

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

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**FORM 10-Q**

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Mark One

**Quarterly Report Pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934**

**For the quarterly period ended March 31, 2013 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.)**

**11119 North Torrey Pines Road, Suite 200**  
**La Jolla, CA**  
**(Address of principal executive offices)**

**92037**  
**(Zip Code)**

**Registrant's Telephone Number, Including Area Code: (858) 550-7500**

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

Accelerated Filer

Non-Accelerated Filer  (Do not check if a smaller reporting company)

Smaller Reporting Company

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

As of May 1, 2013, the registrant had 20,234,959 shares of common stock outstanding.

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LIGAND PHARMACEUTICALS INCORPORATED  
QUARTERLY REPORT

FORM 10-Q

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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)

	March 31, 2013	December 31, 2012
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 5,037	\$ 12,381
Accounts receivable	4,622	4,589
Inventory	2,838	1,697
Other current assets	986	829
Current portion of co-promote termination payments receivable	4,257	4,327
Total current assets	17,740	23,823
Restricted cash and investments	3,933	2,767
Property and equipment, net	758	788
Current portion of deferred income taxes	8	8
Intangible assets, net	55,319	55,912
Goodwill	12,238	12,238
Long-term portion of co-promote termination payments receivable	7,916	8,207
Other assets	451	517
Total assets	\$ 98,363	\$ 104,260
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 5,522	\$ 5,854
Accrued liabilities	4,518	4,961
Current portion of contingent liabilities	356	356
Current portion of deferred income taxes	1,581	1,581
Current portion of note payable	13,212	14,835
Current portion of co-promote termination liability	4,257	4,327
Current portion of lease exit obligations	3,015	3,039
Current portion of deferred revenue	556	486
Total current liabilities	33,017	35,439
Long-term portion of note payable	5,494	13,443
Long-term portion of co-promote termination liability	7,916	8,207
Long-term portion of deferred revenue, net	2,125	2,369
Long-term portion of lease exit obligations	5,074	5,963
Deferred income taxes	791	725
Long-term portion of contingent liabilities	12,384	10,543
Other long-term liabilities	966	1,086
Total liabilities	67,767	77,775
Commitments and Contingencies		
Stockholders' equity:		
Common stock, \$0.001 par value; 33,333,333 shares authorized; 21,342,888 and 21,278,606 shares issued and outstanding at March 31, 2013 and December 31, 2012, respectively	21	21
Additional paid-in capital	752,952	751,503
Accumulated other comprehensive income	1,166	—
Accumulated deficit	(681,263)	(682,759)
Treasury stock, at cost; 1,118,222 shares at March 31, 2013 and December 31, 2012, respectively	(42,280)	(42,280)
Total stockholders' equity	30,596	26,485
Total liabilities and stockholders' equity	\$ 98,363	\$ 104,260

See accompanying notes.

**LIGAND PHARMACEUTICALS INCORPORATED**  
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**  
**(Unaudited)**  
**(in thousands, except share data)**

	Three Months Ended	
	March 31,	
	2013	2012
Revenues:		
Royalties	\$ 5,826	\$ 3,060
Material sales	1,539	667
Collaborative research and development and other revenues	4,286	1,909
Total revenues	<u>11,651</u>	<u>5,636</u>
Operating costs and expenses:		
Cost of sales	663	155
Research and development	2,465	2,817
General and administrative	4,502	3,416
Lease exit and termination costs	89	87
Total operating costs and expenses	<u>7,719</u>	<u>6,475</u>
Income (loss) from operations	<u>3,932</u>	<u>(839)</u>
Other income (expense):		
Interest expense, net	(912)	(701)
(Increase) decrease in contingent liabilities	(1,841)	513
Other, net	191	254
Total other (expense) income, net	<u>(2,562)</u>	<u>66</u>
Income (loss) before income taxes	1,370	(773)
Income tax (expense) benefit	(66)	35
Income (loss) from continuing operations	<u>1,304</u>	<u>(738)</u>
Discontinued operations:		
Gain on sale of Avinza Product Line before income taxes	191	2,048
Income tax expense on discontinued operations	—	(177)
Income from discontinued operations	<u>191</u>	<u>1,871</u>
Net income:	<u>\$ 1,495</u>	<u>\$ 1,133</u>
Basic and diluted per share amounts:		
Income (loss) from continuing operations	\$ 0.06	\$ (0.04)
Income from discontinued operations	0.01	0.10
Net income	<u>\$ 0.07</u>	<u>\$ 0.06</u>
Weighted average number of common shares-basic	20,189,378	19,709,078
Weighted average number of common shares-diluted	<u>20,280,030</u>	<u>19,738,801</u>

*See accompanying notes.*

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

	Three Months Ended	
	March 31,	
	2013	2012
Net income	\$ 1,495	\$ 1,133
Unrealized net gain on available-for-sale securities	1,166	—
Comprehensive income	<u>\$ 2,661</u>	<u>\$ 1,133</u>

*See accompanying notes.*

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

	Three Months Ended	
	March 31,	
	2013	2012
<b>Operating activities</b>		
Net income	\$ 1,495	\$ 1,133
Less: gain from discontinued operations	191	1,871
Income (loss) from continuing operations	1,304	(738)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Non-cash change in estimated fair value of contingent liabilities	1,841	(513)
Depreciation and amortization	670	678
Realized gain on investment	—	(17)
Share-based compensation	1,124	709
Deferred income taxes	66	(35)
Accretion of note payable	142	85
Other	(13)	(10)
Changes in operating assets and liabilities,:		
Accounts receivable	(33)	4,118
Inventory	102	(44)
Other current assets	(157)	(462)
Other long-term assets	66	175
Accounts payable and accrued liabilities	(2,098)	(3,506)
Other liabilities	(120)	—
Deferred revenue	(174)	(609)
Net cash provided by (used in) operating activities of continuing operations	2,720	(169)
Net cash used in operating activities of discontinued operations	(642)	(200)
Net cash provided by (used in) operating activities	2,078	(369)
<b>Investing activities</b>		
Payments to CVR holders	—	(4,549)
Purchases of property and equipment	(37)	(19)
Proceeds from sale of property and equipment	3	13
Proceeds from sale of short-term investments	—	8,500
Net cash (used in) provided by investing activities	(34)	3,945
<b>Financing activities</b>		
Proceeds from issuance of debt	—	7,500
Repayment of debt	(9,714)	(8,500)
Net proceeds from stock option exercises	326	160
Net cash used in financing activities	(9,388)	(840)
Net (decrease) increase in cash and cash equivalents	(7,344)	2,736
Cash and cash equivalents at beginning of period	12,381	7,041
Cash and cash equivalents at end of period	\$ 5,037	\$ 9,777
<b>Supplemental Disclosure of cash flow information</b>		
Interest paid	991	631
Taxes paid	—	17

*See accompanying notes.*

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

**1. Basis of Presentation**

Ligand Pharmaceuticals Incorporated, a Delaware corporation (the "Company" or "Ligand") is a biopharmaceutical company with a business model that is based upon the concept of developing or acquiring royalty revenue generating assets and coupling them to a lean corporate cost structure. By diversifying the portfolio of assets across numerous technology types, therapeutic areas, drug targets, and industry partners, the Company offers investors an opportunity to invest in the increasingly complicated and unpredictable pharmaceutical industry. In comparison to its peers, the Company believes it has assembled one of the largest and most diversified asset portfolios in the industry with the potential to generate revenue in the future. These therapies address the unmet medical needs of patients for a broad spectrum of diseases including hepatitis, muscle wasting, Alzheimer's disease, dyslipidemia, diabetes, anemia, asthma, FSGS and osteoporosis. Ligand has established multiple alliances with the world's leading pharmaceutical companies including GlaxoSmithKline, Onyx Pharmaceuticals, Merck, Pfizer, Baxter International, Bristol-Myers Squibb, Celgene, Lundbeck Inc., Spectrum Pharmaceuticals, Inc. and The Medicines Company. The Company's principal market is the United States. The Company sold its Oncology Product Line ("Oncology") and Avinza Product Line ("Avinza") on October 25, 2006 and February 26, 2007, respectively. The operating results for Oncology and Avinza have been presented in the accompanying consolidated financial statements as "Discontinued Operations."

The Company has incurred significant losses since its inception. As of March 31, 2013, the Company's accumulated deficit was \$681.3 million and the Company had negative working capital of \$15.3 million. Management believes that cash flows from operations will improve due to Captisol® sales, an increase in royalty revenues driven primarily from continued increases in Promacta® and Kyprolis® sales, and also from anticipated new license and milestone revenues. In the event revenues and operating cash flows are not meeting expectations, management plans to reduce discretionary expenses. However, it is possible that the Company may be required to seek additional financing. There can be no assurance that additional financing will be available on terms acceptable to management, or at all. Management believes its currently available cash, cash equivalents, and short-term investments as well as its current and future royalty, license and milestone revenues will be sufficient to satisfy its anticipated operating and capital requirements through at least the next 12 months. The Company's future operating and capital requirements will depend on many factors, including, but not limited to: the pace of scientific progress in its research and development programs; the potential success of these programs; the scope and results of preclinical testing and clinical trials; the time and costs involved in obtaining regulatory approvals; the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims; competing technological and market developments; the amount of royalties on sales of the commercial products of its partners; the efforts of its collaborative partners; obligations under its operating lease agreements; and the capital requirements of any companies the Company acquires, including Pharmacoepia, Inc. ("Pharmacoepia"), Neurogen Corporation ("Neurogen"), Metabasis Therapeutics, Inc. ("Metabasis") and CyDex Pharmaceuticals, Inc. ("CyDex"). The ability of the Company to achieve its operational targets is dependent upon the Company's ability to further implement its business plan and generate sufficient operating cash flow.

*Principles of Consolidation*

The accompanying consolidated financial statements include Ligand and its wholly owned subsidiaries, Ligand JVR, Allergan Ligand Retinoid Therapeutics, Seragen, Inc. ("Seragen"), Pharmacoepia, Neurogen, CyDex, Metabasis, and Nexus VI LLC ("Nexus"). All significant intercompany accounts and transactions have been eliminated in consolidation.

*Basis of Presentation*

The Company's accompanying unaudited consolidated condensed financial statements as of March 31, 2013 and for the three months ended March 31, 2013 and 2012 have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for annual financial statements. The Company's consolidated condensed balance sheet at December 31, 2012 has been derived from the audited financial statements at that date, but does not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements. 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. Operating results for the three months ended March 31, 2013 are not necessarily indicative of the results that may be expected for the year ending December 31, 2013. 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, 2012.

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### Use of Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities, including disclosure of contingent assets and liabilities, at the date of the consolidated financial statements, and the reported amounts of revenue and expenses during the reporting period. The Company's critical accounting policies are those that are both most important to the Company's financial condition and results of operations and require the most difficult, subjective or complex judgments on the part of management in their application, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Because of the uncertainty of factors surrounding the estimates or judgments used in the preparation of the consolidated financial statements, actual results may materially vary from these estimates.

### Reclassifications

Certain reclassifications have been made to the previously issued statement of operations for the three months ended March 31, 2012 for comparability purposes. This reclassification had no effect on the reported net income, stockholders' equity, and operating cash flows as previously reported.

### Earnings (Loss) Per Share

Basic earnings (loss) per share is calculated by dividing net income or loss by the weighted average number of common shares and vested restricted stock units outstanding. Diluted earnings per share is computed by dividing net income or loss by the weighted average number of common shares and vested restricted stock units outstanding and the weighted average number of dilutive common stock equivalents, including stock options and non-vested restricted stock units. Common stock equivalents are only included in the diluted earnings per share calculation when their effect is dilutive. The total number of potential common shares excluded from the computation of diluted loss per share because their inclusion would have been anti-dilutive was 1.2 million and 1.5 million, at March 31, 2013 and 2012, respectively.

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

	Three Months Ended	
	March 31,	
	2013	2012
Net income (loss) from continuing operations	\$ 1,304	\$ (738)
Net income from discontinued operations	191	1,871
Net income	\$ 1,495	\$ 1,133
Shares used to compute basic income (loss) per share	20,189,378	19,709,078
Dilutive potential common shares:		
Restricted stock	90,652	29,723
Shares used to compute diluted income (loss) per share	20,280,030	19,738,801
Basic and diluted per share amounts:		
Income (loss) from continuing operations	\$ 0.06	\$ (0.04)
Income from discontinued operations	0.01	0.10
Net income	\$ 0.07	\$ 0.06

### Cash, Cash Equivalents and Short-term Investments

Cash and cash equivalents consist of cash and highly liquid securities with maturities at the date of acquisition of three months or less. Non-restricted equity and debt securities with a maturity of more than three months are considered short-term investments.

### Restricted Cash and Investments



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Restricted cash and investments consist of certificates of deposit held with a financial institution as collateral under a facility lease including third-party service provider arrangements and available-for-sale securities received by the Company as a result of milestone payments from a licensee. The fair value of the Company's available-for-sale securities are determined using quoted market prices in active markets and are discounted based on trading restrictions.

The following table summarizes the various investment categories at March 31, 2013 and December 31, 2012 (in thousands):

	<u>Cost</u>	<u>Gross unrealized gains</u>	<u>Gross unrealized losses</u>	<u>Estimated fair value</u>
<b>March 31, 2013</b>				
Available-for-sale securities	\$ 1,426	\$ 1,166	\$ —	\$ 2,592
Certificates of deposit - restricted	1,341	—	—	1,341
	<u>\$ 2,767</u>	<u>\$ 1,166</u>	<u>\$ —</u>	<u>\$ 3,933</u>
<b>December 31, 2012</b>				
Available-for-sale securities	\$ 1,426	\$ —	\$ —	\$ 1,426
Certificates of deposit-restricted	1,341	—	—	1,341
	<u>\$ 2,767</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 2,767</u>

### *Concentrations of Credit Risk*

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash equivalents and investments and accounts receivable.

The Company invests its excess cash principally in United States government debt securities, investment grade corporate debt securities and certificates of deposit. The Company has 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. The Company has not experienced any significant losses on its cash equivalents, short-term investments or restricted investments for the periods ending March 31, 2013 and December 31, 2012.

As of March 31, 2013 and December 31, 2012, cash deposits held at financial institutions in excess of FDIC insured amounts of \$250,000 were approximately \$4.4 million and \$11.9 million, respectively.

Accounts receivable from two customers was 64% and 28% of total accounts receivable at March 31, 2013. Accounts receivable from two customers was 53% and 35% of total accounts receivable at December 31, 2012.

The Company currently obtains Captisol from a sole-source supplier. If this supplier was not able to supply the requested amounts of Captisol, the Company would be unable to continue to derive revenues from the sale of Captisol until it obtained an alternative source, which might take a considerable length of time.

### *Inventory*

Inventory is stated at the lower of cost or market. The Company determines cost using the first-in, first-out method. The Company analyzes its inventory levels periodically and writes down inventory to its 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.

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### Property and Equipment

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

	March 31, 2013	December 31, 2012
Lab and office equipment	\$ 4,837	\$ 4,374
Leasehold improvements	134	145
Computer equipment and software	1,244	1,150
	6,215	5,669
Less accumulated depreciation and amortization	(5,457)	(4,881)
	\$ 758	\$ 788

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 their estimated useful lives or their related lease term, whichever is shorter. Depreciation expense of \$0.1 million was recognized for the three months ended March 31, 2013 and 2012.

### Other Current Assets

Other current assets consist of the following (in thousands):

	March 31, 2013	December 31, 2012
Prepaid expenses	\$ 941	\$ 801
Advanced manufacturing payments	—	2
Other receivables	45	26
	\$ 986	\$ 829

### Goodwill and Other Identifiable Intangible Assets

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

	March 31, 2013	December 31, 2012
Indefinite lived intangible assets		
Acquired in-process research and development	\$ 13,036	\$ 13,036
Goodwill	12,238	12,238
Definite lived intangible assets		
Complete technology	15,227	15,227
Trade name	2,642	2,642
Customer relationships	29,600	29,600
	47,469	47,469
Accumulated amortization	(5,186)	(4,593)
Total goodwill and other identifiable intangible assets, net	\$ 67,557	\$ 68,150

The Company accounts for goodwill in accordance with Accounting Standards Codification Topic 350-Intangibles-Goodwill and Other ("ASC 350") which, among other things, establishes standards for goodwill acquired in a business combination, eliminates the amortization of goodwill and requires the carrying value of goodwill and certain non-amortizing

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intangibles to be evaluated for impairment on an annual basis. The Company considers its market capitalization and the carrying value of its assets and liabilities, including goodwill, when performing its goodwill impairment test. If the carrying value of the assets and liabilities, including goodwill, were to exceed the Company's estimation of the fair value, the Company would record an impairment charge in an amount equal to the excess of the carrying value of goodwill over the implied fair value of the goodwill. The Company performs an evaluation of goodwill as of December 31 of each year, absent any indicators of earlier impairment, to ensure that impairment charges, if applicable, are reflected in our financial results before December 31 of each year. When it is determined that impairment has occurred, a charge to operations is recorded. Goodwill and other intangible asset balances are included in the identifiable assets of the business segment to which they have been assigned. Any goodwill impairment, as well as the amortization of other purchased intangible assets, is charged against the respective business segments' operating income. As of March 31, 2013 and December 31, 2012, there have been no impairment of goodwill for continuing operations.

Amortization of definite lived intangible assets is computed using the straight-line method over the estimated useful life of the asset of 20 years. Amortization expense of \$0.6 million was recognized for the three months ended March 31, 2013 and 2012. Estimated amortization expense for the years ending December 31, 2013 through 2017 is \$2.4 million per year.

### *Acquired In-Process Research and Development*

Intangible assets related to IPR&D are considered to be indefinite-lived until the completion or abandonment of the associated research and development efforts. During the period the assets are considered to be indefinite-lived, they will not be amortized but will be tested for impairment on an annual basis and between annual tests if the Company becomes aware of any events occurring or changes in circumstances that would indicate a reduction in the fair value of the IPR&D projects below their respective carrying amounts. If and when development is complete, which generally occurs if and when regulatory approval to market a product is obtained, the associated assets would be deemed finite-lived and would then be amortized based on their respective estimated useful lives at that point in time.

### *Impairment of Long-Lived Assets*

Management reviews long-lived assets for impairment annually or whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets. Fair value for the Company's long-lived assets is determined using the expected cash flows discounted at a rate commensurate with the risk involved. As of March 31, 2013, management does not believe there have been any events or circumstances indicating that the carrying amount of its long-lived assets may not be recoverable.

### *Accrued Liabilities*

Accrued liabilities consist of the following (in thousands):

	March 31, 2013	December 31, 2012
Compensation	\$ 915	\$ 1,807
Professional fees	403	199
Other	3,200	2,955
	<u>\$ 4,518</u>	<u>\$ 4,961</u>

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### Other Long-Term Liabilities

Other long-term liabilities consist of the following (in thousands):

	March 31, 2013	December 31, 2012
Deposits	\$ 567	\$ 538
Deferred rent	399	334
Other	—	214
	<u>\$ 966</u>	<u>\$ 1,086</u>

### Contingent Liabilities

In connection with the Company's acquisition of CyDex in January 2011, the Company recorded a \$17.6 million contingent liability, inclusive of the \$4.3 million payment made in January 2012, for amounts potentially due to holders of the CyDex contingent value rights ("CVRs") and former license holders. The liability is periodically assessed based on events and circumstances related to the underlying milestones, and the change in fair value is recorded in the Company's consolidated statements 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 March 31, 2013 and December 31, 2012 was \$12.7 million and \$10.9 million, respectively. The Company recorded a fair value adjustment to increase the liability for CyDex related contingent liabilities of \$1.8 million for the three months ended March 31, 2013. The Company recorded fair value adjustments to increase the liability for CyDex related contingent liabilities of \$0.6 million for the three months ended March 31, 2012. Additionally, the Company recorded cash payments of \$4.3 million for the January 2012 guaranteed payment and \$0.2 million for the 2011 revenue sharing payment for the three months ended March 31, 2012. There was no revenue sharing payment for the three months ended March 31, 2013.

In connection with the Company's acquisition of Metabasis in January 2010, the Company issued Metabasis stockholders four tradable CVRs, one CVR from each of four respective series of CVR, for each Metabasis share. The CVR will entitle Metabasis stockholders to cash payments as frequently as every six months as cash is received by the Company from proceeds from Metabasis' partnership with Roche (which has been terminated) or 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. Changes in the fair values are reported in the statement of operations as income (decreases) or expense (increases). The carrying amount of the liability may fluctuate significantly based upon quoted market prices and actual amounts paid under the agreements may be materially different than the carrying amount of the liability. The fair value of the liability was estimated to be zero as of March 31, 2013 and 2012. The Company did not record any change in the liability for CVRs for the three months ended March 31, 2013. The Company recorded a decrease in the liability for CVRs of \$1.1 million during the three months ended March 31, 2012.

In connection with the Company's acquisition of Neurogen in December 2009, the Company issued to Neurogen stockholders four CVRs; real estate, Aplindore, VR1 and H3, that entitle them to cash and/or shares of third-party stock under certain circumstances. The Company recorded the acquisition-date fair value of the CVRs as part of the purchase price. In February 2010, the Company completed the sale of the real estate and subsequently distributed the proceeds to the holders of the real estate CVR. As a result and after final settlement of all related expenses, the real estate CVR was terminated in August 2010. In 2012, the Company received a notice from a collaboration partner that it was terminating its agreement related to VR1 for convenience and subsequently the Company recorded a decrease in the fair value of the liability for the related CVR of \$0.2 million. Additionally, per the CVR agreement, no payment event date for the H3 program can occur after December 23, 2012 and the Company recorded a decrease in the fair value of the liability for the related CVR of \$0.5 million. There are no remaining CVR obligations under the agreement with the former Neurogen shareholders.

### Fair Value of Financial Instruments

Fair value is defined as the exit price that would be received to sell an asset or paid to transfer a liability. 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 in the below with Level 1 having the highest priority and Level 3 having the lowest:

Level 1 - Observable inputs such as quoted prices in active markets

Level 2 - Inputs other than the quoted prices in active markets that are observable either directly or indirectly

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Level 3 - Unobservable inputs in which there is little or no market data, which require us to develop our own assumptions

The Company's long-term investments include investments in equity securities which are subject to trading restrictions. The fair value of the investments is determined using quoted market prices in active markets and discounted for the restrictive effect. The Metabasis CVR liability is marked-to-market at each reporting period based upon the quoted market prices of the underlying CVR. The fair value of the CyDex contingent liabilities are determined at each reporting period based upon an income valuation model.

### *Revenue Recognition*

Royalties on sales of products commercialized by the Company's partners are recognized in the quarter reported by the respective partner.

Revenue from material sales is recognized upon transfer of title, which normally passes upon shipment to the customer. The Company's credit and exchange policy includes provisions for the return of product between 30 to 90 days, depending on the specific terms of the individual agreement, when that product (1) does not meet specifications, (2) is damaged in shipment (in limited circumstances where title does not transfer until delivery), or (3) is exchanged for an alternative grade of Captisol.

Nonrefundable, up-front license fees and milestone payments with standalone value that are not dependent on any future performance by us under our collaboration agreements are recognized as revenue upon the earlier of when payments are received or collection is assured, but are deferred if the Company has continuing performance obligations. Amounts received under multiple-element arrangements requiring ongoing services or performance by the Company are recognized over the period of such services or performance. The Company occasionally has sub-license obligations related to arrangements for which it receives license fees, milestones and royalties. The Company evaluates the determination of gross versus net reporting based on each individual agreement.

The Company analyzes its revenue arrangements and other agreements to determine whether there are multiple elements that should be separated and accounted for individually or as a single unit of accounting. For multiple element contracts, arrangement consideration is allocated at the inception of the arrangement to all deliverables on the basis of relative selling price, using a hierarchy to determine selling price. Management first considers vendor-specific objective evidence ("VSOE"), then third-party evidence ("TPE") and if neither VSOE nor TPE exist, the Company uses its best estimate of selling price.

Many of the Company's revenue arrangements involve the bundling of a license with the option to purchase manufactured product. Licenses are granted to pharmaceutical companies for the use of Captisol in the development of pharmaceutical compounds. The licenses may be granted for the use of the Captisol product for all phases of clinical trials and through commercial availability of the host drug or may be limited to certain phases of the clinical trial process. The Company believes that its licenses have stand-alone value at the outset of an arrangement because the customer obtains the right to use Captisol in its formulations without any additional input by the Company, and in a hypothetical stand-alone transaction, the customer would be able to procure inventory from another manufacturer in the absence of contractual provisions for exclusive supply by the Company.

Revenue from milestones is recognized when earned, as evidenced by written acknowledgement from the collaborator, provided that (i) the milestone event is substantive, its achievability was not reasonably assured at the inception of the agreement, and the Company has no further performance obligations relating to that event, and (ii) collectability is reasonably assured. If these criteria are not met, the milestone payment is recognized over the remaining period of the Company's performance obligations under the arrangement.

### *Allowance for Doubtful Accounts*

The Company maintains an allowance for doubtful accounts based on the best estimate of the amount of probable losses in the Company's existing accounts receivable. Accounts receivable that are outstanding longer than their contractual payment terms, ranging from 30 to 90 days, are considered past due. When determining the allowance for doubtful accounts, several factors are taken into consideration, including historical write-off experience and review of specific customer accounts for collectability. Account balances are charged off against the allowance after collection efforts have been exhausted and the potential for recovery is considered remote. There was no allowance for doubtful accounts included in the balance sheets at March 31, 2013 and December 31, 2012.

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### Accounting for Share-Based Compensation

Share-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. Compensation cost for consultant awards is recognized over each separate tranche's vesting period. The following table summarizes share-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 March 31,	
	2013	2012
Share-based compensation expense as a component of:		
Research and development expenses	\$ 386	\$ 425
General and administrative expenses	738	284
	<u>\$ 1,124</u>	<u>\$ 709</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 March 31,	
	2013	2012
Risk-free interest rate	1.1%	1.1%
Dividend yield	—	—
Expected volatility	70%	68%
Expected term	6.3	6.0
Forfeiture rate	9.8%	11.2%

The expected term of the employee and non-employee director options is the estimated weighted-average period until exercise or cancellation of vested options (forfeited unvested options are not considered) based on historical experience. The expected term for consultant awards is the remaining period to contractual expiration.

Volatility is a measure of the expected amount of variability in the stock price over the expected life of an option expressed as a standard deviation. In selecting this assumption, management used the historical volatility of the Company's stock price over a period approximating the expected term.

### Preclinical Study and Clinical Trial Accruals

Substantial portions of the Company's preclinical studies and all of the Company's clinical trials have been performed by third-party laboratories, contract research organizations, or other vendors (collectively "CROs"). Some CROs bill monthly for services performed, while others bill based upon milestone achievement. The Company accrues for each of the significant agreements it has with CROs on a monthly basis. For preclinical studies, accruals are estimated based upon the percentage of work completed and the contract milestones achieved. For clinical studies, accruals are estimated based upon a percentage of work completed, the number of patients enrolled and the duration of the study. The Company monitors patient enrollment, the progress of clinical studies and related activities to the extent possible through internal reviews of data reported to it by the CROs, correspondence with the CROs and clinical site visits. The Company's estimates are dependent upon the timelines and accuracy of the data provided by its CROs regarding the status of each program and total program spending. The Company periodically evaluates its estimates to determine if adjustments are necessary or appropriate based on information it receives concerning changing circumstances, and conditions or events that may affect such estimates. No material adjustments to preclinical study and clinical trial accrued expenses have been recognized to date.

### Sale of Royalty Rights

The Company previously sold to third parties the rights to future royalties of certain of its products. As part of the underlying royalty agreements, the partners have the right to offset a portion of any future royalty payments owed to the Company to the extent of previous milestone payments. Accordingly, the Company deferred a portion of the revenue

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associated with each tranche of royalty right sold, equal to the pro-rata share of the potential royalty offset. Such amounts associated with the offset rights against future royalty payments will be recognized as revenue upon receipt of future royalties from the respective partners. As of March 31, 2013 and December 31, 2012, the Company had deferred \$0.6 million and \$0.8 million, respectively, of revenue related to the sale of royalty rights. As of March 31, 2013, \$0.6 million is included in current portion of deferred revenue and \$40,000 is included in long-term portion of deferred revenue.

### *Product Returns*

In connection with the sale of the Avinza and Oncology product lines, the Company retained the obligation for returns of product that were shipped to wholesalers prior to the close of the transactions. The accruals for product returns, which were recorded as part of the accounting for the sales transactions, are based on historical experience. Any subsequent changes to the Company's estimate of product returns are accounted for as a component of discontinued operations.

### *Costs and Expenses*

Collaborative research and development expense consists of labor, material, equipment and allocated facility cost of the Company's scientific staff who are working pursuant to the Company's collaborative agreements. From time to time, collaborative research and development expense includes costs related to research efforts in excess of those required under certain collaborative agreements. Management has the discretion to set the scope of such excess efforts and may increase or decrease the level of such efforts depending on the Company's strategic priorities.

Proprietary research and development expense consists of intellectual property in-licensing costs, labor, materials, contracted services, and allocated facility costs that are incurred in connection with internally funded drug discovery and development programs.

### *Segment Reporting*

Under ASC 280, Segment Reporting, ("ASC 280"), operating segments are defined as components of an enterprise about which separate financial information is available that is regularly evaluated by the entity's chief operating decision maker, in deciding how to allocate resources and in assessing performance. The Company has evaluated this Codification and has identified two reportable segments: the development and commercialization of drugs using Captisol technology by CyDex and the biopharmaceutical company with a business model that is based upon the concept of developing or acquiring royalty revenue generating assets and coupling them to a lean corporate cost structure of Ligand.

### *Comprehensive Income (Loss)*

Comprehensive income (loss) represents net income (loss) adjusted for the change during the periods presented in unrealized gains and losses on available-for-sale securities less reclassification adjustments for realized gains or losses included in net income (loss). The unrealized gains or losses are reported on the Consolidated Statements of Comprehensive Income.

### *New Accounting Pronouncements*

In July 2012, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update ("ASU") 2012-02, *Intangibles – Goodwill and Other: Testing Indefinite-Lived Intangible Assets for Impairment* in ASU 2012-02. ASU 2012-02 allows a company the option to first assess qualitative factors to determine whether it is necessary to perform a quantitative impairment test. Under that option, a company would no longer be required to calculate the fair value of an indefinite-lived intangible asset unless the company determines, based on that qualitative assessment, that it is more likely than not that the fair value of the indefinite-lived intangible asset is less than its carrying amount. The amendments in this ASU are effective for annual and interim indefinite-lived intangible asset impairment tests performed for periods beginning after September 15, 2012. We adopted this standard for the year ended December 31, 2012. The adoption of ASU 2012-02 did not have a material impact on the Company's financial position or results of operations.

In February 2013, the FASB issued ASU No. 2013-02, *Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income*. Under ASU 2013-02, an entity is required to provide information about the amounts reclassified out of Accumulated Other Comprehensive Income ("AOCI") by component. In addition, an entity is required to present, either on the face of the financial statements or in the notes, significant amounts reclassified out of AOCI by the respective line items of net income, but only if the amount reclassified is required to be reclassified in its entirety in the same reporting period. For amounts that are not required to be reclassified in their entirety to net income, an entity is required to cross-reference to other disclosures that provide additional details about those amounts. Implementing ASU 2013-02 did not change the current requirements for reporting net income or other comprehensive income in the financial statements. The amendments in this ASU are effective for us for fiscal years, and interim periods within those years, beginning after January 1, 2013.

### 2. Financial Instruments

The Company measures certain financial assets and liabilities at fair value on a recurring basis, including available-for-sale fixed income, equity securities, co-promote termination payments receivable and the related liability, derivatives, and contingent liabilities.

#### *Equity Investments and related liability to former license holders*

The fair value of the Company's long-term investments and related liability to former license holders are determined using quoted market prices in active markets and are discounted based on trading restrictions on the resale of the shares. The fair value of the liability to former license holders is based on 15% of the equity investment. This liability is classified as a derivative in accordance with ASC 815, Derivatives and Hedging ("ASC 815"), and is included in accrued liabilities. The discount rate used to value the available-for-sale securities as of March 31, 2013 and December 31, 2012 was 24% and 28%, respectively.

#### *Contingent Liabilities*

The Company issued contingent value rights and also assumed certain contingent liabilities associated with the acquisitions of Metabasis, Neurogen and CyDex. The liability for contingent value rights for Metabasis are determined using quoted market prices in active markets. The fair value of the liabilities for the Neurogen and CyDex contingent liabilities are determined based on the income approach. The discount rate used to value the CyDex contingent liabilities for the period ended March 31, 2013 was in the range of 1% to 5%. There are no remaining contingent value right obligations under the agreement with the former Neurogen shareholders. Under the Contingent Value Rights agreement with the former CyDex shareholders, the Company may be required to make payments upon achievement of certain clinical and regulatory milestones. In addition, the Company will pay CyDex shareholders, for each 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. Additionally, the Company assumed certain contractual obligations for milestone and royalty payments potentially due in connection with Captisol enabled intravenous formulation of Clopidogrel.

#### *Avinza Co-Promotion*

The co-promote termination payments receivable represents a non-interest bearing receivable for future payments to be made by Pfizer and is recorded at its fair value. The receivable and liability will remain equal and adjusted each quarter for changes in the fair value of the obligation including any changes in the estimate of future net Avinza product sales.



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The following table provides a summary of the assets and liabilities that are measured at fair value on a recurring basis as of March 31, 2013 (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)
<b>Assets:</b>				
Current portion of co-promote termination payments receivable	\$ 4,257	\$ —	\$ —	\$ 4,257
Available-for-sale securities	2,592	—	—	2,592
Long-term portion of co-promote termination payments receivable	7,916	—	—	7,916
<b>Total Assets</b>	<b>\$ 14,765</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 14,765</b>
<b>Liabilities:</b>				
Current portion of contingent liabilities - CyDex	\$ 356	\$ —	\$ —	\$ 356
Current portion of co-promote termination liability	4,257	—	—	4,257
Long-term portion of contingent liabilities - CyDex	12,384	—	—	12,384
Liability for restricted investments owed to former licensees	389	—	—	389
Long-term portion of co-promote termination liability	7,916	—	—	7,916
<b>Total liabilities</b>	<b>\$ 25,302</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 25,302</b>

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, 2012 (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)
<b>Assets:</b>				
Current portion of co-promote termination payments receivable	\$ 4,327	\$ —	\$ —	\$ 4,327
Available-for-sale securities	1,426	—	—	1,426
Long-term portion of co-promote termination payments receivable	8,207	—	—	8,207
<b>Total Assets</b>	<b>\$ 13,960</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 13,960</b>
<b>Liabilities:</b>				
Current portion of contingent liabilities - CyDex	\$ 356	\$ —	\$ —	\$ 356
Current portion of co-promote termination liability	4,327	—	—	4,327
Long-term portion of contingent liabilities - CyDex	10,543	—	—	10,543
Liability for restricted investments owed to former licensees	214	—	—	214
Long-term portion of co-promote termination liability	8,207	—	—	8,207
<b>Total liabilities</b>	<b>\$ 23,647</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 23,647</b>

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A reconciliation of the level 3 financial instruments as of March 31, 2013 is as follows (in thousands):

### Assets:

Fair value of level 3 financial instruments as of December 31, 2012	\$	13,960
Assumed payments made by Pfizer or assignee		(853)
Fair value adjustments		1,658
Fair value of level 3 financial instrument assets as of March 31, 2013	\$	14,765

### Liabilities

Fair value of level 3 financial instruments as of December 31, 2012	\$	23,647
Assumed payments made by Pfizer or assignee		(853)
Fair value adjustments		2,508
Fair value of level 3 financial instruments as of March 31, 2013	\$	25,302

### 3. AVINZA Co-Promotion

In February 2003, Ligand and Organon Pharmaceuticals USA Inc. ("Organon") announced that they had entered into an agreement for the co-promotion of Avinza. Subsequently in January 2006, Ligand signed an agreement with Organon that terminated the Avinza co-promotion agreement between the two companies and returned Avinza co-promotion rights to Ligand. In consideration of the early termination, Ligand agreed to make quarterly royalty payments to Organon equal to 6.5% of Avinza net sales through December 31, 2012 and thereafter 6.0% through patent expiration, currently anticipated to be November of 2017.

In February 2007, Ligand and King Pharmaceuticals, Inc., ("King"), executed an agreement pursuant to which King acquired all of the Company's rights in and to Avinza. King also assumed the Company's co-promote termination obligation to make royalty payments to Organon based on net sales of Avinza. In connection with King's assumption of this obligation, Organon did not consent to the legal assignment of the co-promote termination obligation to King. Accordingly, Ligand remains liable to Organon in the event of King's default of the obligation. Therefore, Ligand recorded an asset as of February 26, 2007 to recognize King's assumption of the obligation, while continuing to carry the co-promote termination liability in the Company's consolidated financial statements to recognize Ligand's legal obligation as primary obligor to Organon. This asset represents a non-interest bearing receivable for future payments to be made by King and is recorded at its fair value. The receivable and liability will remain equal and adjusted each quarter for changes in the fair value of the obligation including for any changes in the estimate of future net Avinza product sales. This receivable will be assessed on a quarterly basis for impairment (e.g. in the event King defaults on the assumed obligation to pay Organon).

On a quarterly basis, management reviews the carrying value of the co-promote termination liability. Due to assumptions and judgments inherent in determining the estimates of future net Avinza sales through November 2017, the actual amount of net Avinza sales used to determine the current fair value of the Company's co-promote termination asset and liability may be materially different from current estimates.

A summary of the co-promote termination liability as of March 31, 2013 is as follows (in thousands):

Net present value of payments based on estimated future net Avinza product sales as of December 31, 2012	\$	12,534
Assumed payments made by Pfizer or assignee		(853)
Fair value adjustments		492
Total co-promote termination liability as of March 31, 2013		12,173
Less: current portion of co-promote termination liability as of March 31, 2013		4,257
Long-term portion of co-promote termination liability as of March 31, 2013	\$	7,916

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### 4. Lease obligations

The Company leases office and laboratory facilities in California, Kansas, and New Jersey. These leases expire between 2014 and 2019, some of which are subject to annual increases which range from 3.0% and 3.5%. The Company currently subleases office and laboratory space in California and New Jersey. The following table provides a summary of operating lease obligations and payments expected to be received from sublease agreements as of March 31, 2013 (in thousands):

Operating lease obligations:	Lease Termination Date	Less than 1 year	1-3 years	3-5 years	More than 5 years	Total
	Corporate headquarters-San Diego, CA	July 2019	\$ 693	\$ 1,355	\$ 1,427	\$ 929
Bioscience and Technology Business Center-Lawrence, KS	December 2014	57	43	—	—	100
Vacated office and research facility-San Diego, CA	July 2015	2,191	3,018	—	—	5,209
Vacated office and research facility-Cranbury, NJ	August 2016	2,563	5,165	1,089	—	8,817
<b>Total operating lease obligations</b>		<b>\$ 5,504</b>	<b>\$ 9,581</b>	<b>\$ 2,516</b>	<b>\$ 929</b>	<b>\$ 18,530</b>

  

Sublease payments expected to be received:	Less than 1 year		1-3 years	3-5 years	More than 5 years	Total
	Office and research facility-San Diego, CA	July 2015	\$ 889	\$ 1,227	\$ —	\$ —
Office and research facility-Cranbury, NJ	August 2014 and 2016	190	564	113	—	867
<b>Net operating lease obligations</b>		<b>\$ 4,425</b>	<b>\$ 7,790</b>	<b>\$ 2,403</b>	<b>\$ 929</b>	<b>\$ 15,547</b>

In 2010, the Company ceased use of its facility located in New Jersey. As a result, the Company recorded lease exit costs of \$9.7 million for costs related to the difference between the remaining lease obligations of the abandoned operating leases, which run through August 2016, and management's estimate of potential future sublease income, discounted to present value. In addition, the Company wrote-off property and equipment with a net book value of approximately \$5.4 million related to the facility closure.

As of March 31, 2013 and December 31, 2012, the Company had lease exit obligations of \$8.1 million and \$9.0 million, respectively. For the three months ended March 31, 2013, the Company made cash payments, net of sublease payments received of \$1.0 million. The Company recognized adjustments for accretion and changes in leasing assumptions of \$0.1 million for the three months ended March 31, 2013.

As part of the lease for the corporate headquarters, the Company received a tenant improvement allowance of \$3.2 million. The tenant improvements were used to build out the suite for general lab and office purposes. For the year ended December 31, 2012, the Company recorded a sale leaseback transaction whereby it removed all property from its balance sheet as of the completion date of the buildout. There was no gain on the sale-leaseback.

Total rent expense under all office leases for the three months ended March 31, 2013 and 2012 was \$0.2 million and \$0.1 million, respectively. The Company recognizes rent expense on a straight-line basis. Deferred rent at March 31, 2013 and December 31, 2012 was \$0.4 million and \$0.3 million, respectively, and is included in other long-term liabilities.

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### 5. Segment Reporting

The Company evaluates performance based on the operating profit (loss) of the respective business segments. The segment results may not represent actual results that would be expected if they were independent, stand-alone businesses. Segment information is as follows:

#### Balance Sheet Data:

	As of March 31, 2013		
	Ligand	CyDex	Total
Total assets	\$ 29,793	\$ 68,570	\$ 98,363

	As of December 31, 2012		
	Ligand	CyDex	Total
Total assets	\$ 28,731	\$ 75,529	\$ 104,260

#### Operating Data:

	For the three months ended March 31, 2013		
	Ligand	CyDex	Total
Net revenues from external customers	\$ 6,237	\$ 5,414	\$ 11,651
Operating income	1,396	2,536	3,932
Depreciation and amortization expense	59	611	670
Income tax expense from continuing operations	(66)	—	(66)
Interest expense, net	912	—	912

	For the three months ended March 31, 2012		
	Ligand	CyDex	Total
Net revenues from external customers	\$ 4,101	\$ 1,535	\$ 5,636
Operating (loss)	(388)	(451)	(839)
Depreciation and amortization expense	72	606	678
Income tax benefit from continuing operations	35	—	35
Income tax expense from discontinuing operations	(177)	—	(177)
Interest expense, net	701	—	701

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### 6. Financing Arrangements

The Company has a secured term loan credit facility ("secured debt"). Under the terms of the secured debt, the Company will make interest only payments through February 2013. Subsequent to the interest only payments, the note will amortize with principal and interest payments through the remaining term of the loan. Additionally, the Company must also make an additional final payment equal to 6% of the total amount borrowed which is due at maturity and is being accreted over the life of the loan.

In March 2013, the Company prepaid \$7 million of the secured term loan credit facility. Additionally, the Company paid a prepayment fee of 1% of the prepayment amount, or \$0.1 million and a prorated final-payment fee of 6% of the final payment or \$0.4 million.

The carrying values and the fixed contractual coupon rates of our financing arrangements are as follows (dollars in millions):

	March 31, 2013	December 31, 2012
Current portion notes payable, 8.64%, due August 1, 2014	\$ 9,610	\$ 10,792
Current portion notes payable, 8.9012%, due August 1, 2014	3,602	4,043
<b>Total current portion of notes payable</b>	<b>\$ 13,212</b>	<b>\$ 14,835</b>
Long-term portion notes payable, 8.64%, due August 1, 2014	\$ 4,026	\$ 9,837
Long-term portion notes payable, 8.9012%, due August 1, 2014	1,468	3,606
<b>Total long-term portion of notes payable</b>	<b>\$ 5,494</b>	<b>\$ 13,443</b>

### 7. Stockholders' Equity

On May 31, 2012, the Company's stockholders approved the amendment and restatement of the Company's 2002 Stock Incentive Plan to increase the number of shares available for issuance by 1.8 million shares.

#### Stock Option Activity

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

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term in Years	Aggregate Intrinsic Value (In thousands)
Balance as of December 31, 2012	1,626,606	\$ 14.9	7.8	\$ 11,358
Granted	371,750	21.92		
Exercised	(23,401)	13.96		
Forfeited	(39,375)	19.13		
Cancelled	(24,123)	30.63		
Balance as of March 31, 2013	1,911,457	15.99	8.1	21,635
Exercisable as of March 31, 2013	848,436	15.78	7.0	10,482
Options vested and expected to vest as of March 31, 2013	1,911,457	15.99	8.1	21,635

The weighted-average grant date fair value of all stock options granted during the three months ended March 31, 2013 was \$21.92 per share. The total intrinsic value of all options exercised during the three months ended March 31, 2013 and 2012 was approximately \$0.2 million and \$0.1 million, respectively. As of March 31, 2013, there was \$8.8 million of total unrecognized compensation cost related to nonvested stock options. That cost is expected to be recognized over a weighted-average period of 2.9 years.

Cash received from options exercised during the three months ended March 31, 2013 and 2012 was approximately \$0.3 million and \$0.2 million, respectively. There is no current tax benefit related to options exercised because of Net Operating Losses (NOLs) for which a full valuation allowance has been established.

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As of March 31, 2013, 1.5 million shares were available for future option grants or direct issuance under the Company's 2002 Stock Incentive Plan, as amended.

### Restricted Stock Activity

Restricted stock activity for the three months ended March 31, 2013 is as follows:

	Shares	Weighted-Average Grant Date Fair Value
Nonvested at December 31, 2012	141,561	\$ 12.52
Granted	36,775	21.92
Vested	(40,512)	21.91
Nonvested at March 31, 2013	137,824	\$ 12.27

The weighted-average grant-date fair value of restricted stock granted during the three months ended March 31, 2013 was \$21.92 per share. As of March 31, 2013, there was \$1.4 million of total unrecognized compensation cost related to nonvested restricted stock. That cost is expected to be recognized over a weighted-average period of 1.7 years.

### Employee Stock Purchase Plan

The Company's Employee Stock Purchase Plan, as amended and restated (the "Amended ESPP") allows participants 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 offering period beginning after their hire date.

The Amended ESPP allows employees to purchase Ligand common stock at the end of each six month period at a price equal to 85% of the lesser of fair market value on either the start date of the period or the last trading day of the period (the "Lookback Provision"). The 15% discount and the Lookback Provision make the Amended ESPP compensatory. There were no shares of common stock issued under the amended ESPP during the three months ended March 31, 2013 and 2012. The Company recorded compensation expense related to the ESPP of \$5,200 and \$5,900 for the three months ended March 31, 2013 and 2012, respectively. As of March 31, 2013, 86,528 shares were available for future purchases under the Amended ESPP.

### Warrants

As of March 31, 2013, 163,568 warrants with an exercise price of \$179.40 per warrant were outstanding to purchase an aggregate of 129,360 shares of the Company's common stock. These warrants expire in April 2013. The series of warrants was assumed in the acquisition of Neurogen Corporation.

### Public Offering

In October 2011, we filed a Registration Statement on Form S-3 with the Securities and Exchange Commission ("SEC") for the issuance and sale of up to \$30 million of equity or other securities, proceeds from which will be used for general corporate purposes. The Form S-3 provides additional financial flexibility for us to sell shares or other securities as needed at any time. As of March 31, 2013, 302,750 common shares have been issued under this registration statement for total net proceeds of approximately \$5.5 million.

During the quarter ended March 31, 2013 and 2012, the Company did not issue any common shares pursuant to its at-the-market equity issuance plan.

## **8. Litigation**

We record our 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, we record the

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minimum estimated liability related to the claim in accordance with ASC Topic 450 Contingencies. As additional information becomes available, we assess the potential liability related to our pending litigation and revise our estimates. Revisions in our estimates of potential liability could materially impact our results of operations.

### 9. Common Stock Subject to Conditional Redemption - Pfizer Settlement Agreement

In April 1996, the Company and Pfizer entered into a settlement agreement with respect to a lawsuit filed in December 1994 by the Company against Pfizer. In connection with a collaborative research agreement the Company entered into with Pfizer in 1991, Pfizer purchased shares of the Company's common stock. Under the terms of the settlement agreement, at the option of either the Company or Pfizer, milestone and royalty payments owed to the Company can be satisfied by Pfizer by transferring to the Company shares of the Company's common stock at an exchange ratio of \$74.25 per share, for revenue related to lasofoxifene and drolofoxifene. The remaining common stock issued and outstanding to Pfizer following the settlement was reclassified as common stock subject to conditional redemption (between liabilities and equity) since Pfizer has the option to settle milestone and royalties payments owed to the Company with the Company's shares, and such option is not within the Company's control. The remaining shares of the Company's common stock that could be redeemed totaled 112,371 and are reflected at the exchange ratio price of \$74.25. Pfizer has notified Ligand that the development of the two compounds covered under the 1996 settlement agreement have been terminated and thus the Company reclassified the shares and the current carrying amount of \$8.3 million to permanent equity in the first quarter of 2012.

### 10. Subsequent Events

In April 2013, the Company entered into a Royalty Stream and Milestone Payments purchase agreement with Selexis SA ("Selexis"), a privately held life sciences company, to acquire a portfolio of possible future royalty and milestone payment rights based on over 15 Selexis commercial license agreement programs with various pharmaceutical-company counterparties. In return, the Company paid Selexis \$3.5 million in an upfront cash payment, and will pay an additional \$1 million cash payment on the first anniversary of the closing. The more than 15 programs that are the subject of this transaction are based on Selexis' technology platform for cell line development and scale-up to manufacturing of therapeutic proteins and relate to pre-commercialized drugs that are currently being developed, and which should require no funding or technological support from the Company.

## 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 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 royalties 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 undertake no obligation to release publicly the results of 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.*

*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 our wholly owned subsidiaries—Ligand JVR, Allergan Ligand Retinoid Therapeutics, Seragen, Inc., or Seragen; Pharmacopeia, LLC; Neurogen Corporation, CyDex Pharmaceuticals, Inc., Metabasis Therapeutics, and Nexus Equity VI LLC, or Nexus.

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### Overview

We are a biotechnology company that operates with a business model focused on developing or acquiring revenue generating assets and coupling them to a lean corporate cost structure. Our goal is to create a sustainably profitable business and generate meaningful value for our stockholders. Since a portion of our business model is based on the goal of partnering with other pharmaceutical companies to commercialize and market our assets, a significant amount of our revenue is based largely on payments made to us by partners for royalties, milestones and license fees. We recognized the important role of the drug reformulation segment in the pharmaceutical industry and in 2011 added Captisol® to our technology portfolio. Captisol is a powerful formulation technology that has enabled six FDA approved products, including Onyx's Kyprolis® and Baxter International's Nexterone® and is currently being developed in a number of clinical-stage partner programs. In comparison to our peers, we believe we have assembled one of the largest and most diversified asset portfolios in the industry with the potential to generate significant revenue in the future. The therapies in our development portfolio address the unmet medical needs of patients for a broad spectrum of diseases including hepatitis, muscle wasting, multiple myeloma, Alzheimer's disease, dyslipidemia, diabetes, anemia, epilepsy, FSGS and osteoporosis. We have established multiple alliances with the world's leading pharmaceutical companies including GlaxoSmithKline, Onyx Pharmaceuticals, Merck, Pfizer, Baxter International, Bristol-Myers Squibb, Celgene, Lundbeck Inc., Eli Lilly and Co., Spectrum Pharmaceuticals, Inc. and The Medicines Company.

In December 2012, we received a milestone payment of 620,000 shares of common stock in partner Retrophin, Inc. The milestone arose under the previously executed license agreement for the development and commercialization of Retrophin's lead clinical candidate RE-021 and was triggered by the completion of Retrophin's merger with Desert Gateway, Inc. and its transition to a publicly traded company. We recorded milestone revenue equal to the estimated fair value of the shares received, net of amounts owed to a third party, which was determined by an independent valuation firm.

In early 2013 we received a \$1.4 million milestone payment from Retrophin, Inc. and remitted \$0.2 million to former license holders under the terms of a previous license agreement for RE-021.

In March 2013, we entered into a License Agreement with Spectrum Pharmaceuticals, Inc. ("Spectrum"). Under the License Agreement, we granted to Spectrum an exclusive, nontransferable, worldwide license to such intellectual property rights that will enable Spectrum to develop and potentially commercialize Captisol-enabled® propylene glycol-free melphalan. Contemporaneously with the entry into the license agreement, we entered into a supply agreement to provide Captisol to Spectrum. Under the Supply Agreement, Spectrum agreed to purchase its Captisol requirements for the development of the compound contemplated by the license agreement, as well as any Captisol required for any product that is successfully commercialized. We received a non-refundable license issuance fee of \$3 million. Additionally, we are entitled to milestone payments and royalties on future net sales of the Captisol-enabled melphalan product. This program is currently enrolling patients in a pivotal clinical trial.

In April 2013, we entered into a Royalty Stream and Milestone Payments Purchase Agreement with Selexis SA ("Selexis"), to acquire a portfolio of possible future royalty and milestone payment rights based on over 15 Selexis commercial license agreement programs with various pharmaceutical-company counterparties. In return, we paid Selexis an upfront payment of \$3.5 million, and expect to make an additional \$1 million cash payment on the first anniversary of the closing.

### Results of Operations

#### *Three Months Ended March 31, 2013 and 2012*

Total revenues for the three months ended March 31, 2013 were \$11.7 million compared to \$5.6 million for the same period in 2012. We reported income from continuing operations of \$1.3 million and a loss from continuing operations of \$0.7 million for the three months ending March 31, 2013 and 2012, respectively.

#### *Royalty Revenue*

Royalty revenues were \$5.8 million for the three months ended March 31, 2013, compared to \$3.1 million for the same period in 2012. The increase in royalty revenue is primarily due to an increase in Promacta and Kyprolis royalties.

#### *Material Sales*



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We recorded material sales of \$1.5 million for the three months ended March 31, 2013, compared to \$0.7 million for the same period in 2012. The increase in material sales for the three months ended March 31, 2013 is primarily due to timing of customer purchases of Captisol.

### *Collaborative Research and Development and Other Revenues*

We recorded collaborative research and development and other revenues of \$4.3 million for the three months ended March 31, 2013, compared to \$1.9 million for the same period in 2012. The increase of \$2.4 million for the three months ended March 31, 2013, compared to the same period in 2012, is primarily due to the licensing of Captisol-enabled Melphalan to Spectrum in March 2013.

### *Cost of Sales*

Cost of sales were \$0.7 million for the three months ended March 31, 2013, compared to \$0.2 million for the same period in 2012. The increase of \$0.5 million for the three months ended March 31, 2013, compared to the same period in 2012, is primarily due to an increase in material sales.

### *Research and Development Expenses*

Research and development expenses were \$2.5 million for the three months ended March 31, 2013, compared to \$2.8 million for the same periods in 2012. The decrease of \$0.3 million for the three months ended March 31, 2013, compared to the same period in 2012, is primarily due to timing of costs associated with internal programs.

As summarized in the table below, we are developing several proprietary products for a variety of indications. Our programs are not limited to the following, but are representative of a range of future licensing opportunities to expand our partnered asset portfolio.

<u>Program</u>	<u>Disease/Indication</u>	<u>Development Phase</u>
Selective Androgen Receptor Modulator	Various	Phase II-ready
Captisol-enabled Topiramate	Epilepsy	Phase I/II
Glucagon Receptor Antagonist	Diabetes	Pre-IND
HepDirect™	Liver Diseases	Preclinical
Oral Human Granulocyte Colony Stimulating Factor	Neutropenia	Preclinical
Oral Erythropoietin	Anemia	Preclinical

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.

### *General and Administrative Expenses*

General and administrative expenses were \$4.5 million for the three months ended March 31, 2013, compared to \$3.4 million for the same period in 2012. The increase of \$1.1 million for the three months ended March 31, 2013, compared to the same period in 2012, is primarily due to an increase in share-based compensation expense and other headcount related expenses.

### *Lease Exit and Termination Costs*

In September 2010, we ceased use of our facility located in Cranbury, New Jersey. As a result, during the quarter ended September 30, 2010, we recorded lease exit costs of \$9.7 million for costs related to the difference between the remaining lease obligations of the abandoned operating leases, which run through August 2016, and management's estimate of potential future sublease income, discounted to present value. Actual future sublease income may differ materially from our

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estimate, which would result in us recording additional expense or reductions in expense. In addition, we wrote-off approximately \$5.4 million of property and equipment related to the facility closure and recorded approximately \$1.8 million of severance related costs. We recorded \$0.1 million in lease exit and termination costs for the three months ending March 31, 2013 and 2012.

### *Interest Expense, net*

Interest expense was \$0.9 million for the three months ended March 31, 2013, compared to \$0.7 million for the same period in 2012. The increase in interest expense of \$0.2 million for the three month period ending March 31, 2013 is due to additional costs associated with the loan payoff for the three months ended March 31, 2013.

### *Change in Contingent Liabilities*

We recorded an increase in contingent liabilities of \$1.8 million for the three months ended March 31, 2013, compared to a decrease in contingent liabilities of \$0.5 million for the three months ended March 31, 2012. The increase for the three months ended March 31, 2013 relates to an increase in the liability for amounts potentially due to holders of CVRs and former license holders associated with our CyDex acquisition. The decrease for the three months ended March 31, 2012 is due to a decrease in Metabasis CVRs of \$1.1 million. Partially offsetting, amounts potentially due to CyDex CVR holders and former license holders increased \$0.6 million.

### *Income Taxes*

We recorded income tax expense from continuing operations of \$0.1 million for the three months ended March 31, 2013. We recorded an income tax benefit from continuing operations of \$35,000 for the three months ended March 31, 2012. The income tax benefit for the three months ended March 31, 2012 relates to losses from continuing operations which may be used to offset income from discontinued operations.

### *Discontinued Operations*

#### *Oncology Product Line*

On September 7, 2006, we and Eisai Inc., a Delaware corporation, and Eisai Co., Ltd., a Japanese company (which we collectively refer to as Eisai), entered into a purchase agreement, or the Oncology Purchase Agreement, pursuant to which Eisai agreed to acquire all of our worldwide rights in and to our oncology products, including, among other things, all related inventory, equipment, records and intellectual property, and assume certain liabilities as set forth in the Oncology Purchase Agreement. The Oncology product line included our four marketed oncology drugs: Ontak, Targretin capsules, Targretin gel and Panretin gel.

During the three months ended March 31, 2013 and 2012, there were no pre-tax gains or losses recognized due to subsequent changes in certain estimates and liabilities recorded as of the sale date.

#### *Avinza Product Line*

On September 6, 2006, we and King entered into a purchase agreement, or the Avinza Purchase Agreement, pursuant to which King agreed to acquire all of our rights in and to Avinza in the United States, its territories and Canada, including, among other things, all Avinza inventory, records and related intellectual property, and assume certain liabilities as set forth in the Avinza Purchase Agreement, which we collectively refer to as the Transaction.

Pursuant to the terms of the Avinza Purchase Agreement, we retained the liability for returns of product from wholesalers that had been sold by us prior to the close of the Transaction. Accordingly, as part of the accounting for the gain on the sale of Avinza, we recorded a reserve for Avinza product returns.

During the three months ended March 31, 2013, we recognized a pre-tax gain of \$0.2 million, due to subsequent changes in certain estimates and liabilities recorded as of the sale date, compared to a pre-tax gain of \$2.0 million for the same period of 2012.

### *Income Taxes*

We did not record any provision for income taxes related to discontinued operations for the three month period ended March 31, 2013. We recorded income tax expense related to discontinued operations of \$0.2 million for the three month period ending March 31, 2012.

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### Liquidity and Capital Resources

We have financed our operations through offerings of our equity securities, borrowings from long-term debt, issuance of convertible notes, product sales and the subsequent sales of our commercial assets, royalties, collaborative research and development and other revenues, capital and operating lease transactions.

We have incurred significant losses since inception. At March 31, 2013, our accumulated deficit was \$681.3 million and we had negative working capital of \$15.3 million. We believe that cash flows from operations will improve due to Captisol® sales, an increase in royalty revenues driven primarily from continued increases in Promacta and Kyprolis sales, recent product approvals and regulatory developments, as well as anticipated new license and milestone revenues. In the event revenues and operating cash flows do not meet expectations, management plans to reduce discretionary expenses. However, it is possible that we may be required to seek additional financing. There can be no assurance that additional financing will be available on terms acceptable to management, or at all. We believe our available cash, cash equivalents, and short-term investments as well as our current and future royalty, license and milestone revenues will be sufficient to satisfy our anticipated operating and capital requirements, through at least the next twelve months. Our future operating and capital requirements will depend on many factors, including, but not limited to: the pace of scientific progress in our research and development programs; the potential success of these programs; the scope and results of preclinical testing and clinical trials; the time and costs involved in obtaining regulatory approvals; the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims; competing technological and market developments; the amount of royalties on sales of the commercial products of our partners; the efforts of our collaborative partners; obligations under our operating lease agreements; and the capital requirements of any companies we acquire.

In January 2011, we entered into a \$20 million secured term loan credit facility ("secured debt") with Oxford Financial Group ("Oxford"). The loan was amended in January 2012 to increase the secured credit facility to \$27.5 million. The original \$20 million borrowed under the facility bears interest at a fixed rate of 8.6%. The additional \$7.5 million bears interest at a fixed rate of 8.9%. Under the terms of the secured debt, we made interest only payments through February 2013. Subsequent to the interest only payments, the note amortizes with principal and interest payments through the remaining term of the loan. Additionally, we must also make an additional final payment equal to 6% of the total amount borrowed which is due at maturity and is being accreted over the life of the loan. The maturity date of the term loan is August 1, 2014.

In March 2013, the Company prepaid \$7 million of the secured term loan credit facility. Additionally, we paid a prepayment fee of 1% of the prepayment amount, or \$0.1 million and a prorated final-payment fee of 6% of the final payment or \$0.4 million.

In October 2011, we filed a Registration Statement on Form S-3 with the SEC for the issuance and sale of up to \$30 million of equity or other securities, proceeds from which will be used for general corporate purposes. The Form S-3 provides additional financial flexibility for us to sell shares or other securities as needed at any time. As of March 31, 2013, 302,750 common shares have been issued under this registration statement for total net proceeds of approximately \$5.5 million. During the quarter ended March 31, 2013 and 2012, the Company did not issue any common shares pursuant to its at-the-market equity issuance plan.

In connection with the acquisition of CyDex on January 24, 2011, we issued a series of CVRs and assumed certain contractual obligations. We paid the CVR holders \$4.3 million in January 2012 and may be required to pay up to an additional \$8.0 million upon achievement of certain clinical and regulatory milestones to the CyDex CVR holders and former license holders. In 2011, \$0.9 million was paid to the CyDex Shareholders upon completion of a licensing agreement with The Medicines Company for the Captisol enabled Intravenous formulation of Clopidogrel. An additional \$2 million was paid to the CyDex Shareholders upon acceptance by the FDA of the New Drug Application submitted by Onyx and an additional \$3.5 million was paid upon approval by the FDA of Kyprolis for the potential treatment of patients with relapsed and refractory multiple myeloma. In addition, we will pay CyDex shareholders, for each respective year from 2011 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 paid \$0.2 million to the CyDex shareholders in March 2012 for 20% of all 2011 CyDex-related revenue in excess of \$15 million. For the year ended December 31, 2012, CyDex related revenue did not exceed \$15 million. Pursuant to the Contingent Value Rights Agreement ("CVR Agreement"), the shareholders' representative on behalf of the former CyDex shareholders filed a notice of objection with us regarding the calculation of payments due to the CyDex former shareholders for the first and second quarters of 2011. In addition, the shareholders' representative claimed that we exceeded the \$35 million financial indebtedness limitation contained

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in the CVR Agreement. In August 2012, we executed a settlement agreement with the shareholders' representative releasing us from all claims.

We are also required by the CyDex CVR Agreement to dedicate at least five experienced full-time employee equivalents per year to the acquired business and to invest at least \$1.5 million per year, inclusive of such employee expenses, in the acquired business, through 2015. As of March 31, 2013, we anticipate that we will exceed our commitment for the year ending December 31, 2013.

Based on management's plans, including projected increases in Captisol sales and royalty revenues, as well as anticipated new license revenue and expense reductions, if necessary, we believe our currently available cash, cash equivalents, and short-term investments as well as our current and future royalty, license and milestone revenues will be sufficient to satisfy our anticipated operating and capital requirements, through at least the next 12 months. Our future operating and capital requirements will depend on many factors, including, but not limited to: the pace of scientific progress in our research and development programs; the magnitude of these programs; the scope and results of preclinical testing and clinical trials; the time and costs involved in obtaining regulatory approvals; the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims; competing technological and market developments; the amount of royalties on sales of our partners' commercial products; the efforts of our collaborative partners; obligations under our operating lease agreements; and the capital requirements of any companies we may acquire, including Neurogen, Metabasis and CyDex. We believe that the actions presently being taken to generate sufficient operating cash flow provide the opportunity for us to continue as a going concern. 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. Our ability to achieve our operational targets is dependent upon our ability to further implement our business plan and generate sufficient operating cash flow.

### *Operating Activities*

Operating activities generated cash of \$2.1 million for the three months ended March 31, 2013, compared to \$0.3 million of cash used in operating activities for the same period in 2012.

The cash generated for the three months ended March 31, 2013 reflects net income of \$1.5 million, adjusted by \$0.2 million of gain from discontinued operations and \$3.8 million of non-cash items to reconcile the net income to net cash generated in operations. These reconciling items primarily reflect depreciation and amortization of \$0.7 million, share-based compensation of \$1.1 million, the non-cash change in the estimated fair value of contingent liabilities of \$1.8 million, the change in deferred income taxes of \$0.1 million and accretion of note payable of \$0.1 million. The cash generated during the three months ended March 31, 2013 is further impacted by changes in operating assets and liabilities due primarily to a decrease in accounts payable and accrued liabilities of \$2.1 million, a decrease in deferred revenue of \$0.2 million, an increase in other current assets of \$0.2 million, and a decrease in other liabilities of \$0.1 million. Partially offset by decreases in other long-term assets of \$0.1 million and a decrease in inventory of \$0.1 million. Cash used in operating activities of discontinued operations was \$0.6 million for the three months ended March 31, 2013.

The cash used for the three months ended March 31, 2012 reflects net income of \$1.1 million, adjusted by \$1.9 million of gain from discontinued operations, net of income tax expense and \$0.9 million of non-cash items to reconcile the net income to net cash used in operations. These reconciling items primarily reflect stock based compensation of \$0.7 million and depreciation of \$0.7 million offset by the change in estimated fair value of contingent liabilities of \$0.5 million. The cash used during the three months ended March 31, 2012 is further impacted by changes in operating assets and liabilities due primarily to a decrease in deferred revenue of \$0.6 million, accounts payable and accrued liabilities \$3.5 million, and other current assets \$0.5 million, partially offset by a decrease in accounts receivable of \$4.1 million. Cash used in operating activities for the three months ended March 31, 2012 of \$0.2 million related to discontinued operations.

### *Investing Activities*

Investing activities used cash of \$34,000 for the three months ended March 31, 2013, compared to \$3.9 million of cash provided by investing activities for the same 2012 period.

Cash used by investing activities during the three months ended March 31, 2013 primarily reflects purchases of property and equipment.

Cash provided by investing activities during the three months ended March 31, 2012, primarily reflects \$8.5 million of net proceeds from the sale of short-term investments, offset by \$4.5 million paid to CyDex CVR holders.

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### Financing Activities

Financing activities used cash of \$9.4 million for the three months ended March 31, 2013, compared to cash used by financing activities of \$0.8 million for the same 2012 period.

Cash used by financing activities for the three months ended March 31, 2013 primarily reflects \$9.7 million of repayment of debt, partially offset by proceeds from stock option exercises of \$0.3 million.

Cash used by financing activities for the three months ended March 31, 2012 primarily reflects \$8.5 million for the repayment of debt, partially offset by \$7.5 million of proceeds from the issuance of debt. Additionally, proceeds from the issuance of common stock resulted in \$0.2 million of cash generated from financing activities.

### Other

In connection with the acquisition of Metabasis on January 27, 2010, Metabasis security holders received CVRs under four CVR agreements. 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 March 31, 2013 and December 31, 2012 was zero.

In connection with the acquisition of CyDex on January 24, 2011, we issued a series of CVRs and also assumed certain contingent liabilities. In 2011, \$0.9 million was paid to the CyDex Shareholders upon completion of a licensing agreement with The Medicines Company for the Captisol enabled Intravenous formulation of Clopidogrel. An additional \$2.0 million was paid to the CyDex Shareholders upon acceptance by the FDA of Onyx's NDA, \$4.3 million was paid in January 2012, as contractually obligated, and an additional \$3.5 million was paid upon approval by the FDA of Kyprolis for the potential treatment of patients with relapsed and refractory multiple myeloma. We may be required to pay an additional \$8.0 million 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 from 2013 through 2016, 20% of all CyDex-related revenue, but only to the extent that and beginning only when CyDex-related revenue for such year exceed \$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 paid \$0.2 million to the CyDex shareholders in March 2012 related to 2011 CyDex-related revenue. There was no revenue sharing payment for the three months ended March 31, 2013. The estimated fair value of the contingent liabilities recorded as part of the CyDex acquisition at March 31, 2013 was \$12.7 million.

### Leases And Off-Balance Sheet Arrangements

We lease our office and research facilities under operating lease arrangements with varying terms through November 2021. A portion of our 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%. Commencing in January 2008, we also sublease a portion of our facilities through July 2015. The sublease agreement provides for a 3% increase in annual rents. We had no off-balance sheet arrangements at March 31, 2013 and December 31, 2012.

### Contractual Obligations

As of March 31, 2013, future minimum payments due under our contractual obligations are as follows (in thousands):

	Payments Due by Period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating lease obligations (1)	\$ 18,530	\$ 5,504	\$ 9,581	\$ 2,516	\$ 929

- (1) We currently sublease a portion of our facilities through their respective lease terms of July 2015, August 2014 and August 2016. As of March 31, 2013, we expect to receive aggregate future minimum lease payments totaling \$3.0 million (nondiscounted) over the duration of the sublease agreements as follows: less than one year, \$1.1 million; one to three years, \$1.8 million; and three to five years, \$0.1 million.

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We outsource the production of Captisol to Hovione, LLC. Under the terms of the supply agreement with Hovione, the Company has ongoing minimum annual purchase commitments and is required to purchase a total of \$15 million of Captisol over the term of the supply agreement which expires in December 2019. Through March 31, 2013 we have exceeded that commitment. Either party may terminate the Agreement for the uncured material breach or bankruptcy of the other party or an extended force majeure event. The Company may also terminate the supply agreement for extended supply interruption, regulatory action related to Captisol or other specified events.

Under the terms of our merger with Metabasis, we are committed to spend at least \$7 million within 30 months following the close of the transaction and \$8.0 million within 42 months in new research and development funding on the Metabasis programs. Through March 31, 2013, we estimate that we have spent approximately \$7.9 million of the committed amount.

We are also required under our CyDex CVR Agreement to invest at least \$1.5 million per year, inclusive of employee expenses, in the acquired business, through 2015. As of March 31, 2013, we estimate we will exceed that amount for the year ended December 31, 2013.

**ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We do not have a significant level of transactions denominated in currencies other than U.S. dollars and as a result we have very limited foreign currency exchange rate risk. We purchase Captisol from Hovione, located in Lisbon, Portugal. Payments to Hovione are denominated and paid in US 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 have no material impact on our financial condition, results of operations or cash flows.

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 have no 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 principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, as of the end of the period covered by this report, which we refer to as the Evaluation Date.

As a result of material weaknesses in our internal control over financial reporting relating to the accounting for non-routine transactions and the controls over the determination of fair value of contingent liabilities, management has reassessed the effectiveness of our disclosure controls and procedures and have determined that our disclosure controls and procedures were not effective as of March 31, 2013. Despite the material weaknesses in our internal control, management believes no material inaccuracies or omissions of fact exist in this quarterly report.

*Remediation Plan.* As a result of the material weaknesses associated with non-routine transactions, we have added a corporate controller to our finance and accounting staff. While we had processes to identify and intelligently apply accounting standards to complex transactions, we did not have adequate numbers of highly skilled accountants to provide for a detailed analysis, documentation and review of such transactions. Additionally, we plan to enhance our controls over the determination of the fair value of contingent liabilities by including a formal review of mathematical calculations and completeness of such calculations. These material weaknesses prevented us from properly reporting the financial information for previous interim and annual periods, and we have filed restated 10-Q and 10-K reports for the applicable periods. Management will continue to review and make necessary changes to the overall design of its internal control environment, as well as to policies and procedures to improve the overall effectiveness of internal control over financial reporting.

The material weaknesses will not be remediated until the applicable remedial procedures are tested and management has concluded that the procedures and controls are operating effectively.

*Changes in Internal Controls.* Except as described above, there have been no changes during the last fiscal quarter in our internal control over financial reporting 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***

On June 8, 2012, a federal securities class action and shareholder derivative lawsuit was filed in the Eastern District of Pennsylvania against Genaera Corporation and its officers, directors, major shareholders and trustee ("Genaera Defendants") for allegedly breaching their fiduciary duties to Genaera shareholders. The lawsuit also names the Company and its CEO John Higgins as additional defendants for allegedly aiding and abetting the Genaera Defendants' various breaches of fiduciary duties based on the Company's purchase of a licensing interest in a development-stage pharmaceutical drug program from the Genaera Liquidating Trust in May 2010 and its subsequent sale of half of its interest in the transaction to Biotechnology Value Fund, Inc.

On December 19, 2012, plaintiff filed an amended complaint asserting substantially similar claims against the Company and Mr. Higgins. The amended complaint seeks unspecified damages, disgorgement, punitive damages, attorneys' fees and costs. On February 4, 2013, the Company filed a motion to dismiss plaintiff's amended complaint with prejudice. Plaintiff filed an opposition to the motion to the Company's motion to dismiss on May 3, 2013, and the Company's reply is due on June 3, 2013. The Company intends to continue to vigorously defend against the claims against it and Mr. Higgins in the lawsuit. Due to the complex nature of the legal and factual issues involved, however, the outcome of this matter is not presently determinable.

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### 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.*

#### **Risks Related To Us and Our Business.**

***Revenues based on sales of Promacta represent a substantial portion of our overall current and/or expected future revenues.***

GSK is obligated to pay us royalties on its sales of Promacta. These payments are expected to be a substantial portion of our ongoing revenues for some time. As a result, any setback that may occur with respect to Promacta could significantly impair our operating results and/or reduce the market price of our stock. Setbacks for Promacta could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation, safety issues, 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 or discounts.

***Revenues based on sales of Kyprolis represent a substantial portion of our overall expected future revenues.***

Revenue from Onyx based on sales of Kyprolis are expected to be a substantial portion of our revenue in the future and any setbacks that occur with respect to Kyprolis could significantly impair our future operating results and/or reduce the market price of our stock. Setbacks for Kyprolis could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation, safety issues, 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 or discounts.

***Revenue from sales of Captisol material to our collaborative partners represents a significant portion of our current revenue and our continued development and supply of Captisol is subject to a number of risks.***

In January 2011, we completed our merger with CyDex, in which we obtained exclusive rights to the Captisol technology, in addition to other product candidates. All of CyDex's products and product candidates, as well as the technology that it outlicenses, are based on Captisol. We must coordinate with our collaborative partners concerning the development, manufacturing, regulatory and intellectual property protection strategies for Captisol and new development product candidates. In addition, we rely on our collaborative partners for many aspects of our Captisol developmental and commercialization activities, and we are subject to risks related to their financial stability and solvency.

In addition, Ligand or its partners are attempting to develop product candidates that may contain significantly higher levels of Captisol than in any currently-approved product and has directed developers to demonstrate an adequate safety margin and specifically acceptable renal safety. If products or product candidates incorporating Captisol technology were to cause any unexpected adverse events, whether in preclinical studies, clinical trials or as commercialized products, whether as a result of Captisol or otherwise, 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 our 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.

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### ***Our product candidates face significant development and regulatory hurdles prior to marketing which could delay or prevent sales and/or milestone revenue.***

Before we or our partners obtain the approvals necessary to sell any of our potential products, we must show through preclinical studies and human testing that each product is safe and effective. We and our partners have a number of products 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 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. Recently, 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 rates at which we complete our clinical trials depends on many factors, including, but are 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 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 the 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.

### ***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 research and development funding, milestone payments and future royalty revenues.***

Our strategy for developing and commercializing many of our potential products, including products aimed at larger markets, includes entering into collaborations with corporate partners and others. These collaborations have provided us with funding and research and development resources for potential products for the treatment of a variety of diseases. However, the funding provided to us by our existing collaborative partners for ongoing research and development under our existing collaborative agreements has ceased. These agreements also give our collaborative partners significant discretion when deciding whether or not to pursue any development program. 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 product candidates.

In addition, our collaborators may develop drugs, either alone or with others that compete with the types of drugs they are developing with us. This would result in increased competition for our programs. If products are approved for marketing under our collaborative programs, revenues we receive will depend on the manufacturing, marketing and sales efforts of our collaborative partners, who generally retain commercialization rights under the collaborative agreements. Generally, our current collaborative partners also have the right to terminate their collaborations 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. Disputes or litigation may also arise with our collaborators, including disputes or litigation over 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. Any such dispute or litigation 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.

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***We obtain Captisol from a sole source supplier, and if this supplier were to cease to be able to supply Captisol to us, or decline to supply Captisol to us, we would be unable to continue to derive revenue or continue to develop our product candidates until we obtained an alternative source, which could take a considerable length of time.***

We currently have one supplier of Captisol, Hovione FarmaCiencia SA, or Hovione, through its agent Hovione LLC. Hovione is a major supplier of APIs and API intermediates located in Portugal. Hovione has other production sites in Cork, Ireland, Macau, China, and Zhejiang, China, but those sites are not yet fully qualified to make Captisol. If a major disaster were to happen at Hovione or Hovione were to suffer major production problems or were to fail to deliver Captisol to us for any other reason, there could be a significant interruption of our Captisol supply. While we carry a significant inventory of Captisol for this type of occurrence, which should permit us to satisfy our existing supply obligations for the next twelve months under current and anticipated demand conditions, a series of unusually large orders could rapidly deplete that inventory and cause significant problems with our licensees and disrupt our business. In addition, if we fail to supply Captisol under our supply agreements, our customers could obtain the right to have Captisol manufactured by other suppliers, which would significantly harm our business.

***We rely on contract manufacturers for the manufacture of Captisol and product candidates, and if these contract manufacturers fail to perform as we expect, we will incur delays in our ability to generate revenue and substantial additional expenses in obtaining new contract manufacturers.***

We do not manufacture products or product candidates, but rather contract with contract manufacturers for the manufacture of products and product candidates. With respect to any specific product or product candidate, we only contract with one contract manufacturer due to the high cost of compliance with good manufacturing practices prior to the contract manufacturer being permitted to manufacture the product or product candidate for use in humans. If a contract manufacturer is unable or unwilling to continue to manufacture for us in the future, we would be required to contract with a new contract manufacturer for the specific product or product candidate. In the case of products, this would cause us to lose revenue during the qualification process, and in the case of product candidates, this could cause a delay in the commercialization of the product candidate. In addition, in either case we would incur substantial additional expenses as a result of the new contract manufacturer becoming qualified. Further, if a contract manufacturer were to experience a delay in producing products or product candidates due to a failure to meet strict FDA manufacturing requirements or otherwise, we would also experience a delay in development and commercialization of the product candidate or, in the case of products, sales of the product. This risk is exacerbated in the case of manufacture of injectables, which require heightened sterility and other conditions as well as specialized facilities for preparation.

***Expirations of, challenges to or failure to secure patents and other proprietary rights may significantly hurt our business.***

The initially filed patents relating to Captisol expired starting in 2010 in the United States and will expire by 2016 in most countries outside the U.S. We have also obtained patent protection in the U.S. through 2025 on one or more Agglomerated forms of Captisol and through 2029 on one or more High Purity forms of Captisol. We have obtained patent protection on a number of combinations of APIs and Captisol through three combination patents in the U.S., and we have applied for additional combination patents in the U.S. relating to the combination of Captisol with specific APIs. Our U.S. combination patent relating to Fosphenytoin expires June 12, 2018 and our U.S. combination patent relating to Amiodarone expires May 4, 2022. Our U.S. combination patent relating to one of our early-stage product candidates expires March 19, 2022. There is no guarantee that these patents will be sufficient to prevent competitors from creating a generic form of Captisol and competing against us, or from developing combination patents for products that will prevent us from developing products using those APIs. In addition, most of the agreements in our Captisol outlicensing business, provide that once the relevant patent expires, the amount of royalties we receive will be reduced or eliminated.

Generally, our success will depend on our ability and the ability of our licensors to obtain and maintain patents and proprietary rights for our potential products both in the United States and in foreign countries. Patents may not be issued from any of these applications currently on file, or, if issued, may not provide sufficient protection. 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. We may not develop or obtain rights to products or processes that are patentable. Even if we do obtain patents, such patents may not adequately protect the technology we own or have licensed. In addition, others may challenge, seek to invalidate, infringe or circumvent any patents we own or license and rights we receive under those patents may not provide competitive advantages to us. For example, our European patent related to Agglomerated forms of Captisol is currently being opposed and observations have been filed against our European patent application related to High Purity Captisol.

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Any conflicts resulting from the patent rights of others could significantly reduce the coverage of our patents and limit our ability to obtain meaningful patent protection. We have had and will continue to have discussions with our current and potential collaborative partners regarding the scope and validity of our patents and other proprietary rights. If a collaborative partner or other party successfully establishes that our patent rights are invalid, we may not be able to continue our existing collaborations beyond their expiration. Any determination that our patent rights are invalid also could encourage our collaborative partners to seek early termination of our agreements. Such invalidation could adversely affect our ability to enter into new collaborations.

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 litigation 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.

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.

***Our collaborative partners may change their strategy or the focus of their development and commercialization efforts with respect to our alliance products; the success of our alliance products could be adversely affected.***

If our collaborative partners terminate their collaborations with us or do not commit sufficient resources to the development, manufacture, marketing or distribution of our alliance products, we could be required to devote additional resources to our alliance products, seek new collaborative partners or abandon such alliance products, all of which could have an adverse effect on our business.

***We are currently dependent upon out-licensing our technologies and we may not be successful in entering into additional out-license agreements on favorable terms, which may adversely affect our liquidity or require us to alter development plans on our products.***

We have entered into several out-licensing agreements for the development and commercialization of our products. 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 their products using our Captisol technology, fail to satisfy their obligations under their agreements with us, or otherwise 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. Further, under most of our Captisol outlicenses, the amount of royalties we receive will be reduced or will cease when the relevant patent expires. While we have other more recent patents relating to Captisol with later expiration dates (for example, our high purity patent, U.S. Patent No. 7,635,773 is not expected to expire until 2029 and our morphology patent, U.S. Patent No. 7,629,331 is not expected to expire until 2025), the initially filed patents relating to Captisol expired starting in 2010 in the U.S. and will expire by 2016 in most countries outside the U.S. 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, the source of the vast majority of our Captisol revenue may cease to exist.

Although we expend considerable resources on internal research and development for our proprietary programs, we may not be successful in entering into additional out-licensing agreements under favorable terms due to several factors including:

- the difficulty in creating valuable product candidates that target large market opportunities;
- research and spending priorities of potential licensing partners;
- willingness of and the resources available to pharmaceutical and biotechnology companies to in-license product candidates for their clinical pipelines; or
- differences of opinion with potential partners on the valuation of products we are seeking to out-license.

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The inability to enter into out-licensing agreements under favorable terms and to earn milestone payments, license fees and/or upfront fees may adversely affect our liquidity and may force us to curtail or delay development of some or all of our proprietary programs, which in turn may harm our business and the value of our stock.

***Third party intellectual property may prevent us or our partners from developing our potential products and we may owe a portion of any payments we receive from our collaborative partners to one or more third parties.***

Our success will depend on our ability and the ability of our collaborative partners to avoid infringing the proprietary rights of others, both in the United States and in foreign countries. In addition, disputes with licensors under our license agreements may arise which could result in additional financial liability or loss of important technology and potential products and related revenue, if any. Further, the manufacture, use or sale of our potential products or our collaborative partners' products or potential products may infringe the patent rights of others. This could impact Captisol, Promacta, Kyprolis, Avinza, Viviant and Conbriza (bazedoxifene), Fablyn, and other products or potential products.

Several drug companies and research and academic institutions have developed technologies, filed patent applications or received patents for technologies that may be related to our business. Others have filed patent applications and received patents that conflict with patents or patent applications we have licensed for our use, either by claiming the same methods or compounds or by claiming methods or compounds that could dominate those licensed to us. In addition, we may not be aware of all patents or patent applications that may impact our ability to make, use or sell any of our potential products. For example, US patent applications may be kept confidential while pending in the United States Patent and Trademark Office and patent applications filed in foreign countries are often first published six months or more after filing.

Disagreements or litigation with our collaborative partners could delay our ability and the ability of our collaborative partners to achieve milestones or our receipt of other payments. In addition, other possible disagreements or litigation could delay, interrupt or terminate the research, development and commercialization of certain potential products being developed by either our collaborative partners or by us. The occurrence of any of the foregoing problems could be time-consuming and expensive and could adversely affect our business.

Third parties have not directly threatened an action or claim against us, although we do periodically receive other communications or have other conversations with the owners of other patents or other intellectual property. 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.

In general, litigation claims can be expensive and time consuming to bring or defend against and could result in settlements or damages that could significantly impact our results of operations and financial condition. We cannot predict or determine the outcome of these matters or reasonably estimate the amount or range of amounts of any fines or penalties that might result from a settlement or an adverse outcome. However, a settlement or an adverse outcome could have a material adverse effect on our financial position, liquidity and results of operations.

***If our business does not perform according to our expectations, we may not be able to pay off our existing debt.***

Our operations have consumed substantial amounts of cash since inception. As of March 31, 2013, we had negative working capital of \$15.3 million. Clinical and preclinical development of drug candidates is a long, expensive and uncertain process. Also, we may acquire companies, businesses or products and the consummation of such acquisitions may consume additional cash. For example, in connection with our 2011 acquisition of CyDex, we entered into a \$20 million Loan and Security Agreement, or the Loan Agreement, with a lender. The loan was amended in January 2012 to increase the secured credit facility to \$27.5 million. The original \$20 million borrowed under the facility bears interest at a fixed rate of 8.6%. The additional \$7.5 million bears interest at a fixed rate of 8.9%. Under the terms of the secured debt, we will make interest only payments through March 2013. Subsequent to the interest only payments, the note will amortize with principal and interest payments through the remaining term of the loan. Additionally, we must also make an additional final payment equal to 6% of the total amount borrowed which is due at maturity and is being accreted over the life of the loan. The maturity date of the term loan is August 1, 2014.

In March 2013, the Company prepaid \$7 million of the secured term loan credit facility. Additionally, the Company paid a prepayment fee of 1% of the prepayment amount, or \$0.1 million and a prorated final-payment fee of 6% of the final payment or \$0.4 million.

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In October 2011, we filed a Registration Statement on Form S-3 with the SEC for the issuance and sale of up to \$30 million of equity or other securities, proceeds from which will be used for general corporate purposes. The Form S-3 provides additional financial flexibility for us to sell shares or other securities as needed at any time. As of March 31, 2013, 302,750 common shares have been issued under this registration statement for total net proceeds of approximately \$5.5 million. During the quarter ended March 31, 2013 and 2012, respectively, the Company did not issue any common shares pursuant to its at-the-market equity issuance plan.

We believe that our capital resources, including our currently available cash, cash equivalents, and short-term investments as well as our current and future royalty revenues, will be adequate to fund our operations at their current levels at least for the next 12 months. However, changes may occur that would cause us to consume available capital resources before that time and we may need to complete additional equity or debt financings to fund our operations. Our inability to obtain additional financing could adversely affect our business. Financings may not be available at all or on terms favorable to us. In addition, these financings, if completed, may not meet our capital needs and could result in substantial dilution to our stockholders. If adequate funds are not available, we may be required to delay, reduce the scope of or eliminate one or more of our research or drug development programs. We may also be required to liquidate our business or file for bankruptcy protection. Alternatively, we may be forced to attempt to continue development by entering into arrangements with collaborative partners or others that require us to relinquish some or all of our rights to technologies or drug candidates that we would not otherwise relinquish.

***Our product development involves a number of uncertainties, and we may never generate sufficient collaborative payments and royalties from the development of products to become profitable.***

We were founded in 1987. We have incurred significant losses since our inception. As of March 31, 2013, our accumulated deficit was \$681.3 million.

Most of our products in development will require extensive additional development, including preclinical testing and human studies, as well as regulatory approvals, before they can be marketed. We cannot predict if or when any of the products we are developing or those being developed with our partners will be approved for marketing. There are many reasons why we or our collaborative partners may fail in our efforts to develop our potential products, including the possibility that: preclinical testing or human studies may show that our potential products are ineffective or cause harmful side effects; the products may fail to receive necessary regulatory approvals from the FDA or foreign authorities in a timely manner, or at all; the products, if approved, may not be produced in commercial quantities or at reasonable costs; the products, if approved, may not achieve commercial acceptance; regulatory or governmental authorities may apply restrictions to our products, which could adversely affect their commercial success; or the proprietary rights of other parties may prevent us or our partners from marketing the products.

Any product development failures for these or other reasons, whether with our products or our partners' products, may reduce our expected revenues, profits, and stock price.

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***Any future material weaknesses or deficiencies in our internal control over financial reporting could harm stockholder and business confidence on our financial reporting, our ability to obtain financing and other aspects of our business.***

As described in Item 4, we identified material weaknesses as a result of improper accounting for non-routine transactions and the controls over the determination of fair value of contingent liabilities. Our audit committee, after consultation with management has determined that the material weaknesses were a result of inadequate staffing and review processes. As a result of the material weaknesses associated with non-routine transactions, we have added a corporate controller to our finance and accounting staff. While we had processes to identify and apply accounting standards to complex transactions, we enhanced these processes with the addition of a resource with the ability to research and understand the nuances of complex accounting standards. Additionally, we plan to enhance our controls over the determination of the fair value of contingent liabilities by including a formal review of mathematical calculations and completeness of such calculations. Given the material weaknesses, our audit committee, after consultation with management determined that we did not maintain effective internal control over financial reporting. The existence of one or more material weaknesses or significant deficiencies could result in errors in our consolidated financial statements. Substantial costs and resources may be required to rectify any internal control deficiencies. If we fail to achieve and maintain the adequacy of our internal controls in accordance with applicable standards, we may be unable to conclude on an ongoing basis that we have effective internal controls over financial reporting. If we cannot produce reliable financial reports, our business and financial condition could be harmed, investors could lose confidence in our reported financial information, or the market price of our stock could decline significantly. In addition, our ability to obtain additional financing to operate and expand our business, or obtain additional financing on favorable terms, could be materially and adversely affected, which, in turn, could materially and adversely affect our business, our financial condition and the market value of our securities. Moreover, our reputation with customers, lenders, investors, securities analysts and others may be adversely affected.

***We may undertake strategic acquisitions in the future and any difficulties from integrating such 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, whether as a result of unidentified risks, integration difficulties, regulatory setbacks 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.



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### ***Revenues based on sales of Avinza could decrease or be eliminated.***

Pfizer, as successor to King, is obligated to pay us royalties based on the sales of Avinza. Any setback that may occur with respect to Avinza could reduce our revenue. Setbacks for Avinza could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation, 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 or discounts. Avinza could also face regulatory action and product safety issues and is also subject to generic competition.

### ***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, and we may be subject to other liabilities related to the sale of our prior commercial product lines.***

We and our partners 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 \$5.0 million annual limit. We intend to expand product liability insurance coverage to include the sale of commercial products if we obtain marketing approval for any products that we may develop. However, this insurance may be prohibitively expensive, or may not fully cover our potential liabilities. Inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or delay the commercialization of our product candidates. If we are sued for any injury caused by our product candidates or any future products, our liability could exceed our total assets.

In addition, we agreed to indemnify Eisai and King under certain circumstances pursuant to the asset purchase agreements we entered into with Eisai and King in connection with the sale of our prior commercial product lines. Some of our indemnification obligations still remain and our potential liability in certain circumstances is not limited to specific dollar amounts. We cannot predict the liabilities that may arise as a result of these matters. Any claims related to our indemnification obligations to King or Eisai could materially and adversely affect our financial condition.

In addition, King assumed our obligation to make payments to Organon based on net sales of Avinza (the fair value of which was \$12.2 million as of March 31, 2013). We remain liable to Organon in the event King defaults on this obligation. Any requirement to pay a material amount to Organon, could adversely affect our business and the price of our securities.

The sale of our prior commercial product lines does not relieve us of exposure to product liability risks on products we sold prior to divesting these product lines. A successful product liability claim or series of claims brought against us may not be insured and could result in payment of significant amounts of money and divert management's attention from running our business.

### ***If our partners do not reach the market with our alliance products before our competitors offer products for the same or similar uses, or if our partners are not effective in marketing our alliance products, our revenues from product sales, if any, will be reduced.***

We face intense competition in our development activities. Our competitors might succeed in obtaining regulatory approval for competitive products more rapidly than our partners can for our products. In addition, competitors might develop technologies and products that are less expensive and perceived to be safer or more effective than those being developed by us or our partners, which could impair our product development and render our technology obsolete.

### ***We may not be able to hire and/or retain key employees.***

If we are unable to hire and/or retain key employees, we may not have sufficient resources to successfully manage our assets or our business, and we may not be able to perform our obligations under various contracts and commitments. Furthermore, there can be no assurance that we will be able to retain all of our key management and scientific personnel. If we fail to retain such key employees, we may not realize the anticipated benefits of our mergers. Either of these could have substantial negative impacts on our business and our stock price.

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### ***We use hazardous materials, which may expose us to significant liability.***

In connection with our research and development activities, we handle hazardous materials, chemicals and various radioactive compounds. To properly dispose of these hazardous materials in compliance with environmental regulations, we are required to contract with third parties. We believe that we carry reasonably adequate insurance for toxic tort claims. However, we cannot eliminate the risk or predict the exposure of accidental contamination or injury from the handling and disposing of hazardous materials, whether by us or our third-party contractors. Any accident in the handling and disposing of hazardous materials may expose us to significant liability.

### ***Our shareholder rights plan 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 preferred stock without any further action by the stockholders. Such restrictions 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.

### ***We may lose some or all of the value of some of our short-term investments.***

The investments are intended to maintain safety of principal while providing liquidity adequate to meet projected cash requirements. Risks of principal loss are to be minimized through diversified short and medium term investments of high quality, but the investments are not in every case guaranteed or fully insured. From time to time we may suffer other losses on our short-term investment portfolio.

### ***Funding of our drug development programs will make those funds unavailable for other uses.***

Our drug development programs may require substantial additional capital to successfully complete them, 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 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 U.S. 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. These factors, combined with volatile oil prices, declining business and consumer confidence and increased unemployment, have precipitated an economic recession and fears of a possible depression. Domestic and international equity markets continue to experience heightened volatility and turmoil. These events and the continuing market upheavals may have an adverse effect on us. In the event of a continuing 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.

Our investment securities consist primarily of money market funds, corporate debt obligations, equity investments and U.S. government agency securities. We do not have any auction rate securities. Recently, there has been concern in the credit markets regarding the value of a variety of mortgage-backed securities and the resultant effects on various securities markets. 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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### ***Our stock price has been volatile and could experience a sudden decline in value.***

Our common stock has experienced significant price and volume fluctuations and may continue to experience volatility in the future. As a result, you may not be able to sell your shares quickly or at the latest market price if trading in our stock is not active or the volume is low. 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 limited daily trading volume.

### ***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 of Pharmacoepia, Neurogen, Metabasis and CyDex 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.

### ***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. 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.

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

Not applicable.

**ITEM 3. DEFAULTS UPON SENIOR SECURITIES**

Not applicable.

**ITEM 4. MINE SAFETY DISCLOSURES**

Not applicable

**ITEM 5. OTHER INFORMATION**

Not applicable.

**ITEM 6. EXHIBITS**

The Index to Exhibits on page 49 is incorporated herein by reference as the list of exhibits required as part of this Quarterly Report.

**LIGAND PHARMACEUTICALS INCORPORATED**  
**SIGNATURE**

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: May 8, 2013

By: /s/ John P. Sharp

John P. Sharp

Vice President, Finance and Chief Financial Officer

## INDEX TO EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
2.1 (1)	Agreement and Plan of Merger, by and among the Company, Pharmacoepia, Inc., Margaux Acquisition Corp. and Latour Acquisition, LLC, dated as of September 24, 2008 (Filed as Exhibit 2.1).
2.2 (2)	Agreement and Plan of Merger, by and among the Company, Neurogen Corporation and Neon Signal, LLC, dated as of August 23, 2009 (Filed as Exhibit 10.1).
2.3 (3)	Amendment to Agreement and Plan of Merger, by and among the Company, Neurogen Corporation, and Neon Signal, LLC, dated September 18, 2009 (Filed as Exhibit 10.1).
2.4 (3)	Amendment No. 2 to Agreement and Plan of Merger, by and among the Company, Neurogen Corporation, and Neon Signal, LLC, dated November 2, 2009 (Filed as Exhibit 10.2).
2.5 (4)	Amendment No. 3 to Agreement and Plan of Merger, by and among the Company, Neurogen Corporation, and Neon Signal, LLC, dated December 17, 2009 (Filed as Exhibit 10.1).
2.6 (5)	Certificate of Merger for acquisition of Neurogen Corporation (Filed as Exhibit 2.1).
2.7 (6)	Agreement and Plan of Merger, dated as of October 26, 2009, by and among the Company, Metabasis Therapeutics, Inc., and Moonstone Acquisition, Inc (Filed as Exhibit 10.1).
2.8 (7)	Amendment to Agreement and Plan of Merger, by and among the Company, Metabasis Therapeutics, Inc., Moonstone Acquisition, Inc., and David F. Hale as Stockholders' Representative, dated November 25, 2009 (Filed as Exhibit 10.1).
2.9 (8)	Certificate of Merger for acquisition of Metabasis Therapeutics, Inc. dated January 27, 2010 (Filed as Exhibit 2.1).
2.10 (9)	Certificate of Merger, dated and filed January 24, 2011 (Filed as Exhibit 2.1).
2.11 (9)	Agreement and Plan of Merger, by and among the Company, CyDex Pharmaceuticals, Inc., and Caymus Acquisition, Inc., dated January 14, 2011 (Filed as Exhibit 10.1).
3.1 (10)	Amended and Restated Certificate of Incorporation of the Company (Filed as Exhibit 3.1).
3.2 (10)	Bylaws of the Company, as amended (Filed as Exhibit 3.3).
3.3 (11)	Amended Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of the Company (Filed as Exhibit 3.3).
3.4 (12)	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company dated June 14, 2000 (Filed as Exhibit 3.5).
3.5 (13)	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company dated September 30, 2004 (Filed as Exhibit 3.6).
3.6 (14)	Amendment of the Bylaws of the Company dated November 8, 2005 (Filed as Exhibit 3.1).
3.7 (15)	Amendment of Bylaws of the Company dated December 4, 2007 (Filed as Exhibit 3.1).
4.1 (16)	Specimen stock certificate for shares of Common Stock of the Company.
4.4 (17)	2006 Preferred Shares Rights Agreement, by and between the Company and Mellon Investor Services LLC, dated as of October 13, 2006 (Filed as Exhibit 4.1).
10.1 (18)	Sixth Amendment to Loan and Security Agreement, by and between the Company and Oxford
10.2 †	License Agreement, by and between CyDex and Spectrum Pharmaceuticals, Inc., dated as of March 8, 2013
10.3 †	Supply Agreement, by and between CyDex and Spectrum Pharmaceuticals, Inc., dated as of March 8, 2013
24.1 (19)	Power of Attorney (Filed as Exhibit 24.1).
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*	Certification by Principal Executive Officer, Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification by Principal Financial Officer, Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.1**	The following financial information from the Company's Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2012, formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets, (ii) Condensed Consolidated Statements of Operations, (iii) Condensed Consolidated Statements of Cash Flows, and (iv) the Notes to Condensed Consolidated Financial Statements, tagged as detailed footnotes.

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- (1) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on September 26, 2008.
  - (2) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on August 24, 2009.
  - (3) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on November 6, 2009.
  - (4) This exhibit was previously filed as part of, and is being incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on December 17, 2009.
  - (5) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on December 24, 2009.
  - (6) This exhibit was previously filed as part of, and is being incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on October 28, 2009.
  - (7) This exhibit was previously filed as part of, and is being incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on December 1, 2009.
  - (8) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on January 28, 2010.
  - (9) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on January 26, 2011.
  - (10) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Registration Statement on Form S-4 (No. 333-58823) filed on July 9, 1998.
  - (11) This exhibit was previously filed as part of and is hereby incorporated by reference to same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended March 31, 1999.
  - (12) This exhibit was previously filed as part of, and are hereby incorporated by reference to the numbered exhibit filed with the Company's Annual Report on Form 10-K for the year ended December 31, 2000.
  - (13) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2004.
  - (14) This exhibit was previously filed as part of, and is being incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on November 14, 2005.
  - (15) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on December 6, 2007.
  - (16) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Registration Statement on Form S-1 (No. 33-47257) filed on April 16, 1992 as amended.
  - (17) This exhibit was previously filed as part of, and is being incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on October 17, 2006.
  - (18) This exhibit was previously filed as part of, and is being incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on March 25, 2013.
  - (19) This exhibit was previously filed as part of, and is being incorporated by reference to the numbered exhibit filed with the Company's Annual Report on Form 10-K for the year ended December 31, 2012.
- † Confidential treatment has been requested for portions of this exhibit. These portions have been omitted and submitted separately to the Securities and Exchange Commission.
- \* These certifications are being furnished solely to accompany this quarterly report pursuant to 18 U.S.C. Section 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and are not to be incorporated by reference into any filing of Ligand Pharmaceuticals, Incorporated, whether made before or after the date hereof, regardless of any general incorporation language in such filing. Signed originals of these certifications have 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.

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\*\* Pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Section 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under these sections.



CERTAIN MATERIAL (INDICATED BY AN ASTERISK) HAS BEEN OMITTED FROM THIS DOCUMENT PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT. THE OMITTED MATERIAL HAS BEEN FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION.

**Exhibit 10.2**

## **LICENSE AGREEMENT**

**THIS LICENSE AGREEMENT** (this “**Agreement**”) is made this 8th day of March, 2013 (the “**Effective Date**”) between:

**CYDEX PHARMACEUTICALS, INC.**, a Delaware corporation with offices at 11119 North Torrey Pines Road, Suite 200, La Jolla, CA 92037 (“**CyDex**”); and

**SPECTRUM PHARMACEUTICALS, INC.**, a Delaware corporation with offices at 11500 S. Eastern Ave., Ste. 240, Henderson, NV 89052 (“**Spectrum**”).

### **RECITALS**

**WHEREAS**, CyDex is engaged in the business of developing and commercializing novel drug delivery technologies designed to enhance the solubility and effectiveness of existing and development-stage drugs;

**WHEREAS**, CyDex is the exclusive worldwide licensee of Captisol®, a patented drug formulation system designed to enhance the solubility and stability of drugs;

**WHEREAS**, CyDex has developed or obtained certain rights related to the Compound (defined below);

**WHEREAS**, Spectrum desires to obtain a license to use such patented drug formulation system for Captisol and such rights to the Compound for the development and commercialization of the Licensed Product (defined below) and CyDex is willing to grant such license to Spectrum under the terms and conditions set forth herein; and

**WHEREAS**, CyDex desires to sell Captisol® to Spectrum or its Contract Manufacturers (defined below), and Spectrum desires to obtain supplies of Captisol® from CyDex, for use in the Licensed Product, in accordance with the terms and conditions of that certain Supply Agreement between the parties of even date herewith (the “**Supply Agreement**”).

**NOW, THEREFORE**, in consideration of the following mutual promises and other good and valuable consideration, the receipt and sufficiency of which is acknowledged, the parties, intending to be legally bound, agree as follows:

#### **1. DEFINITIONS.**

For the purposes of this Agreement, the following terms whether used in singular or plural form shall have the meanings as defined below:

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“**Affiliate**” means, with respect to any party, any entity controlling, controlled by, or under common control with such party, during and for such time as such control exists. For these purposes, “control” shall refer to the ownership, directly or indirectly, of at least fifty percent (50%) of the voting securities or other ownership interest of the relevant entity.

“**Annual Net Sales**” means the aggregate Net Sales during a calendar year.

“**Approvals**” means, collectively the Marketing Approvals and Regulatory Approvals.

“**Captisol**” means Captisol®, also known scientifically as sulfobutylether  $\beta$ (beta) cyclodextrin, sodium salt, including all of its optical isomers, and salt, ester, and polymorphic forms.

“**Captisol Data Package**” means (a) all toxicology/safety and other scientific data owned, licensed or developed by CyDex and its Affiliates; and (b) all toxicology/safety and other scientific data owned, licensed or developed by the licensees or sublicensees of CyDex or its Affiliates or other Third Parties (to the extent permitted to be shared under this Agreement in the applicable license or other agreements between CyDex and/or its Affiliates and such licensees, sublicensees or other Third Parties), in each case of Captisol alone (and not in conjunction with a product formulation).

“**Captisol Improvement**” means any technology or improvement related to Captisol alone, including without limitation the formulation or uses of Captisol, whether or not patentable, that is developed by Spectrum or its Affiliates, solely or jointly with a Third Party. For clarity, Captisol Improvements shall not include technology or improvements which are related to the Compound and/or other non-Captisol components of the Licensed Product.

“**Captisol Patents**” means all patents and patent applications in the Territory which pertain to Captisol, other than the Licensed Product Patents, and which now or at any time during the Term are owned by or licensed to CyDex or any CyDex Affiliate with the right to sublicense, including any and all extensions, renewals, continuations, substitutions, continuations-in-part, divisions, patents-of-addition, reissues, reexaminations and/or supplementary protection certificates to any such patents. For avoidance of doubt, all intellectual property pertaining to the Licensed Product generated by Spectrum or its Affiliates or their Sublicensees during the Term of this Agreement shall be solely owned by Spectrum and shall not be part of the Captisol Patents. Set forth in *Exhibit A* attached hereto include, without limitation, a list of the Captisol Patents as of the Effective Date. Such *Exhibit A* may be updated by CyDex from time to time during the Term.

“**Claim**” has the meaning specified in **Section 10.1**.

“**Clinical Grade Captisol**” means Captisol which (a) has been manufactured under conditions of current good manufacturing practices for bulk excipients as set forth in U.S. Pharmacopoeia <1078> as of the Effective Date or any successor thereto, and (b) is for clinical trials for the Licensed Product.

“**Combination Product**” means a Licensed Product containing: (i) the Compound, and (ii) one or more other active pharmaceutical ingredients.

“**Commercial Grade Captisol**” means Captisol which (a) has been manufactured under conditions of current good manufacturing practices for bulk excipients as set forth in U.S. Pharmacopoeia <1078> as of the Effective Date or any successor thereto, and (b) is for commercial sale of the Licensed Product.

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“**Commercial Launch Date**” means, in any particular country, the first commercial sale by Spectrum, its Affiliates or Sublicensees of the Licensed Product to a Third Party in a given regulatory jurisdiction after Approvals have been obtained in such jurisdiction. For avoidance of doubt, any transfer of the Licensed Product to a Third Party for preclinical, clinical or regulatory purposes shall not be deemed a first commercial sale.

“**Commercially Reasonable Efforts**” means the carrying out of obligations or tasks using efforts not less than the efforts a reasonably prudent company engaged in the development and commercialization of a pharmaceutical product having similar market potential, profit potential, or strategic value at a similar stage of its development or product life as the Licensed Product, would use based on conditions then prevailing and taking into account relevant commercial and economic factors.

“**Compound**” means that certain pharmaceutical compound known as melphalan, including all of its optical isomers, and salt, ester, and polymorphic forms.

“**Confidential Information**” has the meaning specified in **Section 8.1**.

“**Contract Manufacturer**” has the meaning specified in **Section 2.4**.

“**Cover**” (including variations thereof such as “Covered,” “Coverage,” or “Covering”) means that the manufacture, use, importation or sale of the Licensed Product to which such term is being applied would infringe a Valid Claim of a patent in the absence of a grant of rights under such patent. The determination of whether an item or process is Covered by a Valid Claim shall be made on a country-by-country basis.

“**Disclosing Party**” has the meaning specified in **Section 8.1** hereof.

“**DMF**” means a Drug Master File for Captisol, as filed as of the Effective Date, or as hereafter updated from time to time during the Term, by CyDex with the FDA, and equivalent filings in other jurisdictions.

“**FDA**” means the United States Food and Drug Administration, or any successor thereto.

“**Field**” means all indications, including without limitation, all dosages, formulations, uses, and routes of administration for the Licensed Product.

“**Indemnitee**” has the meaning specified in **Section 10.4**.

“**Indemnitor**” has the meaning specified in **Section 10.4**.

“**Licensed Patents**” means, collectively, the Captisol Patents and the Licensed Product Patents.

“**Licensed Product**” means a pharmaceutical composition comprising the Compound and Captisol, which is Covered by the Licensed Patents or Product Know-How or Captisol Data Package.

“**Licensed Product Patents**” means all patents and patent applications in the Territory which Cover the use of Captisol with the Compound, other than the Captisol Patents, and which now or at any time during the Term are owned by or licensed to CyDex or any CyDex Affiliate with the right to sublicense, including any and all extensions, renewals, continuations, substitutions, continuations-in-

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part, divisions, patents-of-addition, reissues, reexaminations and/or supplementary protection certificates to any such patents. Licensed Product Patents further include all other patents and patent applications, other than the Captisol Patents, which are owned or licensed by CyDex before the Effective Date or at any time during the Term of this Agreement, and which are necessary to develop, manufacture, and commercialize the Licensed Product or which are necessary for Spectrum to exercise its license under this Agreement. Set forth in *Exhibit B* attached hereto is a list of the Licensed Product Patents as of the Effective Date. Such *Exhibit B* may be updated by CyDex from time to time during the Term.

“**Losses**” has the meaning set forth in **Section 10.1**.

“**Major Markets**” means the countries listed on *Exhibit E*.

“**Marketing Approval**” means final approval of an NDA by the FDA for the United States, or final approval of a comparable document filed with an equivalent health regulatory authority in any other country or in the European Union (using the centralized process or mutual recognition), including all required marketing, pricing or reimbursement approvals.

“**NDA**” means a New Drug Application, as defined in the United States Federal Food, Drug and Cosmetic Act and the regulations promulgated thereunder, or similar application filed with an equivalent regulatory body in another jurisdiction.

“**Net Sales**” means, with respect to a particular time period, the total amounts invoiced by Spectrum and its Affiliates and their Sublicensees for sales of the Licensed Product made during such time period to unaffiliated Third Parties, less the following deductions to the extent allowed or incurred with respect to such sales:

(a) customary discounts, including cash, trade and quantity discounts, charge-back payments, fees for service, patient assistance discounts, administrative fees, and rebates granted to trade customers, government, and distributors; *provided, however*, such discounts shall be subject to audit pursuant to Section 5.3 below ;

(b) credits or allowances granted for damaged, outdated, spoiled, returned or rejected products or on account of retroactive price reductions;

(c) freight, insurance and transportation charges (if separately identified on the invoice); and

(d) taxes, tariffs, duties or other governmental charges (other than income taxes) levied on, absorbed or otherwise imposed on sales of the Licensed Product, as adjusted by any refunds.

Notwithstanding the foregoing, amounts invoiced by Spectrum and its Affiliates for the sale of the Licensed Product among Spectrum or its Affiliates for resale shall not be included in the computation of Net Sales. For purposes of determining Net Sales, a “sale” shall not include reasonable transfers or dispositions as samples for promotional or charitable purposes, or transfers or dispositions at no cost for preclinical, clinical or regulatory purposes. Notwithstanding anything otherwise specified herein, Net Sales shall be calculated in accordance with generally accepted accounting principles.

If a Licensed Product is sold or provided as part of a Combination Product, Net Sales shall be calculated by multiplying the Net Sales from the sale of Combination Products by the fraction A/B, where “A” is

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the fair market value of the Licensed Product containing the Compound as the only active pharmaceutical ingredient when supplied or priced separately and “B” is the fair market value of the Combination Product. If no market price is available for the Licensed Product (solely containing the Compound) when supplied or priced separately, fair market value shall be determined in good faith by the parties.

“**Pfizer**” has the meaning specified in **Section 8.5**.

“**Product Know-How**” means information or data, including regulatory documentation, necessary for the manufacture, use, importation or sale of Licensed Products in the Field in the Territory, owned, licensed or generated by CyDex and its Affiliates, before and during the Term of this Agreement relating to the Compound and/or Captisol.

“**Receiving Party**” has the meaning specified in **Section 8.1**.

“**Regulatory Approval**” means, with respect to the Licensed Product in any country or jurisdiction, all approvals (including, where required, pricing and reimbursement approvals), registrations, licenses or authorizations from the relevant regulatory authority in a country or jurisdiction that is specific to the Licensed Product and necessary to market and sell such Licensed Product in such country or jurisdiction.

“**Royalty Obligation Term**” means, for each country within the Territory on a country-by-country basis, the time period commencing on the first Commercial Launch Date of the Licensed Product in such country and ending on the date that is the earlier of (i) the date that a Valid Claim no longer exists under the Licensed Patents in such country or (ii) the date a pharmaceutical product containing a [\*\*\*] formulation of the Compound, other than Spectrum’s product licensed hereunder, receives regulatory approval in such country; but in either event is at least [\*\*\*] ([\*\*\*)] years after the Commercial Launch Date for such Licensed Product in such country. Notwithstanding the foregoing, if at any time no Valid Claim under the Licensed Patents exists in a country, and a pharmaceutical product containing a [\*\*\*] formulation of the Compound (other than Spectrum’s product licensed hereunder) receives regulatory approval and launches commercially in such country for the same indication as Spectrum’s product licensed hereunder, then the royalty rate shall immediately be reduced [\*\*\*] for such country for the remainder of the Royalty Obligation Term).

“**SEC**” has the meaning specified in **Section 8.3**.

“**Specifications**” means the specifications for Captisol set forth in **Exhibit C** hereto, as such may be amended from time to time.

“**Sublicensees**” has the meaning specified in **Section 2.3**.

“**Term**” has the meaning specified in **Section 13.1**.

“**Territory**” means the entire world.

“**Third Party**” means any person or entity other than CyDex or Spectrum or an Affiliate of either of them.

“**Valid Claim**” means (i) a claim in any unexpired, issued patent which has not been irrevocably abandoned or held to be invalid or unenforceable by a non-appealed or unappealable decision of a court

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or other authority of competent jurisdiction, which is not admitted to be invalid through disclaimer or dedication to the public, and which Covers the Licensed Product, or (ii) regulatory exclusivity, such as orphan drug exclusivity, covering the Licensed Product.

## **2. GRANT OF RIGHTS.**

### **2.1 License Grants from CyDex to Spectrum.**

(a) **Licensed Patents.** Subject to the terms and conditions of this Agreement, CyDex hereby grants to Spectrum an exclusive, nontransferable (except with respect to the assignment provision in **Section 14.14**) license during the Term under the Licensed Patents, solely to research, develop, make, have made, import, use, offer for sale and sell the Licensed Product in the Territory in the Field. Notwithstanding the foregoing, to the extent that any Licensed Patents are licensed to CyDex or its Affiliates by a Third Party on a non-exclusive basis, the license granted to Spectrum in the foregoing sentence shall be exclusive as to CyDex and non-exclusive as to any Third Party. Spectrum may not sublicense the Licensed Patents, except as expressly set forth in **Section 2.3** below.

(b) **Know-How License.** Subject to the terms and conditions of this Agreement, CyDex hereby grants to Spectrum an exclusive, nontransferable (except with respect to the assignment provision in **Section 14.14**) license during the Term under CyDex's rights in and to the Captisol Data Package and Product Know-How, solely to research, develop, make, have made, import, use, offer for sale and sell the Licensed Product in the Territory in the Field. Notwithstanding the foregoing, to the extent that any Captisol Data Package and Product Know-How are licensed to CyDex or its Affiliates by a Third Party on a non-exclusive basis, the license granted to Spectrum in the foregoing sentence shall be exclusive as to CyDex and non-exclusive as to any Third Party. Spectrum may not sublicense its rights to the Captisol Data Package or Product Know-How, except as expressly set forth in **Section 2.3** below.

(c) **Scope of Licenses.** Unless otherwise provided in this Agreement or the Supply Agreement, CyDex grants no rights to Spectrum to manufacture, import, sell or offer for sale bulk Captisol.

**2.2 Grant of License from Spectrum to CyDex.** Spectrum shall provide prompt notice of any and all Captisol Improvements to CyDex. Spectrum hereby grants to CyDex a nonexclusive, transferable, perpetual, worldwide and royalty-free license, with the right to grant sublicenses (through multiple tiers of sublicensees), under Spectrum's and its Affiliates' rights in and to Captisol Improvements to develop, make, have made, use, market, distribute, import, sell and offer for sale Captisol.

**2.3 Sublicensing.** Spectrum shall have the right to grant sublicenses to any Third Party (collectively "**Sublicensees**") under the licenses granted to Spectrum pursuant to **Section 2.1**; *provided, however*, Spectrum shall promptly notify CyDex of each sublicense without unreasonable delay following any such grant. Spectrum shall ensure that all of its Sublicensees will comply with the terms and conditions of this Agreement and Spectrum shall remain fully responsible for the compliance by its Sublicensees with the terms and conditions of this Agreement as if such Sublicensees were Spectrum hereunder.

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**2.4 Contracting.** Spectrum may manufacture the Licensed Product or contract the manufacture of the Licensed Product with reputable Third Party manufacturers inspected by FDA or equivalent foreign regulatory authorities (each a “**Contract Manufacturer**”). To the extent necessary to engage a Contract Manufacturer for manufacturing the Licensed Product, Spectrum shall be permitted under this Agreement to grant any such Contract Manufacturer a sublicense under the licenses granted to Spectrum pursuant to **Section 2.1** solely for such purposes. Spectrum shall ensure that all of its Contract Manufacturers will comply with the terms and conditions of this Agreement and Spectrum shall remain fully responsible for the compliance by such Contract Manufacturers with the terms and conditions of this Agreement as if its Contract Manufacturers were Spectrum hereunder.

**2.5 Technology Transfer.** Within thirty (30) days after the Effective Date, CyDex shall transfer to Spectrum the IND for the Licensed Product and clinical trial materials of the Licensed Product and provide Spectrum with a technology transfer package, which shall include the Product Know-How and the Captisol Data Package, related to the excipients, formulation, filling, packaging, testing and stability of the Licensed Product. CyDex will update such package at least [\*\*\*] with any data or know-how developed or licensed by CyDex during the Term. CyDex shall also, for a period up to the NDA filing and in the preparation for pre-approval inspection of the Third Party manufacturers and laboratories, make its personnel available to Spectrum and its Contract Manufacturers to respond to informational inquiries and provide technical assistance related to the Product Know-How and the Captisol Data Package. After CyDex personnel have spent [\*\*\*] ([\*\*\*)] hours, excluding travel time, providing such assistance, Spectrum shall compensate CyDex at the rate of US\$[\*\*\*] per hour for the time of CyDex personnel incurred to provide such services; provided, that CyDex shall provide reasonable telephonic consultation at [\*\*\*] to Spectrum. Such technology transfer shall not include information related to the manufacture of bulk Captisol.

**2.6 Negative Covenant.** During the Term of this Agreement, CyDex and its Affiliates shall not [\*\*\*].

### **3. MANUFACTURE AND SUPPLY OF CAPTISOL.**

The provisions of the Supply Agreement and any related quality agreement shall govern the manufacture and supply of Captisol for use in the formulation of the Licensed Product.

### **4. COMPENSATION.**

#### **4.1 Payments and Royalties for Licenses.**

**(a) One-Time Fee.** Within [\*\*\*] ([\*\*\*)] business days after the Effective Date, Spectrum shall pay to CyDex a non-refundable, one-time fee of Three Million Dollars (US\$3,000,000) in partial consideration of the rights granted Spectrum under this Agreement.

**(b) Milestone Payments.** Within [\*\*\*] ([\*\*\*)] days following the occurrence of each of the milestone events listed below with respect to the Licensed Product, Spectrum shall provide written notice to CyDex of the achievement of such milestone event, and within [\*\*\*] ([\*\*\*)] days of the occurrence of each of the milestone events, pay to CyDex the applicable non-refundable milestone fee listed next to each such event in further consideration of the rights granted Spectrum under this Agreement. The milestone payments (each payable only one time regardless of the number of times

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achieved by the Licensed Product and regardless of the number of the Licensed Products there may be) are as follows:

	<b>Milestone</b>	<b>Milestone Payment</b>
(i)	Upon receipt of the first Marketing Approval from the FDA	US\$[***]
(ii)	Annual Net Sales in the Territory exceed US\$ [***]	US\$[***]
(iii)	Annual Net Sales in the Territory exceed US\$ [***]	US\$[***]
(iv)	Annual Net Sales in the Territory exceed US\$ [***]	US\$[***]

**(c) Royalties.**

(i) In addition to amounts payable pursuant to **Sections 4.1(a)** and **4.1(b)** above, Spectrum shall make royalty payments to CyDex during the Royalty Obligation Term on a calendar [\*\*\*] basis, in amounts equal to [\*\*\*]% of the applicable Net Sales during such calendar [\*\*\*] arising from the sale of the Licensed Product in the Territory.

(ii) All royalties payable to CyDex pursuant to this **Section 4.1(c)** shall be due and payable within [\*\*\*] ([\*\*\*)] days after the conclusion of each calendar [\*\*\*].

(iii) If additional rights or licenses are required from any Third Party or Third Parties to develop and commercialize the Licensed Product in any jurisdiction within the Territory, Spectrum shall be entitled to deduct [\*\*\*] ([\*\*\*)] of all commercially reasonable payments, including any milestone payments and royalty payments, made to such Third Party or Third Parties to acquire such rights and licenses, from the payments earned by CyDex for that jurisdiction within the Territory, including all milestone and royalty payments specified in **Sections 4.1(b)** and **4.1(c)** above; *provided, however*, any deduction by Spectrum shall not exceed [\*\*\*] ([\*\*\*)] of the payments for a given jurisdiction then earned by CyDex at one time, and any reduction to royalty payments in a calendar [\*\*\*] shall not exceed [\*\*\*] ([\*\*\*)] of the applicable Net Sales in any given jurisdiction. In the event that, for a calendar [\*\*\*], Spectrum is unable to deduct all payments it is entitled to deduct, any remaining portion of the deduction Spectrum is entitled to will be used toward any future payments earned by and due to CyDex pursuant to **Sections 4.1(b)** and **4.1(c)** until the total deduction by Spectrum reaches [\*\*\*] ([\*\*\*)] of all payments made by Spectrum to the Third Party or Third Parties for a given jurisdiction.

**4.2 Currency.** All amounts due hereunder are stated in, and shall be paid in, U.S. dollars. Net Sales based on foreign revenue will be converted to U.S. dollars at the rate of exchange published in *The Wall Street Journal*, Eastern U.S. Edition on the last day of each calendar [\*\*\*]. Spectrum shall provide CyDex, together with each royalty payment owed pursuant to **Section 4.1(c)** above, a schedule detailing the calculation of Net Sales resulting from the conversion of foreign revenue to U.S. dollars as set forth herein.

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### 4.3 Taxes.

(a) **Taxes on Income.** Each Party shall be solely responsible for the payment of all taxes imposed on its share of income arising directly or indirectly from the efforts of the Parties under this Agreement or the Supply Agreement.

(b) **Tax Cooperation.** The parties agree to cooperate with one another and use reasonable efforts to avoid or reduce tax withholding or similar obligations in respect of royalties, milestone payments, and other payments made by Spectrum to CyDex under this Agreement or the Supply Agreement. To the extent Spectrum is required to deduct and withhold taxes on any payment to CyDex, Spectrum shall pay the amounts of such taxes to the proper governmental authority in a timely manner and promptly transmit to CyDex an official tax certificate or other evidence of such withholding sufficient to enable CyDex to claim such payment of taxes. CyDex shall provide Spectrum any tax forms that may be reasonably necessary in order for Spectrum to not withhold tax or to withhold tax at a reduced rate under an applicable bilateral income tax treaty. CyDex shall use reasonable efforts to provide any such tax forms to Spectrum at least [\*\*\*] ([\*\*\*)] days prior to the due date for any payment for which CyDex desires that Spectrum apply a reduced withholding rate. Each party shall provide the other with reasonable assistance to enable the recovery, as permitted by applicable law, of withholding taxes, value added taxes, or similar obligations resulting from payments made under this Agreement, such recovery to be for the benefit of the party bearing such withholding tax or value added tax.

**4.4 Late Payments.** Unpaid balances shall accrue interest, from due date until paid, at a rate equal to the prime rate, as reported in *The Wall Street Journal*, Eastern U.S. Edition, on the date such payment is due, plus an additional [\*\*\*] ([\*\*\*)], unless such unpaid balance is subject to a reasonable, good faith dispute by Spectrum.

## 5. RECORDS; REPORTS; AUDIT.

**5.1 Records.** Spectrum shall, and shall require its Affiliates and Sublicensees to maintain accurate records relating to Net Sales.

**5.2 Reports.** Upon CyDex's request, Spectrum shall update CyDex in writing regarding development and commercial activities with respect to the Licensed Product but not more often than [\*\*\*].

**5.3 Audit.** Upon reasonable prior notice, such records shall be available during regular business hours for a period of [\*\*\*] ([\*\*\*)] years from the end of the calendar year to which they pertain for examination, and not more often than [\*\*\*] each calendar year, by an independent certified public accountant selected by CyDex and reasonably acceptable to Spectrum, for the sole purpose of verifying the accuracy of the financial reports furnished by Spectrum pursuant to this Agreement. Any such auditor shall not disclose Spectrum's Confidential Information, except to the extent such disclosure is necessary to verify the accuracy of the financial reports furnished by Spectrum or the amount of payments due by Spectrum under this Agreement. Any amounts shown to be owed but unpaid shall be paid within [\*\*\*] ([\*\*\*)] days from the accountant's report from the original due date, plus interest accrued thereon (from the applicable original due date) at the rate set forth in **Section 4.4** above. Any amounts shown to have been overpaid shall be refunded within [\*\*\*] ([\*\*\*)] days. CyDex shall bear the full cost of such audit unless such audit discloses an underpayment by Spectrum of more than [\*\*\*] ([\*\*\*)] of the total amount due, in which case Spectrum shall bear the full cost of such audit.

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## 6. DEVELOPMENT AND COMMERCIALIZATION BY SPECTRUM.

**6.1 Diligence.** Spectrum shall (i) use at least Commercially Reasonable Efforts, and shall further require its Affiliates and Sublicensees to use at least Commercially Reasonable Efforts, to develop the Licensed Product, and to commercialize the Licensed Product following Approvals of the Licensed Product, and (ii) comply with the requirements set forth in *Exhibit D* hereto. For the avoidance of doubt, in the event of a conflict between subparts (i) and (ii), Spectrum shall use whichever efforts are greater.

**6.2 Costs and Expenses.** Other than those specified in this Agreement, [\*\*\*].

**6.3 Right of Reference.** Spectrum shall have the right to reference the DMF solely in connection Spectrum's regulatory filings submitted in connection with obtaining Regulatory Approval for the Licensed Product.

**6.4 Access to Spectrum's Data.** In connection with CyDex's development and commercialization of Captisol or for fulfilling its obligations under this Agreement, CyDex shall have the right to reference and utilize all toxicology/safety and other scientific data developed on Captisol alone (and not in conjunction with a product formulation) by Spectrum, its Sublicensees or Affiliates, [\*\*\*]. Upon written request by CyDex, Spectrum shall either provide CyDex with a copy of all such data or shall make such data accessible to CyDex at such times and locations mutually agreed upon by the parties; provided, that CyDex may include such data in the drug master file related to Captisol but shall not selectively share the data with other Captisol licensees.

## 7. REGULATORY MATTERS.

**7.1 Captisol Information Submitted for Regulatory Review.** Except as otherwise set forth herein, Spectrum shall be solely responsible for all communications with regulatory agencies in connection with the Licensed Product. Notwithstanding the foregoing, Spectrum shall provide CyDex with (a) copies of the portions of all regulatory submissions containing Captisol data alone (and not in conjunction with any product formulation) [\*\*\*] ([\*\*\*)] days prior to submission and shall use Commercially Reasonable Efforts to incorporate CyDex's comments on the same, and (b) notice of meetings with the FDA regarding the Licensed Product prior to the occurrence of any such meetings.

**7.2 Material Safety.** CyDex shall provide Spectrum, in writing, from time to time, with (a) relevant information currently known to it regarding handling precautions, toxicity and hazards with respect to Captisol, and (b) the then-current material safety data sheet for Captisol. Notwithstanding the foregoing or anything in this Agreement to the contrary, Spectrum is solely responsible for (i) use of all documentation provided by CyDex, including without limitation, use in any regulatory submission to the FDA or any other regulatory agency in the Territory, (ii) document control and retention, and (iii) determining the suitability of any documentation provided by CyDex hereunder for use in any regulatory submission.

**7.3 Adverse Event Reporting.** Either party shall adhere, and shall require that its Affiliates, Sublicensees, co-marketers and distributors adhere, to all requirements of applicable law and regulations that relate to the reporting and investigation of any adverse event. In the event that either party becomes aware of any adverse event relating to either the Licensed Product or Captisol, the party shall timely inform the other party of any such adverse event.

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**7.4 Quality Agreement.** Within [\*\*\*] ([\*\*\*)] days of the Effective Date, the parties shall enter into a quality agreement containing provisions, in addition to the provisions customary for quality agreement, customary pharmacovigilance provisions including, without limitation, related to sharing of adverse event and other clinically significant information regarding Licensed Product or Captisol.

## **8. CONFIDENTIALITY.**

**8.1 Definition.** Spectrum and CyDex each recognizes that, during the Term, it may be necessary for a party (the “**Disclosing Party**”) to provide Confidential Information (as defined herein) to the other party (the “**Receiving Party**”) that is highly valuable, the disclosure of which would be highly prejudicial to such party. The disclosure and use of Confidential Information will be governed by the provisions of this **Section 8**. Neither Spectrum nor CyDex shall use the other’s Confidential Information except as expressly permitted in this Agreement. For purposes of this Agreement, “**Confidential Information**” means all information disclosed by the Disclosing Party to the Receiving Party and designated in writing by the Disclosing Party as “Confidential” (or equivalent), and all material disclosed orally which is declared to be confidential by the Disclosing Party and confirmed in a writing delivered to the Receiving Party within [\*\*\*] ([\*\*\*)] days of such disclosure; *provided, however*, the foregoing notwithstanding, Confidential Information orally disclosed by or on behalf of the Disclosing Party that a reasonable person would understand to be confidential or proprietary in nature shall be treated as Confidential Information, even if such Confidential Information is not subsequently reduced to a tangible form and delivered to the Receiving Party. Confidential Information shall include, but not be limited to, product specifications, data, know-how, formulations, product concepts, sample materials, business and technical information, financial data, batch records, trade secrets, processes, techniques, algorithms, programs, designs, drawings, and any other information related to a party’s present or future products, sales, suppliers, customers, employees, investors or business. Without limiting the generality of the foregoing, CyDex’s Confidential Information includes all materials provided as part of the Captisol Data Package and Product Know-How.

**8.2 Obligation.** CyDex and Spectrum agree that they will disclose the other’s Confidential Information to its own officers, employees, consultants and agents only if and to the extent necessary to carry out their respective responsibilities under this Agreement or in accordance with the exercise of their rights under this Agreement, and such disclosure shall be limited to the maximum extent possible consistent with such responsibilities and rights. Neither party shall disclose Confidential Information of the other to any Third Party without the other’s prior written consent, and any such disclosure to a Third Party shall be pursuant to the terms of a non-disclosure agreement no less restrictive than this **Section 8**. Each party shall take such action to preserve the confidentiality of each other’s Confidential Information as it would customarily take to preserve the confidentiality of its own Confidential Information (but in no event less than a reasonable standard of care). Unless otherwise specified in this Agreement and subject to terms and conditions in this Agreement, each party, upon the other’s request, will return all the Confidential Information disclosed to the other party pursuant to this Agreement, including all copies and extracts of documents, within [\*\*\*] ([\*\*\*)] days of the request, and in any event, promptly following the termination of this Agreement, except that the receiving party may retain (i) one (1) copy for archival purposes and (ii) such electronic copies that exist as part of the party’s computer systems, network storage systems and electronic backup systems.

**8.3 Exceptions.** The use and non-disclosure obligations set forth in this **Section 8** shall not apply to any Confidential Information, or portion thereof, that the Receiving Party can demonstrate by appropriate documentation:

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(i) at the time of disclosure is in the public domain;

(ii) after disclosure, becomes part of the public domain, by publication or otherwise, through no fault of the Receiving Party;

(iii) at the time of disclosure is already in the Receiving Party's possession, and such prior possession can be properly demonstrated by the Receiving Party, with the exception of Confidential Information exchanged between parties prior to the execution of this Agreement; or

(iv) is made available to the Receiving Party by an independent Third Party; *provided, however,* to the Receiving Party's knowledge, such information was not obtained by said Third Party, directly or indirectly, from the Disclosing Party hereunder.

In addition, the Receiving Party may disclose information that is required to be disclosed by law, by a valid order of a court or by order or regulation of a governmental agency including but not limited to, regulations of the United States Securities and Exchange Commission (the "SEC"), or in the course of litigation; *provided, however,* in all cases the Receiving Party shall give the other party prompt notice of the pending disclosure and make a reasonable effort to obtain, or to assist the Disclosing Party in obtaining, a protective order preventing or limiting the disclosure and/or requiring that the Confidential Information so disclosed be used only for the purposes for which the law or regulation required, or for which the order was issued. Spectrum may further disclose CyDex's Confidential Information to extent that such disclosure is necessary to develop, file for Regulatory Approval, or commercialize the Licensed Product, or to seek, prosecute and maintain intellectual property protection for the Licensed Product.

**8.4 Injunction.** Each party agrees that should it breach or threaten to breach any provisions of this **Section 8**, the Disclosing Party will suffer irreparable damages and its remedy at law will be inadequate. Upon any breach or threatened breach by the Receiving Party of this **Section 8**, the Disclosing Party shall be entitled to seek injunctive relief in addition to any other remedy which it may have, without need to post any bond or security.

**8.5 Third Party Information.** Spectrum acknowledges that CyDex's Confidential Information includes information developed by Pfizer, Inc. ("**Pfizer**") that is confidential to both CyDex and Pfizer. In so far as Confidential Information of Pfizer is disclosed, Pfizer is a third-party beneficiary of this **Section 8** of this Agreement and may enforce it or seek remedies pursuant to it in accordance with its terms.

**8.6 Public Announcements.** The parties will mutually agree on a press release to be issued upon execution of this Agreement or reasonably soon thereafter. The press release shall describe the transaction as being royalty-based with commercial milestones in excess of \$50 million. Ligand shall also file a Form 8-K describing the Agreement as including a significant double-digit royalty.. Neither party shall make any subsequent public announcement concerning this Agreement or the terms hereof not previously made public without the prior written approval of the other party with regard to the form, content, and precise timing of such announcement, except as may be required to be made by either party in order to comply with applicable Law, regulations, court orders, or tax, securities filings, financing arrangements, acquisitions, or sublicenses. Such consent shall not be unreasonably withheld or delayed by such other party. Prior to any such public announcement, the party wishing to make the announcement will submit a draft of the proposed announcement to the other party in sufficient time to enable such other party to

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consider and comment thereon. The party wishing to make the announcement will reasonably consider all comments provided by the other party and will also cooperate to seek confidential treatment of any information reasonably requested by the other party.

## **9. REPRESENTATIONS AND WARRANTIES.**

**9.1 Mutual Representations and Warranties.** Each party represents and warrants to the other as follows:

(i) it is a corporation duly organized and validly existing under the laws of the state or country of its incorporation;

(ii) it has the complete and unrestricted power and right to enter into this Agreement and to perform its obligations hereunder;

(iii) this Agreement has been duly authorized, executed and delivered by such party and constitutes a legal, valid and binding obligation of such party enforceable against such party in accordance with its terms except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, receivership, moratorium, fraudulent transfer, or other similar laws affecting the rights and remedies of creditors generally and by general principles of equity;

(iv) the execution, delivery and performance of this Agreement by such party do not conflict with any agreement, instrument or understanding, oral or written, to which such party is a party or by which such party may be bound, nor violate any law or regulation of any court, governmental body or administrative or other agency having authority over such party;

(v) all consents, approvals and authorizations from all governmental authorities or other Third Parties required to be obtained by such party in connection with the execution and delivery of this Agreement have been obtained;

(vi) no person or entity has or will have, as a result of the transactions contemplated by this Agreement, any right, interest or valid claim against or upon such party for any commission, fee or other compensation as a finder or broker because of any act by such party or its agents; and

(vii) it has not entered into any agreement with any Third Party that is in conflict with the rights granted to the other party pursuant to this Agreement.

**9.2 Additional Representations, Warranties and Covenants of CyDex .** CyDex represents and warrants to Spectrum, as of the Effective Date, and covenants that:

(i) it (directly or through its Affiliates) is the owner or licensee of the Licensed Patents and has the right to grant the licenses to Spectrum for the Captisol Data Package, Product Know-How, and the Licensed Patents pursuant to this Agreement, and it has not and will not grant such license to any Third Party;

(ii) to CyDex's knowledge, it (directly or through its Affiliates) is the owner of all the intellectual property rights necessary to develop, manufacture, and commercialize the Licensed Product, and all such rights have been licensed to Spectrum pursuant to this Agreement;

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(iii) to CyDex's knowledge, other than the intellectual property licensed to Spectrum pursuant to this Agreement, no other intellectual property right and interests are necessary to develop, manufacture, and commercialize the Licensed Product;

(iv) it (directly or through its Affiliates) is the owner or licensee of all the intellectual property rights necessary to manufacture and commercialize Captisol and, to CyDex's knowledge, other than the intellectual property licensed to Spectrum pursuant to this Agreement, no other intellectual property right and interests are necessary to use Captisol to develop, manufacture, and commercialize the Licensed Product;

(v) after the Effective Date, it (directly or through its Affiliates) shall provide to Spectrum pursuant to **Section 2.5** above, all material Confidential Information of CyDex pertaining to the development, manufacture, or commercialization of the Licensed Product;

(vi) CyDex or any of its Affiliates has not received any written notice from any Third Party asserting or alleging that any research or development of the Licensed Product prior to the Effective Date infringed or misappropriated the intellectual property rights of such Third Party;

(vii) there are no actual, or, to CyDex's knowledge, pending, alleged or threatened adverse actions, suits, claims, interferences or formal governmental investigations pertaining to the Licensed Product, the Licensed Patents and the Product Know How by or against CyDex or any of its Affiliates in or before any court, governmental or regulatory authority; and

(viii) after the Effective Date, it will not enter into any agreement or other arrangement with any Third Party following the Effective Date that would limit Spectrum's right and ability to exploit the rights and licenses granted by CyDex to Spectrum under this Agreement.

**9.3 Disclaimer.** THE WARRANTIES SET FORTH IN THIS **SECTION 9** ABOVE ARE PROVIDED IN LIEU OF, AND EACH PARTY HEREBY DISCLAIMS, ALL OTHER WARRANTIES, EXPRESS AND IMPLIED, RELATING TO THE SUBJECT MATTER OF THIS AGREEMENT, CAPTISOL, THE LICENSED PATENTS, THE CAPTISOL DATA PACKAGE, OR THE PRODUCT KNOW-HOW, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

## **10. INDEMNIFICATION.**

**10.1 By CyDex.** CyDex shall defend, indemnify and hold Spectrum and its Affiliates and Sublicensees, and each of their respective directors, officers and employees, harmless from and against any and all losses, damages, liabilities, costs and expenses (including the reasonable costs and expenses of attorneys and other professionals) (collectively "**Losses**") incurred by Spectrum as a result of any claim, demand, action or other proceeding (each, a "**Claim**") by a Third Party, to the extent such Losses arise out of: (a) the manufacture, use, handling, promotion, marketing, distribution, importation, sale or offering for sale of Captisol by CyDex and its Affiliates; or (b) an alleged or actual infringement or misappropriation of an intellectual property right by the use, handling, promotion, marketing, distribution, importation, sale or offering for sale of Captisol by Spectrum in connection with the Licensed Products; or (c) CyDex's breach of this Agreement, to the extent that such Losses are not due to Spectrum's gross negligence or willful misconduct.

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**10.2 By Spectrum.** Spectrum shall defend, indemnify and hold CyDex and its Affiliates, and each of their respective directors, officers and employees, harmless from and against any and all Losses incurred by CyDex as a result of any Claim by a Third Party, to the extent such Losses arise out of: (a) the manufacture, use, handling, promotion, marketing, distribution, importation, sale or offering for sale of the Licensed Product by Spectrum, its Affiliates and Sublicensees to the extent not covered by Section 10.1; or (b) Spectrum's breach of this Agreement, to the extent that such Losses are not due to CyDex's gross negligence or willful misconduct.

**10.3 Expenses.** As the parties intend complete indemnification, all costs and expenses of enforcing any provision of this **Section 10** shall also be reimbursed by the Indemnitor.

**10.4 Procedure.** The party intending to claim indemnification under this **Section 10** (an "**Indemnitee**") shall promptly notify the other party (the "**Indemnitor**") of any Claim in respect of which the Indemnitee intends to claim such indemnification, and the Indemnitor shall assume the defense thereof whether or not such Claim is rightfully brought; *provided, however*, an Indemnitee shall have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnitee, unless Indemnitor does not assume the defense, in which case the reasonable fees and expenses of counsel retained by the Indemnitee shall be paid by the Indemnitor. The Indemnitee, and its employees and agents, shall cooperate fully with the Indemnitor and its legal representatives in the investigations of any Claim. The Indemnitor shall not be liable for the indemnification of any Claim settled or compromised by the Indemnitee without the written consent of the Indemnitor.

## **11. LIMITATION OF LIABILITY.**

**11.1 Limitation of Remedies.** NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES OR LOSS OF PROFITS ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS **SECTION 11** IS INTENDED TO OR SHALL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER **SECTION 10**, OR DAMAGES AVAILABLE FOR A PARTY'S BREACH OF CONFIDENTIALITY OBLIGATIONS IN **SECTION 8**.

**11.2 Limitation of Damages.** EXCEPT WITH RESPECT TO THE INDEMNIFICATION SPECIFICALLY PROVIDED IN SECTION 10 ABOVE, IN NO EVENT SHALL CYDEX'S TOTAL AGGREGATE LIABILITY FOR ALL CLAIMS ARISING OUT OF OR RELATED TO THIS AGREEMENT AND THE SUPPLY AGREEMENT EXCEED [\*\*\*] MILLION DOLLARS (\$ [\*\*\*]).

## **12. MANAGEMENT OF LICENSED PATENTS.**

### **12.1 Prosecution and Maintenance.**

(a) **CyDex Patents.** CyDex shall maintain or abandon, at its sole cost and expense and using reasonable discretion, the Captisol Patents set forth on *Exhibit A*. CyDex shall have the sole right to control the prosecution and maintenance of patent applications and the selection of countries where patent applications are filed related to the Captisol Patents.

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(b) **Licensed Product Patents.** Spectrum shall maintain, at its sole cost and expense and using reasonable discretion, the Licensed Product Patents set forth on *Exhibit B*. Spectrum shall have the sole right to control the prosecution and maintenance of patent applications and the selection of countries where patent applications are filed related to the Licensed Product Patents; *provided, however*, (i) CyDex shall be provided with the right and opportunity to give comments and recommendations as to the overall strategy regarding the filing, prosecution and maintenance of the Licensed Product Patents which shall be considered by Spectrum in good faith, and (ii) Spectrum shall use Commercially Reasonable Efforts to prosecute, obtain and maintain the Licensed Product Patents in each of the Major Markets. In the event that Spectrum decides not to prosecute and maintain the Licensed Product Patents in a country, Spectrum shall provide not less than [\*\*\*] ([\*\*\*)] days prior written notice of such decision, and CyDex shall have the option to take over the prosecution and maintenance in such country or countries. For clarity, in the event that Spectrum fails to prosecute and/or maintain the Licensed Product Patents in a country, CyDex shall have the right to terminate this Agreement pursuant to **Section 13.2** hereof with respect to such country (but not other countries within the Territory) with [\*\*\*] days notice during which Spectrum may cure this failure.

**12.2 Infringement of Captisol Patents by Third Parties.** If Spectrum becomes aware that a Third Party may be infringing a Captisol Patent, it will promptly notify CyDex in writing, providing all information available to Spectrum regarding the potential infringement. CyDex shall take whatever, if any, action it deems appropriate, in its sole discretion, against the alleged infringer. If CyDex elects to take action, Spectrum shall, at CyDex's request and expense, cooperate and shall cause its employees to cooperate with CyDex in taking any such action, including but not limited to, cooperating with the prosecution of any infringement suit by CyDex related to a Captisol Patent. Spectrum shall not take any such action against the alleged infringer related to a Captisol Patent without the written consent of CyDex. Each party shall provide to the party enforcing any such rights under this **Section 12.2** reasonable assistance in such enforcement, at such enforcing party's request and expense, including joining such action as a party plaintiff if required by applicable law to pursue such action. The enforcing party shall keep the other party regularly informed of the status and progress of such enforcement efforts, shall reasonably consider the other party's comments on any such efforts. If either party recovers monetary damages from any Third Party in a suit or action brought for infringement of a Captisol Patent, such recovery shall be allocated first to the reimbursement of any expenses incurred by the parties in such litigation (including, for this purpose, a reasonable allocation of expenses of internal counsel), and the remaining amounts shall (i) to the extent not attributable to the Licensed Product, be paid to CyDex, if the suit or action is brought by CyDex and shared equally by CyDex and Spectrum, if the suit or action is brought by Spectrum and (ii) be regarded as Net Sales which is subject to royalty obligations under this Agreement to the extent any amounts are attributable to the Licensed Product. For clarity, this **Section 12.2** shall not apply in the event of Product Infringement as defined below in **Section 12.3(a)**. Without Spectrum's prior written consent (not to be unreasonably withheld, conditioned or delayed), no settlement shall be concluded by CyDex that would provide the alleged infringer any right to use the Captisol Patents for a product containing the Compound.

### **12.3 Infringement of Licensed Product Patents by Third Parties.**

(a) **Notification.** Each party shall promptly notify the other party in writing of any existing or threatened infringement of the Licensed Product Patents through the development or commercialization of a product comprising the Compound as an active ingredient by a Third Party, of

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which such Party becomes aware, including any “patent certification” filed in the United States under 21 U.S.C. §355(b)(2) or 21 U.S.C. §355(j)(2) or similar provisions in other jurisdictions and of any declaratory judgment, opposition, or similar action alleging the invalidity, unenforceability or non-infringement of any of the Licensed Product Patents (collectively “**Product Infringement**”).

**(b) Product Infringement.**

**(i)** For any Product Infringement, Spectrum shall have the first right, but not the obligation, to bring an appropriate suit or other action against any person or entity engaged in such Product Infringement. If Spectrum fails to institute and prosecute an action or proceeding to abate the Product Infringement within a period of [\*\*\*] ([\*\*\*)] days (a) after the first notice under **Section 12.3(a)** or (b) of otherwise having knowledge of the Product Infringement, then CyDex shall have the right, but not the obligation, to commence a suit or take action to enforce the applicable Licensed Product Patent against such third Party perpetrating such Product Infringement at its own cost and expense. In this case, Spectrum shall take appropriate actions in order to enable CyDex to commence a suit or take the actions set forth in the preceding sentence.

**(ii)** Each party shall provide to the party enforcing any such rights under this **Section 12.3** reasonable assistance in such enforcement, at such enforcing party’s request and expense, including joining such action as a party plaintiff if required by applicable law to pursue such action. The enforcing party shall keep the other party regularly informed of the status and progress of such enforcement efforts, shall reasonably consider the other party’s comments on any such efforts.

**(iii)** Each party shall bear all of its own internal and external costs and expenses incurred in connection with its activities under this **Section 12.3**.

**(iv)** The party not bringing an action with respect to Product Infringement under this **Section 12.3** shall be entitled to separate representation in such matter by counsel of its own choice and at its own expense, but such party shall at all times cooperate fully with the party bringing such action.

**(c) Allocation of Proceeds.** If either party recovers monetary damages from any Third Party in a suit or action brought for a Product Infringement, such recovery shall be allocated first to the reimbursement of any expenses incurred by the parties in such litigation (including, for this purpose, a reasonable allocation of expenses of internal counsel), and the remaining amounts shall be part of Net Sales subject to the royalty payment by Spectrum to CyDex.

**12.4 Cooperation.** Each party hereby agrees to duly execute and deliver, or cause to be duly executed and delivered such further instruments and do and cause to be done such further acts and things, including without limitation, the filing of such additional assignments, agreements, documents and instruments, that may be necessary or as the other party hereto may at any time and from time to time reasonably request in connection with this **Section 12**.

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### 13. TERM AND TERMINATION.

**13.1 Term.** The term of this Agreement (the “**Term**”) shall commence on the Effective Date and shall continue in effect thereafter, on a country-by-country basis, through the Royalty Obligation Term, unless terminated earlier as set forth herein.

#### 13.2 Termination for Breach.

**(d) Notice.** If either party believes that the other is in material breach of this Agreement, then the party holding such belief (the “**Non-breaching Party**”) may deliver notice of such breach to the other party (the “**Notified Party**”). The Notified Party shall have [\*\*\*] ([\*\*\*)] days to cure such breach to the extent involving non-payment of amounts due hereunder, and [\*\*\*] ([\*\*\*)] days to either cure such breach for all other material breaches, or, if cure of such breach other than non-payment cannot reasonably be effected within such [\*\*\*] ([\*\*\*)] day period, to deliver to the Non-breaching Party a plan reasonably calculated to cure such breach within a timeframe that is reasonably prompt in light of the circumstances then prevailing but in no event in excess of an additional [\*\*\*] ([\*\*\*)] day period unless otherwise mutually agreed in writing. Following delivery of such a plan, the Notified Party shall diligently carry out the plan and cure the breach and the cure period shall be extended by the time period provided in such plan but in no event to exceed [\*\*\*] ([\*\*\*)] days from the date of any initial breach notice delivered under this **Section 13.2**.

**(e) Failure to Cure.** If the Notified Party fails to cure a material breach of this Agreement as provided for in **Section 13.2**, then the Non-Breaching Party may terminate this Agreement upon written notice to the Notified Party.

**(f) Disputes.** If a party gives notice of termination under this **Section 13.2** and the other Party disputes whether such termination is proper under this **Section 13.2**, then the issue of whether this Agreement may properly be terminated upon expiration of the notice period (unless such breach is cured as provided in **Section 13.2**) shall be resolved in accordance with **Section 14.4**. If as a result of such dispute resolution process it is determined that the notice of termination was proper, then such termination shall be deemed to have been effective [\*\*\*] ([\*\*\*)] days following the date of the notice of termination (or such other time period applicable pursuant to **Section 13.2**). If as a result of such dispute resolution process it is determined that the notice of termination was improper, then no termination shall have occurred and this Agreement shall remain in effect.

**13.3 Termination by Spectrum for Convenience.** Spectrum shall have the right to terminate this Agreement in its entirety without cause by providing CyDex with ninety (90) days prior written notice.

**13.4 CyDex Rights upon Termination (Other Than for CyDex Breach)** . In event that Spectrum terminates the Agreement without cause pursuant to **Section 13.3** or that CyDex terminates this Agreement pursuant to **Section 13.2**, the following shall apply (in addition to any other rights and obligations otherwise under this Agreement with respect to such termination):

**(a) Regulatory Filings; Data.** To the extent permitted by applicable Laws, Spectrum shall transfer and assign to CyDex all regulatory filings, Regulatory Approvals, and related preclinical, analytical, and clinical data for the Licensed Product.

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**(b) Transition Assistance.** Spectrum shall provide such assistance, at CyDex's expense, as may be reasonably necessary or useful for CyDex to commence or continue developing, manufacturing or commercializing the Licensed Product, to the extent Spectrum is then performing such activities, including, without limitation transferring, upon request of CyDex, any agreements or arrangements with Third Party vendors to sell the Licensed Product, to the extent assignable. To the extent that any such contract between Spectrum and a Third Party is not assignable to CyDex, then Spectrum shall reasonably cooperate with CyDex to arrange to continue to and provide such services from such entity.

**(c) Termination of Licenses.** All rights granted to Spectrum herein shall immediately terminate.

**(d) Return of Records.** Each party shall promptly return all relevant records and materials in its possession or control containing the other party's Confidential Information with respect to which the former party does not retain rights hereunder; *provided, however*; each party may retain one archival copy of such records and materials solely to be able to monitor its obligations that survive under this Agreement.

**(e) License of Certain Rights.** Spectrum hereby grants to CyDex a nonexclusive, transferable, perpetual, worldwide and royalty-free license, with the right to grant sublicenses (through multiple tiers of sublicensees), under Spectrum's and its Affiliates' rights in and to any technology, improvement, data or information related to the Licensed Product, including, without limitation, any such technology, improvement, data or information related to Licensed Patents, Product Know-How or Captisol Data Package, whether or not patentable, that is developed by Spectrum or its Affiliates, to develop, make, have made, use, market, distribute, import, sell and offer for sale the Licensed Product.

**(f) Transfer of Approvals.** Spectrum shall transfer and assign the relevant Marketing Approvals and Regulatory Approvals to CyDex, to the extent permitted by applicable laws .

**13.5 CyDex Rights upon Termination (If for CyDex Breach).** In event that Spectrum terminates the Agreement due to CyDex's breach pursuant to **Section 13.2**, the following shall apply (in addition to any other rights and obligations otherwise under this Agreement with respect to such termination):

**(a) Termination of Licenses.** All rights granted to Spectrum and all rights granted to CyDex herein shall immediately terminate subject to sub-clauses (b) and (c) below.

**(b) Regulatory Filings.** Spectrum shall retain all regulatory filings and data generated by Spectrum, its Affiliates and Sublicensees during the Term of this Agreement, including any existing Market Approval for the Licensed Product, and CyDex shall not have rights to use any such regulatory filings, data or Market Approval.

**(c) Return of Records.** Each party shall promptly return all relevant records and materials in its possession or control containing the other party's Confidential Information with respect to which the former party does not retain rights hereunder; *provided, however*, each party may retain one archival copy of such records and materials solely to be able to monitor its obligations that survive under this Agreement.

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**13.6 Spectrum Rights Upon Expiration.** On a country-by-country basis, upon the expiration of Spectrum's obligations to pay royalties under **Section 4.1(c)**, the license granted to Spectrum under this Agreement shall become a fully-paid, royalty-free, and perpetual license for the Licensed Product in the Field.

**13.7 Termination of the Supply Agreement.** For clarity, this Agreement shall terminate if the Supply Agreement is terminated by Spectrum without cause, or terminated by CyDex because of any material breach by Spectrum.

**13.8 Survival.** Notwithstanding any other provisions of this Agreement, any liability or obligation of either party to the other for acts or omissions prior to the termination or expiration of this Agreement shall survive the termination or expiration of this Agreement. Such termination or expiration shall not relieve either party from obligations that are expressly indicated to survive termination or expiration of this Agreement, nor shall any termination or expiration of this Agreement relieve Spectrum of its obligation to pay CyDex royalties for all Licensed Product sold by Spectrum, its Affiliates or Sublicensees prior to the effective date of such expiration or termination. **Sections 2.2** (Grant of License from Spectrum to CyDex), **4.1** (Payments and Royalties for Licenses), **4.2** (Currency), **4.3** (Taxes), **4.4** (Late Payments), **5** (Records; Reports; Audits), **6.4** (Access to Spectrum's Data), **7.3** (Adverse Event Reporting), **8** (Confidentiality), **9.3** (Disclaimer), **10** (Indemnification), **11** (Limitation of Liability), **13.4** (CyDex Rights Upon Termination (Other Than for CyDex Breach)), **13.5** (CyDex Rights Upon Termination (If for CyDex Breach)), **13.6** (Spectrum's Rights Upon Expiration), **13.8** (Survival), and **14** (General Provisions) shall survive termination or expiration of this Agreement.

#### **14. GENERAL PROVISIONS.**

**14.1 Non-Solicitation.** During the Term and for a period of [\*\*\*] ([\*\*\*)] [\*\*\*] thereafter, neither party shall solicit, induce, encourage or attempt to induce or encourage any employee of the other party to terminate his or her employment with such other party or to breach any other obligation to such other party. This section is not meant to encompass general solicitations such as may be found in newspaper advertisements and the like.

**14.2 Relationship of Parties.** Each of the parties hereto is an independent contractor and nothing in this Agreement is intended or shall be deemed to constitute a partnership, agency, employer-employee or joint venture relationship between the parties. No party shall incur any debts or make any commitments for the other.

**14.3 Compliance with Law.** Each of the parties will comply with all applicable international, federal, state and local laws, rules and regulations, including, but not limited to, import/export restrictions, laws, rules and regulations governing use and patent, copyright and trade secret protection.

#### **14.4 Arbitration.**

**(d) Procedure.** Except as otherwise expressly set forth in **Section 14.4(b)** below, any and all disputes or controversies arising out of or relating to this Agreement shall be exclusively and finally resolved by binding arbitration in accordance with the commercial arbitration rules of the American Arbitration Association then in effect, in San Diego, California. The arbitration shall be conducted by an arbitrator reasonably knowledgeable about the pharmaceutical industry and acceptable

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to CyDex and Spectrum. If CyDex and Spectrum cannot agree on a single arbitrator within [\*\*\*] ([\*\*\*)] days after a demand for arbitration has been made, CyDex shall appoint an arbitrator, Spectrum shall appoint an arbitrator, the two (2) arbitrators shall appoint a third arbitrator, and the three (3) arbitrators shall hear and decide the issue in controversy. If either party fails to appoint an arbitrator within [\*\*\*] ([\*\*\*)] days after service of the demand for arbitration, then the arbitrator appointed by the other party shall arbitrate any controversy in accordance with this **Section 14.4(a)**. Except as to the selection of arbitrators, the arbitration proceedings shall be conducted promptly and in accordance with the rules of the American Arbitration Association then in effect. The expenses of any arbitration, including the reasonable attorney fees of the prevailing party, shall be borne [\*\*\*].

(e) **Short-Form Arbitration.** Any dispute subject to short-form arbitration as provided in this Agreement shall be exclusively and finally resolved by binding arbitration in accordance with the commercial arbitration rules of the American Arbitration Association then in effect, in San Diego, California by a single arbitrator reasonably knowledgeable about the pharmaceutical industry and appointed in accordance with such rules. Such arbitrator shall make his or her determination on the basis of “baseball arbitration” principles. THE FOREGOING REMEDY SHALL BE EACH PARTY’S SOLE AND EXCLUSIVE REMEDY WITH RESPECT TO ANY SUCH DISPUTE. The expenses of any arbitration, including the reasonable attorney fees of the prevailing party, shall be borne [\*\*\*]. In each case, the parties and arbitrator shall use all diligent efforts to complete such arbitration within [\*\*\*] ([\*\*\*)] days of appointment of the arbitrator.

(f) **Confidentiality of Proceedings.** All arbitration proceedings hereunder shall be confidential and the arbitrator(s) shall issue appropriate protective orders to safeguard each party’s Confidential Information. Except as required by law, no party shall make (or instruct the arbitrator(s) to make) any public announcement with respect to the proceedings or decision of the arbitrator(s) without prior written consent of the other party.

(g) **Interim Equitable Relief.** Each party shall, in addition to all other remedies accorded by law and permitted by this Agreement, be entitled to equitable relief (including but not limited to interim injunctive relief) in any court having jurisdiction to protect its interests. Neither party shall commence any court proceeding or action against the other to resolve any dispute, except (i) to enforce an arbitral award rendered pursuant to this **Section 14.4**, or (ii) for such interim injunctive relief.

(h) **Binding Effect.** The provisions of this **Section 14.4** shall survive any expiration or termination of this Agreement, and shall be severable and binding on the parties hereto, notwithstanding that any other provision of this Agreement may be held or declared to be invalid, illegal or unenforceable.

**14.5 Costs and Expenses.** Except as otherwise expressly provided in this Agreement, each party shall bear all costs and expenses associated with the performance of such party’s obligations under this Agreement.

**14.6 Force Majeure.** Neither party shall be liable for failure to perform, or delay in the performance of, its obligations under this Agreement (other than payment obligations) when such failure or delay is caused by an event of *force majeure*. For purposes of this Agreement, an event of *force majeure* means any event or circumstance beyond the reasonable control of the affected party, including but not limited to, war, insurrection, riot, fire, flood or other unusual weather condition, explosion, act of God, peril of the sea, strike, lockout or other industrial disturbance, sabotage, accident, embargo,

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breakage of machinery or apparatus, injunction, act of governmental authority, compliance with governmental order on national defense requirements, or inability to obtain fuel, power, raw materials, labor or transportation facilities. If, due to any event of *force majeure*, either party shall be unable to fulfill its obligations under this Agreement (other than payment obligations), the affected party shall immediately notify the other party of such inability and of the period during which such inability is expected to continue.

**14.7 Notices.** Any notice, request, or communication under this Agreement shall be effective only if it is in writing and personally delivered; sent by certified mail, postage pre-paid; facsimile with receipt confirmed; or by nationally recognized overnight courier with signature required, addressed to the parties at the addresses stated below or such other persons and/or addresses as shall be furnished in writing by any party in accordance with this **Section 14.7**. Unless otherwise provided, all notices shall be sent:

*If to CyDex, to:* CyDex Pharmaceuticals, Inc.  
11119 North Torrey Pines Road  
Suite 200  
La Jolla, CA 92037  
Attention: Secretary  
Fax: [\*\*\*]

With a copy to: General Counsel  
Ligand Pharmaceuticals Incorporated  
11119 North Torrey Pines Road  
Suite 200  
La Jolla, CA 92037  
Fax: [\*\*\*]

*If to Spectrum, to:* Spectrum Pharmaceuticals, Inc.  
157 Technology Drive  
Irvine, CA 92618  
Attention: Legal Counsel  
Fax: [\*\*\*]

With a copy to: Stradling Yocca Carlson & Rauth  
660 Newport Center Drive, Suite 1600  
Newport Beach, CA 92660  
Attention: Shivbir Grewal  
Facsimile: [\*\*\*]

If sent by facsimile transmission, the date of transmission shall be deemed to be the date on which notice of successful transmission thereof is received by the notifying party. If sent by overnight courier, the next business day after the date of deposit with such courier shall be deemed to be the date on which such notice, request or communication was given. If sent by certified mail, the third business day after the date of mailing shall be deemed the date on which such notice, request or communication was given.

**14.8 Use of Name.** No party shall use the name, trademark, trade name or logo of the other party, its Affiliates or their respective employee(s) in any publicity, promotion, news release or public

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disclosure relating to this Agreement or its subject matter, without the prior express written permission of the other party, except as may be required by law. The parties agree that a party may disclose this Agreement and its terms, and material developments or material information generated under this Agreement, in (i) securities filings with the SEC (or equivalent foreign agency) to the extent required by law after complying with the procedure set forth in this **Section 14.8**, or (ii) under conditions of confidentiality in connection with investment and similar corporate transactions. In the event of a required public announcement, the party making such announcement shall provide the other party with a copy of the proposed text prior to such announcement sufficiently in advance of the scheduled release of such announcement to afford such other party a reasonable opportunity to review and comment upon the proposed text and the timing of such disclosure.

**14.9 Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of California (without giving effect to any conflicts of law principles that require the application of the law of a different state).

**14.10 Entire Agreement; Amendment.** This Agreement and all Exhibits attached hereto or thereto contain the entire agreement of the parties relating to the subject matter hereof and supersede any and all prior agreements, written or oral, between CyDex and Spectrum relating to the subject matter of this Agreement. This Agreement may not be amended unless agreed to in writing by both parties.

**14.11 Binding Effect.** This Agreement shall be binding upon, and the rights and obligations hereof shall apply to the CyDex and Spectrum and any successor(s) and permitted assigns. The name of a party appearing herein shall be deemed to include the names of such party's successors and permitted assigns to the extent necessary to carry out the intent of this Agreement.

**14.12 Waiver.** The rights of either party under this Agreement may be exercised from time to time, singularly or in combination, and the exercise of one or more such rights shall not be deemed to be a waiver of any one or more of the others. No waiver of any breach of a term, provision or condition of this Agreement shall be deemed to have been made by either party unless such waiver is addressed in writing and signed by an authorized representative of that party. The failure of either party to insist upon the strict performance of any of the terms, provisions or conditions of this Agreement, or to exercise any option contained in this Agreement, shall not be construed as a waiver or relinquishment for the future of any such term, provision, condition or option or the waiver or relinquishment of any other term, provision, condition or option.

**14.13 Severability.** If a final judicial determination is made that any provision of this Agreement is unenforceable, this Agreement shall be rendered void only to the extent that such judicial determination finds such provisions unenforceable, and such unenforceable provisions shall be automatically reconstituted and become a part of this Agreement, effective as of the date first written above, to the maximum extent they are lawfully enforceable.

**14.14 Assignment.** Neither party may assign its rights or delegate its obligations under this Agreement, in whole or in part, by operation of law or otherwise, to any Third Party without the prior written consent of the other party, which consent shall not be unreasonably withheld. Notwithstanding the foregoing, either party may assign its rights and delegate its obligations under this Agreement without the other party's prior written consent to an Affiliate or to a Third Party successor pursuant to (a) a sale of all of its assets relating to this Agreement, (b) a sale of substantially all its assets, or (c) a

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merger, consolidation, reorganization or other similar transaction. Any assignment not in accordance with this **Section 14.14** shall be void.

**14.15 Third Party Beneficiaries.** Except for the rights of Indemnitees pursuant to **Section 10** hereof, and subject to **Section 8.5** hereof, the terms and provisions of this Agreement are intended solely for the benefit of each party hereto and their respective successors or permitted assigns and it is not the intention of the parties to confer third-party beneficiary rights upon any other person, including without limitation Sublicensees. The enforcement of any obligation of CyDex under this Agreement shall only be pursued by Spectrum or such Indemnitees, and not Sublicensees.

**14.16 Headings.** The descriptive headings of this Agreement are for convenience only, and shall be of no force or effect in construing or interpreting any of the provisions of this Agreement.

**14.17 Counterparts.** This Agreement may be executed in two counterparts, each of which shall constitute an original document, but both of which shall constitute one and the same instrument.

*[Remainder of this page left blank intentionally]*

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IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

**CYDEX PHARMACEUTICALS, INC.**

By: /s/ John L. Higgins

Name: John L. Higgins

Title: President and Chief Executive Officer

**SPECTRUM PHARMACEUTICALS, INC.**

By: /s/ Rajesh C. Shrotriya, MD

Name: Rajesh C. Shrotriya, MD

Title: Chairman, President and Chief Executive Officer

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**EXHIBIT A: CAPTISOL PATENTS**

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**EXHIBIT A – CONTINUED**

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**EXHIBIT B: LICENSED PRODUCT PATENTS**

Matter	Title	Country	Serial Number	Patent Number	Expiration Date
***	***	***	***		
***	***	***	***		
***	***	***	***		
***	***	***	***		
***	***	***	***		
***	***	***	***		
***	***	***	***		
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**EXHIBIT C: SPECIFICATIONS**

[\*\*\*]

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## EXHIBIT D: SPECIFIED DILIGENCE REQUIREMENTS

Using Commercial Reasonable Efforts, Spectrum will engage in Substantial Development Activities [\*\*\*]. “**Substantial Development Activities**” shall mean [\*\*\*].

In the event that Spectrum fails to achieve the above goal as determined within [\*\*\*] ([\*\*\*)] days following the specified date, the parties shall meet to discuss and agree upon a mutually acceptable remediation plan within [\*\*\*] ([\*\*\*)] days from the specified date. If it is mutually determined that Spectrum failed to either engage in Substantial Development Activities or to use Commercially Reasonable Efforts in developing a Licensed Product, and if the parties are unable to mutually agree upon a remediation plan, then CyDex has the right to terminate the Agreement pursuant to **Section 13.2**. In the event that the parties cannot agree on such determination or plan, then the parties CEO’s or their mutually agreed upon designees shall have a face-to-face meeting to attempt to solve any dispute within the next [\*\*\*] ([\*\*\*)] days. In the event that the dispute is still not resolved, the parties agree to be subject to short-form arbitration pursuant to **Section 14.4(b)**.

On a country-by-country basis, the Commercial Launch Date shall occur no later than [\*\*\*] ([\*\*\*)] months following the date of Regulatory Approval in a Major Market. For at least [\*\*\*] ([\*\*\*)] months following the Commercial Launch Date, Spectrum shall assign the Licensed Product to the primary call position those physicians who treat multiple myeloma or perform transplant for multiple myeloma and allocate greater than [\*\*\*] of sales efforts and sales representative’s time as demonstrated by activity analysis and compensation. For [\*\*\*] ([\*\*\*)] months following the Commercial Launch Date, Spectrum shall provide commercially reasonable medical science liaison support for phase IV and investigator sponsored studies. For [\*\*\*] ([\*\*\*)] years following the Commercial Launch Date, Spectrum shall allocate no less than Commercially Reasonable Efforts to selling the Licensed Product. For avoidance of doubt, the decision whether to seek Regulatory Approval in a particular Major Market other than the United States is at the sole discretion of Spectrum, subject to its obligation to use Commercially Reasonable Efforts as set forth in Section 6.1.

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**EXHIBIT E: MAJOR MARKETS**

[\*\*\*]  
[\*\*\*]  
[\*\*\*]  
[\*\*\*]  
[\*\*\*]  
[\*\*\*]  
[\*\*\*]  
[\*\*\*]  
[\*\*\*]  
[\*\*\*]

### SUPPLY AGREEMENT

**THIS SUPPLY AGREEMENT** (this “**Agreement**”) is made this 8th day of March, 2013 (the “**Effective Date**”) between:

**CYDEX PHARMACEUTICALS, INC.**, a Delaware corporation with offices at 11119 North Torrey Pines Road, Suite 200, La Jolla, CA 92037 (“**CyDex**”); and

**SPECTRUM PHARMACEUTICALS, INC.**, a Delaware corporation with offices at 11500 S. Eastern Ave., Ste. 240, Henderson, NV 89052 (“**Spectrum**”).

### **RECITALS**

**WHEREAS**, CyDex and Spectrum are also parties to that certain License Agreement of even date herewith (the “**License Agreement**”); and

**WHEREAS**, CyDex desires to sell Captisol® to Spectrum or its Contract Manufacturers (defined below), and Spectrum desires to obtain supplies of Captisol® from CyDex, for use in the Licensed Product (defined below), in accordance with the terms and conditions contained herein.

**NOW, THEREFORE**, in consideration of the following mutual promises and other good and valuable consideration, the receipt and sufficiency of which is acknowledged, the parties, intending to be legally bound, agree as follows:

#### **1. DEFINITIONS.**

For the purposes of this Agreement, defined terms shall have the meanings defined in the License Agreement unless defined elsewhere in this Agreement. For reference purposes, “**Affiliate**”, “**Approvals**”, “**Captisol**”, “**Clinical Grade Captisol**”, “**Commercial Grade Captisol**”, “**Commercial Launch Date**”, “**Compound**”, “**Contract Manufacturer**”, “**FDA**”, “**Licensed Product**”, “**Specifications**” and “**Sublicensee**” are defined in the License Agreement.

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## 2. PURCHASE AND SUPPLY OF CAPTISOL.

**2.1 Clinical Quantities.** Spectrum shall have the right to purchase Clinical Grade Captisol from CyDex, at the purchase prices specified in *Exhibit A* hereto; such purchase prices are CPT (destination) (Incoterms 2012). Clinical Grade Captisol may only be used by Spectrum in the conduct of clinical trials; Commercial Grade Captisol may not be used by Spectrum in the conduct of clinical trials.

**2.2 Purchase Commitment.** Subject to the provisions of this Agreement and during the Term of this Agreement, Spectrum agrees that Spectrum and its Affiliates and Sublicensees and their Contract Manufacturers shall purchase [\*\*\*] percent ([\*\*\*%]) of their requirements for Captisol for use in the formulation of Licensed Product exclusively from CyDex. Except as set forth in Section 3.6 of this Agreement, this Agreement and the License Agreement do not grant Spectrum, its Affiliates or Sublicensees or their Contract Manufacturers the right to manufacture (or have manufactured on their behalf) Captisol without CyDex's prior written consent.

**2.3 Supply Commitment.** CyDex agrees that CyDex shall produce (or have produced for it) and sell to Spectrum and its Affiliates and Sublicensees and their Contract Manufacturers [\*\*\*] percent ([\*\*\*%]) of Spectrum's and its Affiliates' and Sublicensees' and their Contract Manufacturers' requirements for Captisol for use in the formulation of Licensed Product, during the Term and subject to the provisions of this Agreement; *provided, however*, that, and notwithstanding anything to the contrary in this Agreement, in no event shall CyDex be obligated to supply to Spectrum or its Affiliates or Sublicensees or their Contract Manufacturers more than an aggregate quantity of [\*\*\*] kilograms of Captisol [\*\*\*] (the "**Volume Threshold**").

**2.4 Third-Party Manufacturers.** Without limiting CyDex's responsibility under this Agreement, [\*\*\*] in connection with the manufacture or testing of Captisol (each, a "**Third-Party Manufacturer**"). CyDex shall give Spectrum prior written notice of any such arrangement [\*\*\*]. The parties hereby agree that [\*\*\*] is a Third-Party Manufacturer as of the Effective Date of this Agreement. CyDex shall include in all such agreements customary terms for the manufacture and supply of pharmaceutical products for use in the US and Europe including, without limitation, the obligation to comply with all the terms and conditions applicable to CyDex under this Agreement. CyDex shall not terminate or amend any such agreement with a Third-Party Manufacturer in a manner detrimental to Spectrum without the prior written consent of Spectrum.

## 3. SUPPLY TERMS.

**3.1 Long-Term Forecasts.** No later than [\*\*\*] ([\*\*\*]) months after the Effective Date, Spectrum shall provide CyDex with a non-binding forecast setting forth Spectrum's estimate of the required quantities of Clinical Grade Captisol for each of the following [\*\*\*] ([\*\*\*]) months. Such long-term forecast of Clinical Grade Captisol requirements shall thereafter be updated by Spectrum at least once every [\*\*\*] ([\*\*\*]) months. In addition, no later than [\*\*\*] ([\*\*\*]) months prior to the anticipated Commercial Launch Date by Spectrum or its Affiliates or Sublicensees of a Licensed Product in any particular country, Spectrum shall provide CyDex with a non-binding forecast setting forth Spectrum's estimate of the required quantities of Commercial Grade Captisol for each of the following [\*\*\*] ([\*\*\*]) months. Such long-term forecast of Commercial Grade Captisol requirements shall thereafter be updated by Spectrum at least once every [\*\*\*] ([\*\*\*]) months.

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**3.2 [\*\*\*] Detailed Forecast.** At least [\*\*\*] ([\*\*\*)] days prior to the date on which Spectrum will issue its first purchase order to CyDex for Clinical Grade Captisol (the “**First Clinical Order Date**”), Spectrum shall provide to CyDex a detailed rolling forecast setting forth Spectrum’s requirements and anticipated delivery schedules for Clinical Grade Captisol for each calendar quarter during a [\*\*\*] ([\*\*\*)] month period (the “**Detailed Clinical Forecast**”) starting from the calendar quarter in which the First Clinical Order Date occurs and the next [\*\*\*] calendar quarters. At least [\*\*\*] ([\*\*\*)] days prior to the date on which Spectrum will issue its first purchase order to CyDex for Commercial Grade Captisol (the “**First Commercial Order Date**”), Spectrum shall provide to CyDex a detailed rolling forecast setting forth Spectrum’s requirements and anticipated delivery schedules for Commercial Grade Captisol for each calendar quarter during a [\*\*\*] ([\*\*\*)] month period (the “**Detailed Commercial Forecast**,” and together with the Detailed Clinical Forecast, a “**Detailed Forecast**”) starting from the calendar quarter in which the First Commercial Order Date occurs and the next [\*\*\*] calendar quarters. For purposes of this Agreement, a calendar quarter means the consecutive [\*\*\*] ([\*\*\*)] month period ending March 31, June 30, September 30, and December 31, respectively. The Detailed Forecast shall thereafter be updated by Spectrum quarterly on a rolling basis, no later than the [\*\*\*] day of each calendar quarter, so that in each calendar quarter CyDex shall have been provided with a rolling Detailed Forecast for each calendar quarter during the [\*\*\*] ([\*\*\*)] month period commencing on the first day of the next calendar quarter following the date on which such Detailed Forecast is submitted. The Detailed Forecast shall be [\*\*\*], with respect to the [\*\*\*] calendar quarters covered by such updated Detailed Forecast (“[\*\*\*]”, “[\*\*\*]”, “[\*\*\*]”, respectively, and where the [\*\*\*] calendar quarter shall be “[\*\*\*]”).

**3.3 Detailed Forecast Variances.** Each updated Detailed Forecast may modify the amount of Commercial Grade Captisol or Clinical Grade Captisol estimated in the previous Detailed Forecast in accordance with the following limitations (the “**Purchase Volume Limitations**”):

(i) for the [\*\*\*] covered by such updated Detailed Forecast, no change in excess of [\*\*\*] ([\*\*\*)] may be made to the forecast provided for the [\*\*\*] in the immediately preceding Detailed Forecast without the prior express written consent of CyDex;

(ii) for the [\*\*\*] covered by such updated Detailed Forecast, no change in excess of a [\*\*\*] ([\*\*\*)] volume increase or decrease in each of Commercial Grade Captisol and Clinical Grade Captisol may be made to the forecast provided for the [\*\*\*] in the immediately preceding Detailed Forecast without the prior express written consent of CyDex; and

(iii) for the [\*\*\*] covered by such updated Detailed Forecast, no change in excess of a [\*\*\*] ([\*\*\*)] volume increase or decrease in each of Commercial Grade Captisol and Clinical Grade Captisol may be made to the forecast provided for the [\*\*\*] in the immediately preceding Detailed Forecast without the prior express written consent of CyDex.

**3.4 Purchase Orders.** Together with each Detailed Forecast provided under **Section 3.2**, Spectrum shall place a firm purchase order with CyDex, for Spectrum’s order of Commercial Grade Captisol or Clinical Grade Captisol, as applicable, for the first calendar quarter of the Detailed Forecast for delivery consistent with the Detailed Forecast subject to the Purchase Volume Limitations. Each purchase order, for all grades of Captisol, shall specify: (i) the grade of Captisol ordered (*i.e.*, Commercial Grade Captisol or Clinical Grade Captisol); (ii) quantities; (iii) delivery dates; and (iv) reasonable shipping instructions. Spectrum’s requested delivery dates shall be at least [\*\*\*] ([\*\*\*)] days after the date of Spectrum’s purchase order. If any purchase order or other document submitted by Spectrum

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hereunder or any other document passing between the parties contains terms or conditions in addition to or inconsistent with the terms of this Agreement, the terms of this Agreement shall control and prevail and the parties hereby agree that such additional or inconsistent terms shall simply be ignored and deemed not to exist, unless they are handwritten and expressly identified as being additional to or inconsistent with this **Section 3.4** and are signed by officers of both parties next to the handwriting.

**3.5 Modified Specifications.** CyDex shall have the right to change the Specifications from time to time during the Term; *provided, however*, that any such change shall not affect commercial viability of the Licensed Product or regulatory status or Approvals of the Licensed Product. In the event that CyDex intends to modify Specifications, CyDex shall give Spectrum at least [\*\*\*] ([\*\*\*)] days' notice of such intended change and seek Spectrum's permission which Spectrum will not withhold unless Spectrum reasonably believes such change(s) will affect commercial viability of the Licensed Product or regulatory status or Approvals of the Licensed Product. Subject to the foregoing, Spectrum shall cooperate with CyDex to have such change approved by all regulatory agencies having jurisdiction at CyDex's own cost, including replacing Captisol already purchased by Spectrum with Captisol under the new modified Specifications and reimbursing Spectrum all costs associated with the finished product if it is no longer suitable for human use. In the event that any regulatory agency having jurisdiction requires CyDex to implement any changes to the Specifications for Captisol generally (and not for the Licensed Product specifically), CyDex shall use all reasonable efforts to make such changes and shall, within [\*\*\*] ([\*\*\*)] days of learning of required changes to the Specifications, advise Spectrum as to any lead-time changes or other terms that may result from a change to the Specifications at CyDex's own costs, including replacing Captisol already purchased by Spectrum with Captisol under the new modified Specifications and reimbursing Spectrum all costs associated with the finished product if it is no longer suitable for human use. In the event that any modification to Specifications for Captisol generally (and not for the Licensed Product specifically) by CyDex leads to delay or withdrawal of Licensed Product or makes Licensed Product no longer commercially viable, **Section 3.5** of this Agreement shall apply.

### **3.6 Inability to Supply.**

(a) **Notice.** CyDex shall notify Spectrum if CyDex is unable to supply the quantity of (i) Commercial Grade Captisol ordered by Spectrum in accordance with the Purchase Volume Limitations set forth in **Section 3.3** or (ii) Clinical Grade Captisol ordered by Spectrum as set forth in **Section 2.1** above in accordance with the Purchase Volume Limitations set forth in **Section 3.3**: (1) within [\*\*\*] ([\*\*\*)] days after CyDex's receipt of a purchase order from Spectrum; or (2) immediately upon becoming aware of an event that would render CyDex unable to supply to Spectrum the quantity of Captisol that CyDex is required to supply hereunder.

(b) **Allocation.** If CyDex is unable to supply to Spectrum the quantity of Captisol that CyDex is required to supply hereunder, CyDex (i) shall allocate its available Captisol among Spectrum and any other purchasers of Captisol with which CyDex then has an on-going contractual relationship, in proportion to the quantity of Captisol for which each of them has orders pending at such time and (ii) shall use Commercially Reasonable Efforts to minimize supply delays. The supply allocation provided in this **Section 3.6(b)**, the alternate suppliers provisions of **Section 3.6(c)** and the safety stock provisions of **Section 3.6(d)** shall be CyDex's sole obligation and Spectrum's sole and exclusive remedy for any supply shortage lasting less than [\*\*\*]. If such supply shortage lasts more than [\*\*\*], Spectrum may also recover any actual damages proven, up to a maximum cap of \$[\*\*\*].

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(c) **Alternate Suppliers.** If CyDex fails to supply to Spectrum, or if CyDex is unable to supply Spectrum with, [\*\*\*] ([\*\*\*)] of the quantity of Commercial Grade Captisol properly forecasted and ordered by Spectrum (and provided such order was within the Purchase Volume Limitations) in accordance with this Agreement, for a period of [\*\*\*] ([\*\*\*)] months or longer (“**Supply Interruption**”) then CyDex shall immediately provide written notice to Spectrum of the Supply Interruption. In the event of a Supply Interruption:

(i) *Additional Site.* CyDex shall negotiate as soon as practicable, but in any event within [\*\*\*] ([\*\*\*)] days from the first day of the Supply Interruption, with its Third-Party Manufacturer for such Third-Party Manufacturer to validate and qualify or re-qualify an additional site for the manufacture of Commercial Grade Captisol.

(ii) *Additional Manufacturer.* If an additional site pursuant to **Section 3.6(c)(i)** does not resolve the Supply Interruption, then CyDex shall use its good faith efforts to qualify or re-qualify one or more alternate suppliers at its own cost for the manufacture of Commercial Grade Captisol as soon as practicable, but in any event within [\*\*\*] ([\*\*\*)] days from the first day of the Supply Interruption.

If CyDex is unable to resolve such Supply Interruption within [\*\*\*] ([\*\*\*)] days after the first day of the Supply Interruption or has not taken steps within such time period likely to resolve such Supply Interruption pursuant to **Sections 3.6(c)(i)** or **(ii)**, then Spectrum shall additionally have the non-exclusive right and license, notwithstanding **Section 2.1(c)** of the License Agreement, to make (by Spectrum or its Affiliates) or have made (by a Contract Manufacturer via sublicense, other than the Third Party Manufacturer) quantities of Captisol, necessary to replace quantities of Commercial Grade Captisol not provided by CyDex due to the Supply Interruption, for use in the Licensed Product. After CyDex resumes manufacture and supply of Captisol, Spectrum shall use its best efforts to resume purchase of up to [\*\*\*] of its requirements of Captisol from CyDex but in no event shall Spectrum have any obligation to terminate the supply arrangement with any such Third Party. Any transfer of CyDex’s Captisol manufacturing technology (which shall not include technology which is proprietary to the Third Party Manufacturer or Pfizer) to Spectrum or its Contract Manufacturer shall be subject to contractual covenants reasonably satisfactory to CyDex regarding confidentiality, limitations on use and non-competition. In the event of a dispute between the parties as to whether or not a Supply Interruption has occurred, such dispute shall be finally resolved by short-form arbitration in accordance with **Section 14.4(b)** of the License Agreement.

(d) **Safety Stock.** CyDex shall at its own cost and expense during the Term, but only following receipt of the first Approval of the Licensed Product, use Commercially Reasonable Efforts to maintain (or cause its Third-Party Manufacturers to maintain) an amount of inventory of [\*\*\*] ([\*\*\*)] [\*\*\*] of Captisol (the “**Safety Stock**”). Spectrum will be given priority access to the Safety Stock to the extent permitted without conflicting with any CyDex arrangements existing as of the Effective Date, none of which involve CyDex providing priority access to the Safety Stock to any other CyDex customer ahead of Spectrum. The Safety Stock shall be stored at a secure facility in compliance with cGMP. In the event that CyDex is not able to supply Captisol to Spectrum pursuant to any purchase order, CyDex shall in each case draw upon the Safety Stock to make up for any shortfall.

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**3.7 Delivery.** Unless otherwise agreed in writing by the parties, Captisol shall be delivered [\*\*\*]. CyDex shall issue its invoice for material and any associated taxes, fees or duties upon shipment of quantities of Captisol to Spectrum. Spectrum acknowledges the inherent risk that a batch of Captisol may be lost in production or shipment, and Spectrum shall use commercially reasonable efforts to maintain a sufficient inventory of Captisol in the event of late delivery by CyDex. Quantities actually delivered to Spectrum pursuant to an accepted purchase order may vary from the quantities reflected in such purchase order by up to [\*\*\*] ([\*\*\*) and still be deemed to be in compliance with such purchase order; *provided, however;* that Spectrum shall only be invoiced and required to pay for the quantities of Captisol that Spectrum actually ordered and CyDex actually delivered to Spectrum. Upon Spectrum's written request, CyDex will use commercially reasonable efforts to include, in the next shipment of Captisol to Spectrum, any quantities ordered pursuant to an accepted purchase order but not delivered.

### **3.8 Acceptance and Rejection.**

**(a) Acceptance Testing.** Spectrum shall have a period of [\*\*\*] ([\*\*\*) days from the date of receipt to test or cause to be tested Captisol supplied under this Agreement. Spectrum or its designee shall have the right to reject by notice to CyDex any shipment of Captisol that does not conform in all material respects with the Specifications at the time of delivery pursuant to **Section 3.7** hereof when tested in accordance with accordance with the Specifications and other CyDex-approved quality control testing procedures. All shipments of Captisol shall be deemed accepted by Spectrum unless CyDex receives written notice of rejection from Spectrum within such [\*\*\*] ([\*\*\*) day period describing the reasons for the rejection in reasonable detail. Acceptance or deemed acceptance of a delivery of Captisol shall not affect the product warranties given by CyDex under this Agreement.

**(b) Latent Defects.** As soon as either party becomes aware of a latent defect in any Captisol lot, it will promptly notify the other party of such event (including reasonable details and the lot involved). If Captisol accepted by Spectrum becomes non-conforming by virtue of the later discovery of a latent defect, Spectrum may place the lot on quality assurance hold pending CyDex's investigation and a final resolution of the claimed latent defect. In the event that such Captisol is found to contain a latent defect, such Captisol will be deemed rejected as of the date of the notice, and the rights and obligations of the parties with respect to the rejected Captisol will thereafter be governed by the provisions set forth in **Section 3.8(e)**.

**(c) Confirmation.** After its receipt of a notice of rejection from Spectrum pursuant to **Section 3.6(b)** or **(c)** above, CyDex shall notify Spectrum as soon as reasonably practical whether it accepts Spectrum's basis for rejection and Spectrum shall cooperate with CyDex in determining whether such rejection was necessary or justified. If the parties are unable to agree as to whether a shipment of Captisol supplied by CyDex or its Third-Party Manufacturer hereunder meets the Specifications, such question shall be submitted to an independent quality control laboratory mutually agreed upon by the parties. The findings of such independent laboratory shall be binding upon the parties. The cost of the independent quality control laboratory shall be borne by the party whose results are shown by such laboratory to have been incorrect.

**(d) Return or Destruction of Rejected Shipments.** Spectrum may not return or destroy any batch of Captisol until it receives written notification from CyDex that CyDex does not dispute that the batch fails to meet the Specifications. CyDex will indicate in its notice either that Spectrum is authorized to destroy the rejected batch of Captisol or that CyDex requires return of the

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rejected Captisol. Upon written authorization from CyDex to do so, Spectrum shall promptly destroy the rejected batch of Captisol and provide CyDex with written certification of such destruction. Upon receipt of CyDex's request for return, Spectrum shall promptly return the rejected batch of Captisol to CyDex. In each case, CyDex will reimburse Spectrum for the documented, reasonable costs associated with the destruction or return of the rejected Captisol.

(e) **Refund or Replacement.** Spectrum shall not be required to pay any invoice with respect to any shipment of Captisol properly rejected pursuant to this **Section 3.8**. Notwithstanding the foregoing, Spectrum shall be obligated to pay in full for any rejected shipment of Captisol that is subsequently determined to meet the Specifications in all material respects, irrespective of whether Spectrum has already paid CyDex for a replacement shipment. If Spectrum pays in full for a shipment of Captisol and subsequently properly rejects such shipment in accordance with this **Section 3.8**, Spectrum shall be entitled, upon confirmation that such shipment failed to meet the Specifications in all material respects, either: (i) to a refund or credit equal to the purchase price paid with respect to such rejected shipment; or (ii) to require CyDex to replace such rejected shipment at no additional cost to Spectrum. Spectrum acknowledges and agrees that, except for the indemnification obligations set forth in **Section 6.1**, Spectrum's rights to a refund or credit for or to receive replacement of properly rejected shipments of Captisol hereunder shall be Spectrum's sole and exclusive remedy, and CyDex's sole obligation, with respect to non-conforming Captisol delivered hereunder.

(f) **Exceptions.** Spectrum's rights of rejection, return, refund and replacement set forth in this **Section 3.8** shall not apply to any Captisol that is non-conforming due to damage (i) caused by Spectrum, its Affiliates, its Sublicensees its Contract Manufacturers, or its or their respective employees or agents (collectively, "**Permitted Purchasers**"), including but not limited to, damaged caused by a Permitted Purchaser's misuse, neglect, improper storage, transportation or use beyond any dating provided or (ii) that occurs subsequent to delivery of such Captisol by the carrier at the point of delivery, including but not limited to any damage caused thereafter by accident, fire or other hazard and CyDex shall have no liability or responsibility to Spectrum with respect thereto.

**3.9 Recalls.** If any Captisol should be alleged or proven not to meet the Specifications, Spectrum shall notify CyDex immediately, and both parties shall cooperate fully regarding the investigation and disposition of any such matter. In the event a dispute arises between the parties as to whether or not Captisol purchased by Spectrum meets the Specifications, such dispute shall be immediately resolved by an independent quality control laboratory in accordance with **Section 3.6(c)** above. If (i) Spectrum and CyDex agree in writing that it is appropriate to recall any Licensed Product, or (ii) the FDA or an equivalent foreign regulatory authority requires the recall of any Licensed Product, and in either case such recall is solely due to issues relating to Captisol, then CyDex agrees, upon substantiation thereof, to reimburse Spectrum all costs incurred in connection with such recalls that are reasonable and customary, including costs incurred for making the finished Licensed Product which is subject to such recalls. For clarity, if such recall is not solely due to issues relating to Captisol, or is due in part to Spectrum's breach of this Agreement, gross negligence or willful misconduct, then Spectrum shall pay for such recalls. Spectrum shall maintain records of all sales of Licensed Product and customers sufficient to adequately administer any such recall, for a period of five (5) years after expiration or termination of this Agreement.

**3.10 Quality Agreement.** Within ninety (90) days of the Effective Date, the parties shall enter into a quality agreement, containing customary provisions for specific procedures needed for batch

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releases, documentation, complaint handling, annual Product reviews, change control and other matters agreed by the parties.

#### 4. COMPENSATION.

##### 4.1 Pricing.

(a) **Captisol Purchase Prices.** The purchase prices for Captisol pursuant to this Agreement are as specified in *Exhibit A* attached hereto. CyDex reserves the right to increase such purchase prices set forth in *Exhibit A* on each [\*\*\*] during the Term, by written notice no less than [\*\*\*] ([\*\*\*)] days to Spectrum, by a percentage equal to the lesser of [\*\*\*]. The minimum order for Commercial Grade Captisol shall be in [\*\*\*] ([\*\*\*)] kilogram increments; the minimum order for Clinical Grade Captisol shall be in [\*\*\*] ([\*\*\*)] kilogram increments.

(b) **Compound Supplies.** For clarity, Spectrum or its Contract Manufacturers shall at their cost arrange for supplies of the Compound.

**4.2 Payments.** All amounts due hereunder are stated in, and shall be paid in, U.S. dollars. Payment of CyDex's invoices shall be made within [\*\*\*] ([\*\*\*)] days of Spectrum's receipt of such invoices. Unpaid balances shall accrue interest, from due date until paid, at a rate equal to the prime rate, as reported in *The Wall Street Journal*, Eastern U.S. Edition, on the date such payment is due, plus an additional [\*\*\*] ([\*\*\*)], unless such unpaid balance is subject to a reasonable, good faith dispute by Spectrum.

#### 5. REPRESENTATIONS AND WARRANTIES.

**5.1 Limited Warranty.** CyDex warrants solely to Spectrum that all Captisol sold to Spectrum pursuant to this Agreement shall (i) conform to the respective Specifications (as applicable for Clinical Grade Captisol or Commercial Grade Captisol) in all material respects at the time of delivery, (ii) be a merchantable quality free from defects in material and workmanship at the time of delivery, and (iii) be manufactured and provided in compliance with the applicable laws including without limitation, cGMPs. CyDex's sole obligation, and Spectrum's sole and exclusive remedies, for any breach of such warranty, shall be (i) for a refund or credit equal to the purchase price paid with respect to such rejected shipment, or for CyDex to replace such rejected shipment at no additional cost to Spectrum; and (ii) indemnification pursuant to **Section 6.1** (Indemnification by CyDex) hereof. The foregoing warranty shall not apply to any Captisol that has (i) been altered, changed or modified other than by CyDex, or (ii) been subjected to misuse, abuse, improper maintenance, negligence, or accident.

**5.2 Mutual Representations and Warranties.** The provisions of **Section 9.1** (Mutual Representations and Warranties) of the License Agreement are incorporated herein by reference as if fully set forth herein.

**5.3 Disclaimer.** THE WARRANTIES SET FORTH IN THIS **SECTION 5** ARE PROVIDED IN LIEU OF, AND EACH PARTY HEREBY DISCLAIMS, ALL OTHER WARRANTIES, EXPRESS AND IMPLIED, RELATING TO THE SUBJECT MATTER OF THIS AGREEMENT OR CAPTISOL, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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## 6. INDEMNIFICATION.

**6.1 By CyDex.** CyDex shall defend, indemnify and hold Spectrum and its Affiliates and Sublicensees, and each of their respective directors, officers and employees, harmless from and against any and all losses, damages, liabilities, costs and expenses (including the reasonable costs and expenses of attorneys and other professionals) (collectively “**Losses**”) incurred by Spectrum as a result of any claim, demand, action or other proceeding (each, a “**Claim**”) by a Third Party, to the extent such Losses arise out of: (a) the manufacture, use, handling, promotion, marketing, distribution, importation, sale or offering for sale of Captisol by CyDex and its Affiliates; or (b) an alleged or actual infringement or misappropriation of an intellectual property right by the use, handling, promotion, marketing, distribution, importation, sale or offering for sale of Captisol by Spectrum in connection with the Licensed Products; or (c) CyDex’s breach of this Agreement, to the extent that such Losses are not due to Spectrum’s gross negligence or willful misconduct.

**6.2 By Spectrum.** Spectrum shall defend, indemnify and hold CyDex and its Affiliates, and each of their respective directors, officers and employees, harmless from and against any and all Losses incurred by CyDex as a result of any Claim by a Third Party, to the extent such Losses arise out of: (a) the manufacture, use, handling, promotion, marketing, distribution, importation, sale or offering for sale of the Licensed Product by Spectrum, its Affiliates and Sublicensees to the extent not covered by Section 6.1; or (b) Spectrum’s breach of this Agreement, to the extent that such Losses are not due to CyDex’s gross negligence or willful misconduct.

**6.3 Expenses.** As the parties intend complete indemnification, all costs and expenses of enforcing any provision of this **Section 6** shall also be reimbursed by the Indemnitor.

**6.4 Procedure.** The party intending to claim indemnification under this **Section 6** (an “**Indemnitee**”) shall promptly notify the other party (the “**Indemnitor**”) of any Claim in respect of which the Indemnitee intends to claim such indemnification, and the Indemnitor shall assume the defense thereof whether or not such Claim is rightfully brought; *provided, however*, that an Indemnitee shall have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnitee, unless Indemnitor does not assume the defense, in which case the reasonable fees and expenses of counsel retained by the Indemnitee shall be paid by the Indemnitor. The Indemnitee, and its employees and agents, shall cooperate fully with the Indemnitor and its legal representatives in the investigations of any Claim. The Indemnitor shall not be liable for the indemnification of any Claim settled or compromised by the Indemnitee without the written consent of the Indemnitor.

## 7. LIMITATION OF LIABILITY.

**7.1 Limitation of Remedies.** NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES OR LOSS OF PROFITS ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS **SECTION 7** IS INTENDED TO OR SHALL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER **SECTION 6**, OR DAMAGES AVAILABLE FOR A PARTY’S BREACH OF CONFIDENTIALITY OBLIGATIONS IN **SECTION 8** OF THE LICENSE AGREEMENT.

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**7.2 Limitation of Damages.** EXCEPT WITH RESPECT TO THE INDEMNIFICATION SPECIFICALLY PROVIDED IN SECTION 6 ABOVE, IN NO EVENT SHALL CYDEX'S TOTAL AGGREGATE LIABILITY FOR ALL CLAIMS ARISING OUT OF OR RELATED TO THIS AGREEMENT AND THE LICENSE AGREEMENT EXCEED [\*\*\*] MILLION DOLLARS (\$ [\*\*\*]).

## **8. TERM AND TERMINATION.**

**8.1 Term.** The term of this Agreement (the “**Term**”) shall commence on the Effective Date and shall continue in effect, on a country-by-country basis, until the expiration or termination of the License Agreement, for any reason, unless terminated earlier as set forth herein. The parties agree that [\*\*\*] ([\*\*\*]) [\*\*\*] prior to expiration of this Agreement, they shall meet and discuss renewal of this Agreement for an additional term, but neither party shall be obligated to renew the Agreement.

### **8.2 Termination for Breach.**

**(a) Notice.** If either party believes that the other is in material breach of this Agreement, then the party holding such belief (the “**Non-breaching Party**”) may deliver notice of such breach to the other party (the “**Notified Party**”). The Notified Party shall have [\*\*\*] ([\*\*\*]) days to cure such breach to the extent involving non-payment of amounts due hereunder, and [\*\*\*] ([\*\*\*]) days to either cure such breach for all other material breaches, or, if cure of such breach other than non-payment cannot reasonably be effected within such [\*\*\*] ([\*\*\*]) day period, to deliver to the Non-breaching Party a plan reasonably calculated to cure such breach within a timeframe that is reasonably prompt in light of the circumstances then prevailing but in no event in excess of an additional [\*\*\*] ([\*\*\*]) day period, unless mutually agreed otherwise. Following delivery of such a plan, the Notified Party shall diligently carry out the plan and cure the breach and the cure period shall be extended by the time period provided in such plan but in no event to exceed [\*\*\*] ([\*\*\*]) days from the date of any initial breach notice delivered under this **Section 8.2**.

**(b) Failure to Cure.** If the Notified Party fails to cure a material breach of this Agreement as provided for in **Section 8.2(a)**, then the Non-Breaching Party may terminate this Agreement upon written notice to the Notified Party.

**(c) Disputes.** If a party gives notice of termination under this **Section 8.2** and the other Party disputes whether such termination is proper under this **Section 8.2**, then the issue of whether this Agreement may properly be terminated upon expiration of the notice period (unless such breach is cured as provided in **Section 8.2(a)**) shall be resolved in accordance with **Section 14.4** of the License Agreement. If as a result of such dispute resolution process it is determined that the notice of termination was proper, then such termination shall be deemed to have been effective [\*\*\*] ([\*\*\*]) days following the date of the notice of termination (or such other time period applicable pursuant to **Section 8.2**). If as a result of such dispute resolution process it is determined that the notice of termination was improper, then no termination shall have occurred and this Agreement shall remain in effect.

**8.3 Termination with License Agreement.** Unless otherwise agreed upon by the parties, this Agreement shall automatically terminate upon the expiration or termination, for whatever reason, of the License Agreement.

**8.4 Survival.** Notwithstanding any other provisions of this Agreement, any liability or obligation of either party to the other for acts or omissions prior to the termination or expiration of this

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Agreement shall survive the termination or expiration of this Agreement. Such termination or expiration shall not relieve either party from obligations that are expressly indicated to survive termination or expiration of this Agreement. **Sections 3.9** (Product Recalls), **4.2** (Payments), **5.3** (Disclaimer), **6** (Indemnification), **7** (Limitation of Liability), **8.4** (Survival), and **9** (General Provisions) shall survive termination or expiration of this Agreement.

**9. GENERAL PROVISIONS.**

The following **Sections** of the License Agreement are incorporated into this Agreement by this reference as if fully set forth herein: **1** (Definitions), **7.2** (Material Safety), **7.3** (Adverse Event Reporting), **8** (Confidentiality) and **14** (General Provisions). In the event that there is any conflict between this Agreement and the License Agreement, the License Agreement shall govern.

*[Remainder of this page left blank intentionally]*

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IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

**CYDEX PHARMACEUTICALS, INC.**

By: /s/ John L. Higgins

Name: John L. Higgins

Title: President and Chief Executive Officer

**SPECTRUM PHARMACEUTICALS, INC.**

By: /s/ Rajesh C. Shrotriya, MD

Name: Rajesh C. Shrotriya, MD

Title: Chairman, President and Chief Executive Officer

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**EXHIBIT A: PURCHASE PRICES FOR CAPTISOL**

[\*\*\*]

**CLINICAL GRADE CAPTISOL**

Individual Order Quantity	Price
Any quantity of Clinical Grade Captisol	US\$[***] per kg

**COMMERCIAL GRADE CAPTISOL**

Annual Order Quantity (Metric tons per calendar year)	Price
Scale-up / Process Validation	US\$[***] per kg
Other Commercial Grade Captisol	US\$[***] per kg

Notwithstanding the foregoing, following receipt of the first Approval, CyDex shall invoice Spectrum for all quantities of Captisol ordered (whether Clinical Grade Captisol or Commercial Grade Captisol) at the [\*\*\*] price. Within [\*\*\*] ([\*\*\*)] days of the last date of each calendar quarter thereafter, Spectrum shall provide to CyDex a report, certified by Spectrum's chief financial officer, setting forth the quantities of Captisol that were for clinical trials for the Licensed Product during such calendar quarter and the quantities of Captisol that were for commercial sale of the Licensed Product during such calendar quarter. CyDex shall then issue a reconciliation invoice for such calendar quarter, showing any additional amounts owed by Spectrum due to the intended use of Captisol in clinical trials for the Licensed Product. Both the original invoice and any reconciliation invoice shall be paid as set forth in Section 4.2.

\* \* \* \* \*

**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: May 8, 2013

/s/ John L. Higgins

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John L. Higgins

President, Chief Executive Officer and Director

(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, John P. Sharp, 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: May 8, 2013

/s/ John P. Sharp

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John P. Sharp

Vice President, Finance and Chief Financial Officer

(Principal Financial Officer)



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

In connection with the accompanying Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated (the "Company") for the quarter ended March 31, 2013, I, John L. Higgins, President, Chief Executive Officer and Director of the Company, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge and belief, that:

- (1) such Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in such Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, fairly presents, in all material respects, the financial condition and results of operations of the Company.

The foregoing certification is being furnished solely to accompany such Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, 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.

Date: May 8, 2013

/s/ John L. Higgins

John L. Higgins  
*President, Chief Executive Officer and Director  
(Principal Executive Officer)*

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

In connection with the accompanying Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated (the "Company") for the quarter ended March 31, 2013, I, John P. Sharp, Vice President, Finance and Chief Financial Officer of the Company, hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge and belief, that:

- (1) such Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in such Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, fairly presents, in all material respects, the financial condition and results of operations of the Company.

The foregoing certification is being furnished solely to accompany such Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, 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.

Date: May 8, 2013

/s/ John P. Sharp

John P. Sharp

*Vice President, Finance and Chief Financial Officer  
(Principal Financial Officer)*