provided by financing activities in the first three quarters of 2016 was \$3.6 million compared to \$6.9 million for the first three quarters of 2015.

The net cash provided for the first three quarters of 2016 reflects \$4.6 million of proceeds received from stock option exercises and our employee stock purchase plan, partially offset by \$1.0 million purchase of common stock for net settlement of RSUs vested and released during the quarter.

The net cash provided for the first three quarters of 2015 reflects \$7.4 million of proceeds received from stock option exercises and our employee stock purchase plan, which is partially offset by \$0.5 million repurchase of our common stock.

Critical Accounting Policies

Certain of our policies require the application of management judgment in making estimates and assumptions that affect the amounts reported in our consolidated financial statements and the disclosures made in the accompanying notes. Those estimates and assumptions are based on historical experience and various other factors deemed applicable and reasonable under the circumstances. The use of judgment in determining such estimates and assumptions is by nature, subject to a degree of uncertainty. Accordingly, actual results could differ materially from the estimates made.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risk from interest rates and equity prices which could affect our results of operations, financial condition and cash flows. We manage our exposure to these market risks through our regular operating and financing activities.

Investment Portfolio Risk

At September 30, 2016, our investment portfolio included investments in available-for-sale equity securities of \$37.5 million. These securities are subject to market risk and may decline in value based on market conditions.

Equity Price Risk

Our 2019 Convertible Senior Notes include conversion and settlement provisions that are based on the price of our common stock at conversion or maturity of the notes, as applicable. The minimum amount of cash we may be required to pay is \$245.0 million, but will ultimately be determined by the price of our common stock. The fair values of our 2019 Convertible Senior Notes are dependent on the price and volatility of our common stock and will generally increase or decrease as the market price of our common stock changes. In order to minimize the impact of potential dilution to our common stock upon the conversion of the 2019 Convertible Senior Notes, we entered into convertible bond hedges covering 3,264,643 shares of our common stock. Concurrently with entering into the convertible bond hedge transactions, we entered into warrant transactions whereby we sold warrants with an exercise price of approximately \$125.08 per share, subject to adjustment. Throughout the term of the 2019 Convertible Senior Notes, the notes may have a dilutive effect on our earnings per share to the extent the stock

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price exceeds the conversion price of the notes. Additionally, the warrants may have a dilutive effect on our earnings per share to the extent the stock price exceeds the strike price of the warrants.

Foreign currency risk

Through our licensing and business operations, we are exposed to foreign currency risk. Foreign currency exposures arise from transactions denominated in a currency other than the functional currency and from foreign denominated revenues and profit translated into U.S. dollars. Our collaborative partners sell our products worldwide in currencies other than the U.S. dollar. Because of this, our revenues from royalty payments are subject to risk from changes in exchange rates.

We purchase Captisol from Hovione, located in Lisbon, Portugal. Payments to Hovione are denominated and paid in U.S. dollars, however the unit price of Captisol contains an adjustment factor which is based on the sharing of foreign currency risk between the two parties. The effect of an immediate 10% change in foreign exchange rates would not have a material impact on our financial condition, results of operations or cash flows. We do not currently hedge our exposures to foreign currency fluctuations.

Interest rate risk

We are exposed to market risk involving rising interest rates. To the extent interest rates rise, our interest costs could increase. An increase in interest costs of 10% would not have a material impact on our financial condition, results of operations or cash flows.

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ITEM 4. CONTROLS AND PROCEDURES

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Based upon and as of the date of that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective to provide reasonable assurance that information required to be disclosed by us in reports we file or submit pursuant to the Exchange Act is (1) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and (2) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Our disclosure controls were designed to provide reasonable assurance that the controls and procedures would meet their objectives. Our management, including the Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls will prevent all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable assurance of achieving the designed control objectives and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusions of two or more people, or by management override of the control. Because of the inherent limitations in a cost-effective, maturing control system, misstatements due to error or fraud may occur and not be detected.

As described in Item 9A of our Annual Report on Form 10-K/A for the fiscal year ended December 31, 2015, we identified material weaknesses in our internal control over financial reporting related to:

(1) the design of our internal control over the tax accounting for complex transactions that have a significant tax impact, specifically, management did not have adequate supervision and review of certain technical tax accounting performed by third party tax specialists.

(2) the design of our internal control over the presentation and disclosure of our 2019 convertible senior notes, specifically, management review control is not precise and adequate to capture the appropriate presentation and disclosure of our convertible debt that is triggered by certain specific contractual conditions.

To remediate the material weakness described in bullet point (1) above and to prevent similar deficiencies in the future, we are currently evaluating additional controls and procedures, which may include:

- engagement of additional independent third party tax specialists to assist or review in the tax accounting for non-routine, complex transactions
- additional training for staff involved in the tax accounting for non-routine, complex transactions

With regards to the material weakness described in bullet point (2) above, subsequent to December 31, 2015, management has implemented additional controls and procedures related to management review of the presentation and disclosures of our 2019 convertible senior notes, which include:

- developed and refined certain spreadsheet tools to review various inputs including our stock price, which would trigger the early conversion conditions under the debt indenture agreement
- additional management review of the presentation including the classification of our 2019 convertible senior notes

Management will continue to improve the respective process and controls over the presentation and disclosure of our convertible debt. However, the material weakness will not be considered remediated until the applicable remedial controls operate for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

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Except for the changes mentioned above, there have not been any changes in our internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter of the fiscal year to which this report relates that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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PART II. OTHER INFORMATION

ITEM 1. Legal Proceedings

From time to time we are subject to various lawsuits and claims with respect to matters arising out of the normal course of our business. Due to the uncertainty of the ultimate outcome of these matters, the impact on future financial results is not subject to reasonable estimates.

Securities Litigation

In 2012, a federal securities class action and shareholder derivative lawsuit was filed in Pennsylvania alleging that the Company and its CEO assisted various breaches of fiduciary duties based on our purchase of a licensing interest in a development-stage pharmaceutical program from the Genaera Liquidating Trust in 2010 and our subsequent sale of half of our interest in the transaction to Biotechnology Value Fund, Inc. Plaintiff filed a second amended complaint in February 2015, which we moved to dismiss in March 2015. The district court granted the motion to dismiss on November 11, 2015. The plaintiff has appealed that ruling to the Third Circuit. The Company intends to continue to vigorously defend against the claims against the Company and its CEO. The outcome of the matter is not presently determinable.

Paragraph IV Certification by Par Pharmaceuticals

On January 7, 2016, we received a paragraph IV certification from Par Sterile Products, LLC, a subsidiary of Par Pharmaceuticals, Inc., or Par, advising us that it had filed an ANDA with the FDA seeking approval to market a generic version of Merck's NOXAFIL-IV product. On October 31, 2016, the parties entered into a consent judgment dismissing all claims, counterclaims, affirmative defenses and demands. The parties have reported to the court that they entered into a confidential settlement agreement, and that they submitted the agreement to the Federal Trade Commission and the United States Department of Justice pursuant to Section 112(a) of the Medicare Prescription Drug, Improvement and Modernization Act of 2003.

ITEM 1A. RISK FACTORS

The following is a summary description of some of the many risks we face in our business. You should carefully review these risks in evaluating our business, including the businesses of our subsidiaries. You should also consider the other information described in this report. The risk factors set forth below with an asterisk () next to the title are new risk factors or risk factors containing material changes from the risk factors previously disclosed in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2015, as filed with the SEC on February 26, 2016:*

Future revenue based on Promacta and Kyprolis, as well as sales of our other products, may be lower than expected.

Novartis is obligated to pay us royalties on its sales of Promacta, and we receive revenue from Amgen based on both sales of Kyprolis and purchases of Captisol material for clinical and commercial uses. These payments are expected to be a substantial portion of our ongoing revenues for some time. In addition, we receive revenues based on sales of Duavee, Conbriza, Noxafil IV and Nexterone. Any setback that may occur with respect to any of our products, and in particular Promacta or Kyprolis, could significantly impair our operating results and/or reduce the market price of our stock. Setbacks for the products could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation or reimbursement, licenses and approvals, intellectual property rights, competition with existing or new products and physician or patient acceptance of the products, as well as higher than expected total rebates, returns, discounts, or unfavorable exchange rates. These products also are or may become subject to generic competition. Any such setback could reduce our revenue.

Future revenue from sales of Captisol material to our collaborative partners may be lower than expected.

Revenues from sales of Captisol material to our collaborative partners represent a significant portion of our current revenues. Any setback that may occur with respect to Captisol could significantly impair our operating results and/or reduce the market price of our stock. Setbacks for Captisol could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation or reimbursement, licenses and approvals, intellectual property rights, competition with existing or new products and physician or patient acceptance of the products using Captisol, as well as higher than expected total rebates, returns or discounts for such products.

If products or product candidates incorporating Captisol technology were to cause any unexpected adverse events, the perception of Captisol safety could be seriously harmed. If this were to occur, we may not be able to market Captisol products unless and until we are able to demonstrate that the adverse event was unrelated to Captisol, which we may not be able to do. Further, whether or not the adverse event was a result of Captisol, we could be required by the FDA to submit to additional regulatory reviews or approvals, including extensive safety testing or clinical testing of products using Captisol, which would be expensive and, even if we were to demonstrate that the adverse event was unrelated to Captisol, would delay the marketing of Captisol-enabled products and receipt of revenue related to those products, which could significantly impair our operating results and/or reduce the market price of our stock.

We obtain Captisol from a sole source supplier, and if this supplier were to cease to be able, for any reason, to supply Captisol to us in the amounts we require, or decline to supply Captisol to us, we would be required to seek an alternative source, which could potentially take a considerable length of time and impact our revenue and customer relationships. We maintain inventory of Captisol, which has a five year shelf life, at three geographically dispersed storage locations in the United States and Europe. If we were to encounter problems maintaining our inventory, such as natural disasters, at one or more of these locations, it could lead to supply interruptions.

We currently depend on our arrangements with our outlicensees to sell products using our Captisol technology. These agreements generally provide that outlicensees may terminate the agreements at will. If our outlicensees discontinue sales of products using our Captisol technology, fail to obtain regulatory approval for products using our Captisol technology, fail to satisfy their obligations under their agreements with us, or choose to utilize a generic form of Captisol should it become available, or if we are unable to establish new licensing and marketing relationships, our financial results and growth prospects would be materially affected. Furthermore, we maintain significant accounts receivable balances with certain customers purchasing Captisol materials, which may result in the concentration of credit risk. We generally do not require any collateral from our customers to secure payment of these accounts receivable. If any of our major customers were to default in the payment of their obligations to us, our business, financial condition, operating results and cash flows could be adversely affected.

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Further, under most of our Captisol outlicenses, the amount of royalties we receive will be reduced or will cease when the relevant patent expires. Our high purity patents and foreign equivalents, are not expected to expire until 2029 and our morphology patents and foreign equivalents, are not expected to expire until 2025, but the initially filed patents relating to Captisol expired starting in 2010 in the United States and have expired in most countries outside the United States. If our other intellectual property rights are not sufficient to prevent a generic form of Captisol from coming to market and if in such case our outlicensees choose to terminate their agreements with us, our Captisol revenue may decrease significantly.

Third party intellectual property may prevent us or our partners from developing our potential products; our and our partners' intellectual property may not prevent competition; and any intellectual property issues may be expensive and time consuming to resolve.

The manufacture, use or sale of our potential products or our collaborative partners' products or potential products may infringe the patent rights of others. If others obtain patents with conflicting claims, we may be required to obtain licenses to those patents or to develop or obtain alternative technology. We may not be able to obtain any such licenses on acceptable terms, or at all. Any failure to obtain such licenses could delay or prevent us from pursuing the development or commercialization of our potential products.

Generally, our success will depend on our ability and the ability of us and our partners to obtain and maintain patents and other intellectual property rights for our and their potential products both in the United States and in foreign countries. Our patent position, like that of many biotechnology and pharmaceutical companies, is uncertain and involves complex legal and technical questions for which important legal principles are unresolved. Even if we or our partners do obtain patents, such patents may not adequately protect the technology we own or have licensed. For example, in September 2016, our Partner Onyx received a Notice of paragraph IV certification from Cipla advising Onyx that Cipla had filed an ANDA with the FDA seeking approval to market a generic version of Onyx's KYPROLIS product. The paragraph IV certification alleges that each of the nine U.S. patents listed in the Orange Book for KYPROLIS are invalid and/or will not be infringed by Cipla's manufacture, use or sale of the product for which the ANDA was submitted. If Cipla succeeds in obtaining FDA approval to market its ANDA product, we could lose the revenues related to KYPROLIS.

Any conflicts with the patent rights of others could significantly reduce the coverage of our patents or limit our ability to obtain meaningful patent protection. For example, our European patent related to Agglomerated forms of Captisol was limited during an opposition proceeding, and the rejection of our European patent application related to High Purity Captisol is currently being appealed. A hearing in that appeal, before the European Patent Office, is scheduled for February 7, 2017. In addition, any determination that our patent rights are invalid may result in early termination of our agreements with our collaborative partners and could adversely affect our ability to enter into new collaborations. We also rely on unpatented trade secrets and know-how to protect and maintain our competitive position. We require our employees, consultants, collaborative partners and others to sign confidentiality agreements when they begin their relationship with us. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our competitors may independently discover our trade secrets.

We may also need to initiate litigation, which could be time-consuming and expensive, to enforce our proprietary rights or to determine the scope and validity of others' rights. If this occurs, a court may find our patents or those of our licensors invalid or may find that we have infringed on a competitor's rights. In addition, if any of our competitors have filed patent applications in the United States which claim technology we also have invented, the United States Patent and Trademark Office may require us to participate in expensive interference proceedings to determine who has the right to a patent for the technology.

The occurrence of any of the foregoing problems could be time-consuming and expensive and could adversely affect our financial position, liquidity and results of operations.

We rely heavily on collaborative relationships, and any disputes or litigation with our collaborative partners or termination or breach of any of the related agreements could reduce the financial resources available to us, including milestone payments and future royalty revenues.

Our existing collaborations may not continue or be successful, and we may be unable to enter into future collaborative arrangements to develop and commercialize our unpartnered assets. Generally, our current collaborative partners also have the right to terminate their collaborations at will or under specified circumstances. If any of our collaborative partners breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully (for example, by not making required payments when due, or at all), our product development under these agreements will be delayed or terminated.

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Disputes or litigation may also arise with our collaborators (with us and/or with one or more third parties), including those over payment obligations, ownership rights to intellectual property, know-how or technologies developed with our collaborators. Such disputes or litigation could adversely affect our rights to one or more of our product candidates and could delay, interrupt or terminate the collaborative research, development and commercialization of certain potential products, create uncertainty as to ownership rights of intellectual property, or could result in litigation or arbitration. The occurrence of any of these problems could be time-consuming and expensive and could adversely affect our business.

Our product candidates, and the product candidates of our partners, face significant development and regulatory hurdles prior to partnering and/or marketing which could delay or prevent licensing, sales-based royalties and/or milestone revenue.

Before we or our partners obtain the approvals necessary to sell any of our unpartnered assets or partnered programs, we must show through preclinical studies and human testing that each potential product is safe and effective. We and/or our partners have a number of partnered programs and unpartnered assets moving toward or currently awaiting regulatory action. Failure to show any product's safety and effectiveness could delay or prevent regulatory approval of a product and could adversely affect our business. The drug development and clinical trials process is complex and uncertain. For example, the results of preclinical studies and initial clinical trials may not necessarily predict the results from later large-scale clinical trials. In addition, clinical trials may not demonstrate a product's safety and effectiveness to the satisfaction of the regulatory authorities. A number of companies have suffered significant setbacks in advanced clinical trials or in seeking regulatory approvals, despite promising results in earlier trials. The FDA may also require additional clinical trials after regulatory approvals are received. Such additional trials may be expensive and time-consuming, and failure to successfully conduct those trials could jeopardize continued commercialization of a product.

The speed at which we and our partners complete our scientific studies and clinical trials depends on many factors, including, but not limited to, our ability to obtain adequate supplies of the products to be tested and patient enrollment. Patient enrollment is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial and other potential drug candidates being studied. Delays in patient enrollment for our or our partners' trials may result in increased costs and longer development times. In addition, our collaborative partners have rights to control product development and clinical programs for products developed under our collaborations. As a result, these collaborative partners may conduct these programs more slowly or in a different manner than expected. Moreover, even if clinical trials are completed, we or our collaborative partners still may not apply for FDA approval in a timely manner or the FDA still may not grant approval.

Our drug development programs may require substantial additional capital to complete successfully, arising from costs to: conduct research, preclinical testing and human studies; establish pilot scale and commercial scale manufacturing processes and facilities; and establish and develop quality control, regulatory, marketing, sales and administrative capabilities to support these programs. While we expect to fund our research and development activities from cash generated from royalties and milestones from our partners in various past and future collaborations to the extent possible, if we are unable to do so, we may need to complete additional equity or debt financings or seek other external means of financing. These financings could depress our stock price. If additional funds are required to support our operations and we are unable to obtain them on terms favorable to us, we may be required to cease or reduce further development or commercialization of our products, to sell some or all of our technology or assets or to merge with another entity.

Our OmniAb antibody platform faces specific risks, including the fact that no drug using antibodies from the platform has been tested in clinical trials.

None of our collaboration partners using our OmniAb antibody platform have tested drugs based on the platform in clinical trials and, therefore, none of our OmniAb collaboration partners' drugs have received FDA approval. If one of our OmniAb collaboration partners' drug candidates fails during preclinical studies or clinical trials, our other OmniAb collaboration partners may decide to abandon drugs using antibodies generated from the OmniAb platform, whether or not attributable to the platform. All of our OmniAb collaboration partners may terminate their programs at any time without penalty. In addition, our OmniRat and OmniFlic platforms, which we consider the most promising, are covered by two patents within the U.S. and two patents in the European Union and are subject to the same risks as our patent portfolio discussed above, including the risk that our patents may infringe on third party patent rights or that our patents may be invalidated. Further, we face significant competition from other companies selling human antibody-generating rodents, especially mice which compete with our OmniMouse platform, including the VelocImmune mouse, the AlivaMab mouse and the Trianni mouse. Many of our competitors have greater financial, technical and human resources than we do and may be better equipped to develop, manufacture and market competing antibody platforms.

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If plaintiffs bring product liability lawsuits against us or our partners, we or our partners may incur substantial liabilities and may be required to limit commercialization of our approved products and product candidates.

As is common in our industry, our partners and we face an inherent risk of product liability as a result of the clinical testing of our product candidates in clinical trials and face an even greater risk for commercialized products. Although we are not currently a party to product liability litigation, if we are sued, we may be held liable if any product or product candidate we develop causes injury or is found otherwise unsuitable during product testing, manufacturing, marketing or sale. Regardless of merit or eventual outcome, liability claims may result in decreased demand for any product candidates or products that we may develop, injury to our reputation, discontinuation of clinical trials, costs to defend litigation, substantial monetary awards to clinical trial participants or patients, loss of revenue and the inability to commercialize any products that we develop. We have product liability insurance that covers our clinical trials up to a \$10.0 million annual limit. If we are sued for any injury caused by our product candidates or any future products, our liability could exceed our total assets.

Any difficulties from strategic acquisitions could adversely affect our stock price, operating results and results of operations.

We may acquire companies, businesses and products that complement or augment our existing business. We may not be able to integrate any acquired business successfully or operate any acquired business profitably. Integrating any newly acquired business could be expensive and time-consuming. Integration efforts often take a significant amount of time, place a significant strain on managerial, operational and financial resources and could prove to be more difficult or expensive than we predict. The diversion of our management's attention and any delay or difficulties encountered in connection with any future acquisitions we may consummate could result in the disruption of our on-going business or inconsistencies in standards and controls that could negatively affect our ability to maintain third-party relationships. Moreover, we may need to raise additional funds through public or private debt or equity financing, or issue additional shares, to acquire any businesses or products, which may result in dilution for stockholders or the incurrence of indebtedness.

As part of our efforts to acquire companies, business or product candidates or to enter into other significant transactions, we conduct business, legal and financial due diligence with the goal of identifying and evaluating material risks involved in the transaction. Despite our efforts, we ultimately may be unsuccessful in ascertaining or evaluating all such risks and, as a result, might not realize the intended advantages of the transaction. If we fail to realize the expected benefits from acquisitions we may consummate in the future or have consummated in the past, whether as a result of unidentified risks, integration difficulties, regulatory setbacks, litigation with current or former employees and other events, our business, results of operations and financial condition could be adversely affected. If we acquire product candidates, we will also need to make certain assumptions about, among other things, development costs, the likelihood of receiving regulatory approval and the market for such product candidates. Our assumptions may prove to be incorrect, which could cause us to fail to realize the anticipated benefits of these transactions.

In addition, we will likely experience significant charges to earnings in connection with our efforts, if any, to consummate acquisitions. For transactions that are ultimately not consummated, these charges may include fees and expenses for investment bankers, attorneys, accountants and other advisors in connection with our efforts. Even if our efforts are successful, we may incur, as part of a transaction, substantial charges for closure costs associated with elimination of duplicate operations and facilities and acquired IPR&D charges. In either case, the incurrence of these charges could adversely affect our results of operations for particular quarterly or annual periods.

We have restated prior consolidated financial statements, which may lead to additional risks and uncertainties, including loss of investor confidence.

We have restated our consolidated financial statements as of and for the year ended December 31, 2015 (including the third quarter within that year) and for the first and second quarters of fiscal year 2016 in order to correct certain accounting errors as described in *Restated Financials* in "Note 1 Summary of significant accounting policies" to the condensed consolidated financial statements (the Restatement). For a description of the material weaknesses in our internal control over financial reporting identified by management in connection with the Restatement and management's plan to remediate those material weaknesses, see "Part I, Item 4 - Controls and Procedures".

As a result of the Restatement, we have become subject to possible additional costs and risks, including (a) accounting and legal fees incurred in connection with the Restatement and (b) a possible loss of investor confidence.

We have identified material weaknesses in our internal control over financial reporting that, if not remediated, could result in additional material misstatements in our financial statements.

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As described in “Part II, Item 9A - Controls and Procedures,” our amended Annual Report on Form 10-K/A for the year ended December 31, 2015, management identified control deficiencies that represent material weaknesses. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. As a result of the identified material weaknesses, management has concluded that we did not maintain effective internal control over financial reporting as of December 31, 2015. See “Part II, Item 9A - Controls and Procedures.” our amended Annual Report on Form 10-K/A for the year ended December 31, 2015.

We are developing and implementing a remediation plan to address the material weaknesses. If our remediation efforts are insufficient or if additional material weaknesses in our internal control over financial reporting are discovered or occur in the future, our consolidated financial statements may contain material misstatements and we could be required to restate our financial results, which could materially and adversely affect our business, results of operations and financial condition, restrict our ability to access the capital markets, require us to expend significant resources to correct the material weakness, subject us to fines, penalties or judgments, harm our reputation or otherwise cause a decline in investor confidence.

Our shareholder rights plan, concentration of ownership and charter documents may hinder or prevent change of control transactions.

Our shareholder rights plan and provisions contained in our certificate of incorporation and bylaws may discourage transactions involving an actual or potential change in our ownership. In addition, our Board of Directors may issue shares of common or preferred stock without any further action by the stockholders. Our directors and certain of our institutional investors, collectively beneficially own a significant portion of our outstanding common stock. We have in the past granted waivers to investors allowing them to increase their ownership level above the limit set forth in our shareholder rights agreement. Such restrictions, circumstances and issuances may have the effect of delaying or preventing a change in our ownership. If changes in our ownership are discouraged, delayed or prevented, it would be more difficult for our current Board of Directors to be removed and replaced, even if you or our other stockholders believe that such actions are in the best interests of us and our stockholders. Our shareholder rights plan expired in October, 2016.

We rely on information technology and any failure, inadequacy, interruption or security lapse of that technology, including any cyber security incidents, could harm our ability to operate our business effectively.

Our business is increasingly dependent on critical, complex and interdependent information technology systems, including internet-based systems, to support business processes as well as internal and external communications. Despite the implementation of security measures, our internal computer systems and those of our collaborative partners are vulnerable to damage from cyber-attacks, computer viruses, security breaches, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. System failures, accidents or security breaches could cause interruptions in our operations, could lead to the loss of trade secrets or other intellectual property, could lead to the public exposure of personal information of our employees and others, and could result in a material disruption of our clinical and commercialization activities and business operations, in addition to possibly requiring substantial expenditures to remedy. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and our business and financial condition could be harmed.

The occurrence of a catastrophic disaster could damage our facilities beyond insurance limits or we could lose key data which could cause us to curtail or cease operations.

We are vulnerable to damage and/or loss of vital data from natural disasters, such as earthquakes, tornadoes, power loss, fire, floods and similar events, as well as from accidental loss or destruction. If any disaster were to occur, our ability to operate our business could be seriously impaired. We have property, liability, and business interruption insurance which may not be adequate to cover our losses resulting from disasters or other similar significant business interruptions, and we do not plan to purchase additional insurance to cover such losses due to the cost of obtaining such coverage. Any significant losses that are not recoverable under our insurance policies could seriously impair our business, financial condition and prospects.

We sold the 2019 Convertible Senior Notes, which may impact our financial results, result in the dilution of existing stockholders, and restrict our ability to take advantage of future opportunities.

In August of 2014, we sold \$245.0 million aggregate principal amount of 0.75% Convertible Senior Notes due 2019, or the 2019 Convertible Senior Notes. We will be required to pay interest on the 2019 Convertible Senior Notes until they come due or are converted, and the payment of that interest will reduce our net income. The sale of the 2019 Convertible Senior

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Notes may also affect our earnings per share figures, as accounting procedures require that we include in our calculation of earnings per share the number of shares of our common stock into which the 2019 Convertible Senior Notes are convertible. The 2019 Convertible Senior Notes may be converted, under the conditions and at the premium specified in the 2019 Convertible Senior Notes, into cash and shares of our common stock, if any (subject to our right to pay cash in lieu of all or a portion of such shares). If shares of our common stock are issued to the holders of the 2019 Convertible Senior Notes upon conversion, there will be dilution to our shareholders equity. Upon the occurrence of certain circumstances, holders of the 2019 Convertible Senior Notes may require us to purchase all or a portion of their notes for cash, which may require the use of a substantial amount of cash. If such cash is not available, we may be required to sell other assets or enter into alternate financing arrangements at terms that may or may not be desirable. The existence of the 2019 Convertible Senior Notes and the obligations that we incurred by issuing them may restrict our ability to take advantage of certain future opportunities, such as engaging in future debt or equity financing activities.

Impairment charges pertaining to goodwill, identifiable intangible assets or other long-lived assets from our mergers and acquisitions could have an adverse impact on our results of operations and the market value of our common stock.

The total purchase price pertaining to our acquisitions in recent years of OMT, CyDex, Metabasis, Pharmacopeia, and Neurogen have been allocated to net tangible assets, identifiable intangible assets, in-process research and development and goodwill. To the extent the value of goodwill or identifiable intangible assets or other long-lived assets become impaired, we will be required to incur material charges relating to the impairment. Any impairment charges could have a material adverse impact on our results of operations and the market value of our common stock.

Our stock price has been volatile and could experience a sudden decline in value.

The market prices for securities of biotechnology and pharmaceutical companies have historically been highly volatile, and the market has recently experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Continued volatility in the overall capital markets could reduce the market price of our common stock in spite of our operating performance. Further, high stock price volatility could result in higher stock-based compensation expense.

Our common stock has experienced significant price and volume fluctuations and may continue to experience volatility in the future. Many factors may have a significant impact on the market price of our common stock, including, but not limited to, the following factors: results of or delays in our preclinical studies and clinical trials; the success of our collaboration agreements; publicity regarding actual or potential medical results relating to products under development by us or others; announcements of technological innovations or new commercial products by us or others; developments in patent or other proprietary rights by us or others; comments or opinions by securities analysts or major stockholders; future sales of our common stock by existing stockholders; regulatory developments or changes in regulatory guidance; litigation or threats of litigation; economic and other external factors or other disaster or crises; the departure of any of our officers, directors or key employees; period-to-period fluctuations in financial results; and price and volume fluctuations in the overall stock market.

We may be subject to prosecution for violation of federal law due to our agreement with Vireo Health, which is developing drugs using cannabis.

In November 2015, we entered into a license agreement and supply agreement with Vireo Health granting Vireo Health an exclusive right in certain states within the United States and certain global territories to use Captisol in Vireo's development and commercialization of pharmaceutical-grade cannabinoid-based products. However, state laws legalizing medical cannabis use are in conflict with the Federal Controlled Substances Act, which classifies cannabis as a schedule-I controlled substance and makes cannabis use and possession illegal on a national level. The United States Supreme Court has ruled that it is the Federal government that has the right to regulate and criminalize cannabis, even for medical purposes, and thus Federal law criminalizing the use of cannabis preempts state laws that legalize its use. The Obama administration has effectively stated that it is not an efficient use of resources to direct Federal law enforcement agencies to prosecute those lawfully abiding by state-designated laws allowing the use and distribution of medical and recreational cannabis. Yet, there is no guarantee that the current policy and practice will not change regarding the low-priority enforcement of Federal laws in states where cannabis has been legalized. Any such change in the Federal government's enforcement of Federal laws could result in Ligand, as the supplier of Captisol, to be charged with violations of Federal laws which may result in significant legal expenses and substantial penalties and fines.

Our results of operations and liquidity needs could be materially negatively affected by market fluctuations and economic downturn.

Our results of operations could be materially negatively affected by economic conditions generally, both in the United States and elsewhere around the world. Continuing concerns over inflation, energy costs, geopolitical issues, the availability and cost of credit, and the U.S. financial markets have contributed to increased volatility and diminished expectations for the economy and the markets going forward. Domestic and international equity markets periodically experience heightened volatility and turmoil. These events may have an adverse effect on us. In the event of a market downturn, our results of operations could be adversely affected by those factors in many ways, including making it more difficult for us to raise funds if necessary, and our stock price may further decline. We cannot provide assurance that our investments are not subject to adverse changes in market value. If our investments experience adverse changes in market value, we may have less capital to fund our operations.

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ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES

Unregistered Sales of Equity Securities and Use of Proceeds

The following table presents information regarding repurchases by us of our common stock during the three months ended September 30, 2016 under the stock repurchase program approved by our board of directors in September 2015, under which we may acquire up to \$200 million of our common stock in open market and negotiated purchases for a period of up to three years. There were no repurchases during the first six months of 2016.

	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Program (in thousands)
July 1 - July 31, 2016	—	—	—	199,510
August 1 - August 31, 2016	—	—	—	199,510
September 1 - September 30, 2016	15,500	\$100.22	15,500	197,957
Total	15,500	\$100.22	15,500	197,957

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ITEM 6. EXHIBITS

The Exhibit Index to this Quarterly Report on Form 10-Q 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.

Date: November 14, 2016

By: /s/ Matthew Korenberg

Matthew Korenberg

Vice President, Finance and Chief Financial Officer

Duly Authorized Officer and Principal Financial Officer

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
10.1#	Amended & Restated Director Compensation and Stock Ownership Policy
31.1	Certification by Principal Executive Officer, Pursuant to Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by Principal Financial Officer, Pursuant to Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certifications by Principal Executive Officer and Principal Financial Officer, Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

Indicates management contract or compensation policy.

LIGAND PHARMACEUTICALS INCORPORATED
DIRECTOR COMPENSATION AND STOCK OWNERSHIP POLICY
(Amended and Restated Effective March [], 2014)

I. DIRECTOR COMPENSATION

Non-employee members of the board of directors (the “**Board**”) of Ligand Pharmaceuticals Incorporated (the “**Company**”) shall be eligible to receive cash and equity compensation effective as of March [], 2014 (the “**Restatement Effective Date**”), as set forth in this Director Compensation Policy. The cash compensation and stock awards described in this Director Compensation Policy shall be paid or be made, as applicable, automatically and without further action of the Board, to each member of the Board who is not an employee of the Company or any parent or subsidiary of the Company (each, an “**Independent Director**”) who may be eligible to receive such cash compensation or stock awards, unless such Independent Director declines the receipt of such cash compensation or stock awards by written notice to the Chairman of the Board. This Director Compensation Policy shall remain in effect until it is revised or rescinded by further action of the Board. The terms and conditions of this Director Compensation Policy shall supersede any prior cash or equity compensation arrangements between the Company and its directors.

1. Cash Compensation.
 - a. Annual Retainer. Each Independent Director shall be eligible to receive an annual retainer of \$45,000 for service on the Board. In addition, an Independent Director serving as:
 - i. chairman of the Board shall be eligible to receive an additional annual retainer of \$30,000 for such service;
 - ii. chairman of the Audit Committee shall be eligible to receive an additional annual retainer of \$20,000 for such service;
 - iii. members (other than the chairman) of the Audit Committee shall be eligible to receive an additional annual retainer of \$10,000 for such service;
 - iv. chairman of the Compensation Committee shall be eligible to receive an additional annual retainer of \$15,000 for such service;
 - v. members (other than the chairman) of the Compensation Committee shall be eligible to receive an additional annual retainer of \$7,500 for such service;
 - vi. chairman of the Nominating and Corporate Governance Committee shall be eligible to receive an additional annual retainer of \$10,000 for such service; and
 - vii. members (other than the chairman) of the Nominating and Corporate Governance Committee shall be eligible to receive an additional annual retainer of \$5,000 for such service.
 - b. Payment of Cash Compensation. Annual retainer fees shall be paid after each annual meeting of the Company’s stockholders in advance for the upcoming year of service and shall be prorated for the period of the year served for Independent Directors who are elected or appointed to the Board at a time other than the date of the annual meeting of the Company’s stockholders; provided, however, that an Independent Director may elect in writing prior to the date of an annual meeting to receive all or a portion of his annual retainer fee in the form of such number of fully vested shares of the Company’s common stock as is equal to (i) the amount of the annual retainer the Independent Director has elected to receive in the form of shares of the Company’s common stock, divided by (ii) the closing price per share of the Company’s common stock on the Nasdaq Global Market (or such other established stock exchange or national quotation system on which the stock is quoted) on the date of the annual meeting. Committee retainer fees shall also be paid annually after each annual meeting of the Company’s stockholders in advance for the upcoming year of service and shall be prorated for any partial quarters served for Independent Directors who serve on a committee for a partial year.
2. Equity Compensation. The Independent Directors shall be granted the following stock awards. The stock awards described below shall be granted under and shall be subject to the terms and provisions of the Company’s 2002 Stock Incentive Plan (the “**2002 Plan**”) and shall be granted subject to the execution and delivery of award agreements, including attached exhibits, in substantially the same forms previously approved by the Board.
 - a. Initial Stock Awards. A person who is initially elected or appointed to the Board on or after the Restatement Effective Date, and who was or is an Independent Director at the time of such initial election or appointment, shall be eligible to receive the following stock awards on the date of such initial election or appointment (each, an “**Initial Stock Award**”):
 - i. that number of restricted stock units determined by dividing (A) \$[113,000], by (B) the average closing price per share of the Company’s common stock on the Nasdaq Global Market (or such other established stock exchange or national quotation system on which the stock is quoted) for the 30-calendar day period prior to the date of grant; and

- ii. that number of stock options having a value of \$[205,000], calculated on the grant date in accordance with the Black-Scholes option pricing model (utilizing the same assumptions that the Company utilizes in preparation of its financial statements).
- b. Subsequent Stock Awards. A person who is an Independent Director as of the date of each annual meeting of the Company's stockholders and who is re-elected for another year of service as an Independent Director at such annual meeting automatically shall be eligible to receive the following stock awards on the date of each such annual meeting of the Company's stockholders on or after the Restatement Effective Date (each, a "**Subsequent Stock Award**"):
 - i. that number of restricted stock units determined by dividing (A) \$75,000, by (B) the average closing price per share of the Company's common stock on the Nasdaq Global Market (or such other established stock exchange or national quotation system on which the stock is quoted) for the 30-calendar day period prior to the date of grant; and
 - ii. that number of stock options having a value of \$140,000, calculated on the grant date in accordance with the Black-Scholes option pricing model (utilizing the same assumptions that the Company utilizes in preparation of its financial statements).

An Independent Director elected for the first time to the Board at an annual meeting of stockholders shall only receive an Initial Restricted Stock grant in connection with such election, and shall not receive a Subsequent Restricted Stock grant on the date of such meeting as well. The stock awards described in this clause shall be referred to as "**Subsequent Stock Awards**."

- c. Termination of Employment of Employee Directors. Members of the Board who are employees of the Company or any parent or subsidiary of the Company who subsequently terminate their employment with the Company and any parent or subsidiary of the Company and remain on the Board will not receive any Initial Stock Awards pursuant to clause 2(a) above, but to the extent that they are otherwise eligible, will be eligible to receive, after termination from employment with the Company and any parent or subsidiary of the Company, Subsequent Stock Awards as described in clause 2(b) above.
- d. Vesting of Stock Awards Granted to Independent Directors.
 - i. Initial Stock Awards granted hereunder shall vest in three (3) equal annual installments on each of the first three (3) anniversaries following the date of grant, subject to the Independent Director's continuing service on the Board through each such vesting date.
 - ii. Subsequent Stock Awards granted hereunder shall vest in full on the earlier of (A) the date of the annual meeting of the Company's stockholders next following the grant date (it being understood that the Subsequent Stock Awards shall vest on the date of such annual meeting whether or not the Independent Director is re-elected at such meeting, so long as the Independent Director serves through such meeting) and (B) on the first anniversary of the date of grant, subject to the Independent Director's continuing service on the Board through each such vesting date.
 - iii. Any stock awards granted hereunder shall vest in full in the event of a Change in Control or a Hostile Take-Over (each as defined in the 2002 Plan) to the extent the Independent Director is serving on the Board at the time of such transaction or in the event an Independent Director ceases to serve on the Board by reason of death or Permanent Disability as defined in the 2002 Plan.
 - iv. Any unvested stock awards will be forfeited to the Company in the event an Independent Director ceases to serve on the Board prior to the vesting of such awards.
- e. Effect of Termination of Board Service on Stock Options. An Independent Director shall be able to exercise his or her stock options that were vested at the time of his or her cessation of Board service until the first to occur of (i) the third anniversary of the date of his or her cessation of Board service, or (ii) the original expiration date of the term of such stock options.
- f. Term of Stock Options. Each stock option granted hereunder shall have a term of ten (10) years measured from the date of grant.
- g. Exercise Price of Stock Options. The exercise price per share of any stock options granted hereunder shall be equal to one hundred percent (100%) of the Fair Market Value (as defined in the 2002 Plan) of the common stock on the date of grant.

II. DIRECTOR STOCK OWNERSHIP GUIDELINES

Independent Directors are expected to own and hold shares of the Company's common stock with a value equal to three times the annual cash retainer for service as an Independent Director (without regard to any retainers paid for committee service or service as chairman of the Board). The stock ownership level should be achieved by each Independent Director on or before April 30, 2014 or, if later, within three years after the Independent Director's first appointment to the Board.

Stock that counts toward satisfaction of these guidelines include: shares of common stock owned outright by the Independent Director and his or her immediate family members who share the same household, whether held individually or jointly; restricted stock where the restrictions have lapsed; shares acquired upon stock option exercise; shares purchased in the open market; and shares held in trust

for the benefit of the Independent Director or his or her family. Restricted stock units, which represent the right to receive shares, do not count towards satisfaction of these guidelines. Shares held in trust may be included. Due to the complexities of trust accounts, requests to include shares held in trust should be submitted to the Secretary of the Company and the Chairman of the Board will make the final decision as to whether to include those shares.

An Independent Director will be deemed to be in compliance with these guidelines if the Fair Market Value (as defined in the 2002 Plan) of the shares of the Company's common stock held by such Independent Director on any date prior to the deadline for his or her compliance equals or exceeds the required multiple of his or her annual cash retainer. After meeting the requirements set forth in these guidelines, any subsequent decreases in the market value of the Company's common stock shall not be considered, so long as the Independent Director continues to hold at least the same number of shares of the Company's common stock as he or she did when the guidelines were first met or exceeded by such Independent Director.

The guidelines may be waived for Independent Directors, at the discretion of the Board, if compliance would create hardship or prevent an Independent Director from complying with a court order, as in the case of a divorce settlement.

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**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/15d-14(a)
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, John L. Higgins, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated;
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 officers 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 officers 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 14, 2016

/s/ John L. Higgins

John L. Higgins

Chief Executive Officer

(Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/15d-14(a)
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Matthew Korenberg, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated;
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 officers 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 officers 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 14, 2016

/s/ Matthew Korenberg

Matthew Korenberg

Vice President, Finance and Chief Financial Officer

(Principal Financial Officer)

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

In connection with the Quarterly Report of Ligand Pharmaceuticals Incorporated (the "Company") on Form 10-Q for the quarter ended September 30, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John L. Higgins, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

Date: November 14, 2016

/s/ John L. Higgins

John L. Higgins
Chief Executive Officer
(Principal Executive Officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and is not being filed 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. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

In connection with the Quarterly Report of Ligand Pharmaceuticals Incorporated (the "Company") on Form 10-Q for the quarter ended September 30, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Matthew Korenberg, Vice President, Finance and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
-

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

Date: November 14, 2016

/s/ Matthew Korenberg

Matthew Korenberg

Vice President, Finance and Chief Financial Officer

(Principal Financial Officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and is not being filed 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. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.