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

FORM 10-Q

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

For the quarterly period ended June 30, 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	**77-0160744**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
11119 North Torrey Pines Road, Suite 200 La Jolla, CA	**92037**
(Address of principal executive offices)	**(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 August 1, 2013, the registrant had 20,440,863 shares of common stock outstanding.

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)

	June 30, 2013	December 31, 2012
ASSETS		
Current assets:		
Cash and cash equivalents	$ 5,923	$ 12,381
Accounts receivable	699	4,589
Inventory	2,265	1,697
Other current assets	1,211	829
Current portion of co-promote termination payments receivable	4,472	4,327
Total current assets	14,570	23,823
Restricted cash and investments	4,162	2,767
Property and equipment, net	804	788
Deferred income taxes	8	8
Intangible assets, net	54,245	55,912
Goodwill	12,238	12,238
Commercial license rights	4,571	—
Long-term portion of co-promote termination payments receivable	8,579	8,207
Other assets	394	517
Total assets	$ 99,571	$ 104,260
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 4,755	$ 5,854
Accrued liabilities	4,021	4,961
Current portion of contingent liabilities	780	356
Current portion of deferred income taxes	1,581	1,581
Current portion of note payable	13,600	14,835
Current portion of co-promote termination liability	4,472	4,327
Current portion of lease exit obligations	2,910	3,039
Current portion of deferred revenue	452	486
Total current liabilities	32,571	35,439
Long-term portion of note payable	1,970	13,443
Long-term portion of co-promote termination liability	8,579	8,207
Long-term portion of deferred revenue, net	2,085	2,369
Long-term portion of lease exit obligations	4,305	5,963
Deferred income taxes	901	725
Long-term portion of contingent liabilities	9,219	10,543
Other long-term liabilities	673	1,086
Total liabilities	60,303	77,775
Commitments and Contingencies		
Stockholders' equity:		
Common stock, $0.001 par value; 33,333,333 shares authorized; 21,435,847 and 21,278,606 shares issued and outstanding at June 30, 2013 and December 31, 2012, respectively	21	21
Additional paid-in capital	755,305	751,503
Accumulated other comprehensive income	1,395	—
Accumulated deficit	(675,173)	(682,759)
Treasury stock, at cost; 1,118,222 shares at June 30, 2013 and December 31, 2012, respectively	(42,280)	(42,280)
Total stockholders' equity	39,268	26,485
Total liabilities and stockholders' equity	$ 99,571	$ 104,260

See accompanying notes.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2013	2012	2013	2012
Revenues:				
Royalties	$ 4,916	$ 2,983	$ 10,742	$ 6,043
Material sales	3,993	1,665	5,532	2,332
Collaborative research and development and other revenues	671	1,094	4,957	3,003
Total revenues	9,580	5,742	21,231	11,378
Operating costs and expenses:				
Cost of sales	1,214	435	1,877	590
Research and development	2,022	2,850	4,487	5,668
General and administrative	4,306	3,858	8,808	7,273
Lease exit and termination costs	44	414	132	501
Write-off of in-process research and development	480	—	480	—
Total operating costs and expenses	8,066	7,557	15,784	14,032
Income (loss) from operations	1,514	(1,815)	5,447	(2,654)
Other income (expense):				
Interest expense, net	(453)	(762)	(1,361)	(1,463)
Decrease (increase) in contingent liabilities	2,741	(1,415)	900	(902)
Other, net	2	2	188	256
Total other income (expense), net	2,290	(2,175)	(273)	(2,109)
Income (loss) before income taxes	3,804	(3,990)	5,174	(4,763)
Income tax expense	(110)	(338)	(176)	(303)
Income (loss) from continuing operations	3,694	(4,328)	4,998	(5,066)
Discontinued operations:				
Gain on sale of Avinza Product Line before income taxes	2,397	1,608	2,588	3,656
Income tax benefit on discontinued operations	—	191	—	14
Income from discontinued operations	2,397	1,799	2,588	3,670
Net income (loss):	$ 6,091	$ (2,529)	$ 7,586	$ (1,396)
Basic per share amounts:				
Income (loss) from continuing operations	$ 0.18	$ (0.22)	$ 0.25	$ (0.26)
Income from discontinued operations	0.12	0.09	0.13	0.19
Net income (loss)	$ 0.30	$ (0.13)	$ 0.38	$ (0.07)
Diluted per share amounts:				
Income (loss) from continuing operations	$ 0.18	$ (0.22)	$ 0.24	$ (0.26)
Income from discontinued operations	0.12	0.09	0.13	0.19
Net income (loss)	$ 0.30	$ (0.13)	$ 0.37	$ (0.07)
Weighted average number of common shares-basic	20,258,618	19,749,266	20,223,634	19,728,852
Weighted average number of common shares-diluted	20,427,360	19,749,266	20,277,763	19,728,852

See accompanying notes.

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

	Three months ended June 30,		Six months ended June 30	
	2013	2012	2013	2012
Net income (loss)	$ 6,091	$ (2,529)	$ 7,586	$ (1,396)
Unrealized net gain on available-for-sale securities	229	—	1,395	—
Comprehensive income (loss)	$ 6,320	$ (2,529)	$ 8,981	$ (1,396)

See accompanying notes.

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

	Six Months Ended June 30,	
	2013	**2012**
Operating activities		
Net income (loss)	$ 7,586	$ (1,396)
Less: gain from discontinued operations	2,588	3,670
Income (loss) from continuing operations	4,998	(5,066)
Adjustments to reconcile net income (loss) to net cash used in operating activities:		
Non-cash change in estimated fair value of contingent liabilities	(900)	902
Write-off of in-process research and development	480	—
Depreciation and amortization	1,339	1,340
Share-based compensation	2,616	2,103
Deferred income taxes	176	303
Accretion of note payable	225	231
Other	(13)	(10)
Changes in operating assets and liabilities,:		
Accounts receivable	3,890	5,293
Inventory	429	(305)
Other current assets	(382)	(683)
Other long-term assets	123	214
Accounts payable and accrued liabilities	(2,593)	(3,651)
Other liabilities	(413)	—
Deferred revenue	(318)	(1,572)
Net cash provided by (used in) operating activities of continuing operations	9,657	(901)
Net cash used in operating activities of discontinued operations	(642)	(200)
Net cash provided by (used in) operating activities	9,015	(1,101)
Investing activities		
Purchase of commercial license rights	(3,571)	—
Payments to CVR holders	—	(4,549)
Purchases of property and equipment	(158)	(261)
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	(3,726)	3,703
Financing activities		
Proceeds from issuance of debt	—	7,500
Repayment of debt	(12,933)	(8,500)
Net proceeds from employee stock purchase plan	85	70
Net proceeds from stock option exercises	1,101	172
Net cash used in financing activities	(11,747)	(758)
Net (decrease) increase in cash and cash equivalents	(6,458)	1,844
Cash and cash equivalents at beginning of period	12,381	7,041
Cash and cash equivalents at end of period	$ 5,923	$ 8,885
Supplemental Disclosure of cash flow information		
Interest paid	$ 1,245	$ 1,302
Taxes paid	—	15
Supplemental schedule of non-cash activity		
Liability for commercial license rights	$ 1,000	$ —
Accrued inventory purchases	997	1,092
Unrealized gain on AFS investments	1,395	—

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. These therapies address the unmet medical needs of patients for a broad spectrum of diseases including hepatitis, multiple myeloma, 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, Lundbeck Inc., and Spectrum Pharmaceuticals, Inc. 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 June 30, 2013, the Company's accumulated deficit was $675.2 million and the Company had negative working capital of $18.0 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 and cash equivalents 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 may acquire in the future. 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"), Pharmacopeia, Inc ("Pharmacopeia"), Neurogen Corporation ("Neurogen"), Metabasis Therapeutics, Inc. ("Metabasis"), CyDex Pharmaceuticals, Inc. ("CyDex") and Nexus VI LLC ("Nexus"). All significant intercompany accounts and transactions have been eliminated in consolidation.

Basis of Presentation

The Company's accompanying unaudited condensed consolidated financial statements as of June 30, 2013 and for the three and six months ended June 30, 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 condensed consolidated 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 and six months ended June 30, 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.

Use of Estimates

The preparation of condensed 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 condensed 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 and six months ended June 30, 2012 for comparability purposes. These reclassifications 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 1.1 million and 1.3 million, at June 30, 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 June 30,		Six months ended June 30,	
	2013	2012	2013	2012
Net income (loss) from continuing operations	$ 3,694	$ (4,328)	$ 4,998	$ (5,066)
Net income from discontinued operations	2,397	1,799	2,588	3,670
Net income (loss)	$ 6,091	$ (2,529)	$ 7,586	$ (1,396)
Shares used to compute basic income (loss) per share	20,258,618	19,749,266	20,223,634	19,728,852
Dilutive potential common shares:				
Restricted stock	46,391	—	35,864	—
Stock options	122,351	—	18,265	—
Shares used to compute diluted income (loss) per share	20,427,360	19,749,266	20,277,763	19,728,852
Basic per share amounts:				
Income (loss) from continuing operations	$ 0.18	$ (0.22)	$ 0.25	$ (0.26)
Income from discontinued operations	0.12	0.09	0.13	0.19
Net income (loss)	$ 0.30	$ (0.13)	$ 0.38	$ (0.07)
Diluted per share amounts:				
Income (loss) from continuing operations	$ 0.18	$ (0.22)	$ 0.24	$ (0.26)
Income from discontinued operations	0.12	0.09	0.13	0.19
Net income (loss)	$ 0.30	$ (0.13)	$ 0.37	$ (0.07)

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

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 June 30, 2013 and December 31, 2012 (in thousands):

	Cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value
June 30, 2013				
Available-for-sale securities	$ 1,426	$ 1,395	$ —	$ 2,821
Certificates of deposit - restricted	1,341	—	—	1,341
	$ 2,767	$ 1,395	$ —	$ 4,162
December 31, 2012				
Available-for-sale securities	$ 1,426	$ —	$ —	$ 1,426
Certificates of deposit-restricted	1,341	—	—	1,341
	$ 2,767	$ —	$ —	$ 2,767

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash equivalents, 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 June 30, 2013 and December 31, 2012.

As of June 30, 2013 and December 31, 2012, cash deposits held at financial institutions in excess of FDIC insured amounts of $250,000 were approximately $5.4 million and $11.9 million, respectively.

Accounts receivable from two customers was 44% and 20% of total accounts receivable at June 30, 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.

Property and Equipment

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

	June 30, 2013	December 31, 2012
Lab and office equipment	$ 4,483	$ 4,374
Leasehold improvements	177	145
Computer equipment and software	1,168	1,150
	5,828	5,669
Less accumulated depreciation and amortization	(5,024)	(4,881)
	$ 804	$ 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 and $0.2 million was recognized for the three and six months ended June 30, 2013 and 2012, respectively.

Other Current Assets

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

	June 30, 2013	December 31, 2012
Prepaid expenses	$ 848	$ 801
Other receivables	363	28
	$ 1,211	$ 829

Goodwill and Other Identifiable Intangible Assets

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

	June 30, 2013	December 31, 2012
Indefinite lived intangible assets		
Acquired in-process research and development	$ 12,556	$ 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	(5,780)	(4,593)
Total goodwill and other identifiable intangible assets, net	$ 66,483	$ 68,150

The Company accounts for goodwill and other intangible assets 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 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 and other intangibles 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.

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 and $1.2 million was recognized for the three and six months ended June 30, 2013 and 2012, respectively. Estimated amortization expense for the year 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. For the three and six months ended June 30, 2013, the Company recorded a non-cash impairment charge of $0.5 million for the write-off of in-process research and development for Captisol-enabled Clopidogrel or MDCO-157. The asset was impaired upon notification from the Medicines Company that they intended to terminate the license agreement and return the rights of the compound to the Company. MDCO-157 is an intravenous option of the anti-platelet medication designed for situations where the administration of oral platelet inhibitors is not feasible or desirable. For the three and six months ended June 30, 2012, there was no impairment of in-process research and development.

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 June 30, 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.

Commercial license rights

Commercial license rights represent a portfolio of future milestone and royalty payment rights acquired in accordance with the Royalty Stream and Milestone Payments Purchase Agreement entered into with Selexis SA ("Selexis") in April 2013. The portfolio consists of over 15 Selexis commercial license agreement programs with various pharmaceutical-company counterparties. The purchase price was $4.6 million, inclusive of acquisition costs. The Company paid $3.6 million upon closing and will pay $1 million in April 2014. Individual commercial license rights acquired under the agreement are carried at allocated cost and approximate fair value. The carrying value of the license rights will be reduced on a pro-rata basis as revenue is realized over the term of the agreement. Declines in the fair value of individual license rights below their carrying value that are deemed to be other than temporary are reflected in earnings in the period such determination is made.

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	June 30, 2013	December 31, 2012
Compensation	$ 1,132	$ 1,807
Professional fees	438	199
Other	2,451	2,955
	$ 4,021	$ 4,961

Other Long-Term Liabilities

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

	June 30, 2013	December 31, 2012
Deposits	$ 315	$ 538
Deferred rent	358	334
Other	—	214
	$ 673	$ 1,086

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 June 30, 2013 and December 31, 2012 was $7.6 million and $10.9 million, respectively. The Company recorded a fair value adjustment to decrease the liability for CyDex related contingent liabilities of $5.2 million and $3.3 million for the three and six months ended June 30, 2013, respectively. The Company recorded fair value adjustments to increase the liability for CyDex related contingent liabilities of $1.6 million and $2.2 million for the three and six months ended June 30, 2012, respectively. 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 and six months ended June 30, 2012. There was no revenue sharing payment for the three and six months ended June 30, 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 $2.4 million and $0 as of June 30, 2013 and December 31, 2012, respectively. The Company recorded an increase in the liability for CVRs of $2.4 million for the three and six months ended June 30, 2013. The Company recorded no change in the liability for CVRs during the three months ended June 30, 2012 and a decrease in the liability for CVRs of $1.1 million during the six months ended June 30, 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

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

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 the customer is 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 June 30, 2013 and December 31, 2012.

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 June 30,		Six months ended June 30,	
	2013	2012	2013	2012
Share-based compensation expense as a component of:				
Research and development expenses	$ 448	$ 523	$ 834	$ 948
General and administrative expenses	1,044	871	1,782	1,155
	$ 1,492	$ 1,394	$ 2,616	$ 2,103

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 June 30,		Six months ended June 30,	
	2013	2012	2013	2012
Risk-free interest rate	1.4%	0.9%	1.3%	1.0%
Dividend yield	—	—	—	—
Expected volatility	69%	69%	69%	69%
Expected term	6.3	6.3	6.3	6.3
Forfeiture rate	8.4%	8.0%	8.4%-9.8%	8.0%-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 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 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 June 30, 2013 and December 31, 2012, the Company had deferred $0.5 million and $0.8 million, respectively, of revenue related to the sale of royalty rights. As of June 30, 2013, $0.5 million is included in current portion of deferred revenue and there is no long-term portion of deferred revenue related to the sale of royalty rights. As of December 31, 2012, $0.5 million is included in current portion of deferred revenue and $0.3 million is included in long-term portion of deferred revenue related to the sale of royalty rights.

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.

Income Taxes

Income taxes are accounted for under the liability method. This approach requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of differences between the tax basis of assets or liabilities and their carrying amounts in the consolidated financial statements. A valuation allowance is provided for deferred tax assets if it is more likely than not that these items will either expire before we are able to realize their benefit or if future deductibility is uncertain. As of June 30, 2013, we have provided a full valuation allowance against our deferred tax assets as recoverability was uncertain. Developing the provision for income taxes requires significant judgment and expertise in federal and state income tax laws, regulations and strategies, including the determination of deferred tax assets and liabilities and, if necessary, any valuation allowances that may be required for deferred tax assets. Our judgments and tax strategies are subject to audit by various taxing authorities. While we believe we have provided adequately for our income tax liabilities in our consolidated

financial statements, adverse determinations by these taxing authorities could have a material adverse effect on our consolidated financial condition and results of operations.

Our ending deferred tax liability represents a future tax obligation for current tax amortization claimed on acquired In Process R&D. As we cannot estimate when the In Process R&D assets will be amortizable for financial reporting purposes, the deferred tax liability associated with the In Process R&D assets cannot be used to support the realization of our deferred tax assets. As a result, we are required to increase our valuation allowance and record a charge to deferred taxes.

Discontinued Operations-Oncology Product Line

On September 7, 2006, the Company 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 its 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.

Discontinued Operations-Avinza Product Line

On September 6, 2006, the Company and King entered into a purchase agreement, or the Avinza Purchase Agreement, pursuant to which King agreed to acquire all of the 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.

Pursuant to the terms of the Avinza Purchase Agreement, the Company 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, the Company recorded a reserve for Avinza product returns.

During the three and six months ended June 30, 2013 the Company recognized a pre-tax gain of $2.4 million and $2.6 million, respectively, as a result of subsequent changes in certain estimates and liabilities recorded as of the sale date. The Company recognized a pre-tax gain of $1.6 million and $3.7 million for the three and six months ended June 30, 2012, respectively, due to subsequent changes in certain estimates and liabilities recorded as of the sale date.

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, 2014.

In July, 2013, the FASB issued Accounting Standards Update No. 2013-11, *Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists*. ASU 2013-11 requires the netting of unrecognized tax benefits (UTBs) against a deferred tax asset for a loss or other carryforward that would apply in settlement of the uncertain tax positions. UTBs are required to be netted against all available same-jurisdiction loss or other tax carryforwards that would be utilized, rather than only against carryforwards that are created by the UTBs. ASU 2013-11 is effective for us for interim and annual periods beginning after December 15, 2013. We are currently evaluating the effect, if any, the adoption of this standard will have on our financial statements.

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 June 30, 2013 and December 31, 2012 was 18% 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 June 30, 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.

The following table provides a summary of the assets and liabilities that are measured at fair value on a recurring basis as of June 30, 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)
Assets:				
Current portion of co-promote termination payments receivable	$ 4,472	$ —	$ —	$ 4,472
Available-for-sale securities	2,821	—	—	2,821
Long-term portion of co-promote termination payments receivable	8,579	—	—	8,579
Total assets	$ 15,872	$ —	$ —	$ 15,872
Liabilities:				
Current portion of contingent liabilities - CyDex	$ 780	$ —	$ —	$ 780
Current portion of co-promote termination liability	4,472	—	—	4,472
Long-term portion of contingent liabilities-Metabasis	2,439	2,439	—	—
Long-term portion of contingent liabilities - CyDex	6,780	—	—	6,780
Liability for restricted investments owed to former licensees	423	—	—	423
Long-term portion of co-promote termination liability	8,579	—	—	8,579
Total liabilities	$ 23,473	$ 2,439	$ —	$ 21,034

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)
Assets:				
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
Total assets	$ 13,960	$ —	$ —	$ 13,960
Liabilities:				
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
Total liabilities	$ 23,647	$ —	$ —	$ 23,647

A reconciliation of the level 3 financial instruments as of June 30, 2013 is as follows (in thousands):

Assets:	
Fair value of level 3 financial instrument assets as of December 31, 2012	$ 13,960
Assumed payments made by Pfizer or assignee	(1,689)
Fair value adjustments recorded as unrealized gain on available-for-sale securities	1,395
Fair value adjustments to Co-promote termination liability	2,206
Fair value of level 3 financial instrument assets as of June 30, 2013	$ 15,872

Liabilities	
Fair value of level 3 financial instrument liabilities as of December 31, 2012	$ 23,647
Assumed payments made by Pfizer or assignee	(1,689)
Fair value adjustments for amounts owed related to restricted investments and recorded as other expense	209
Fair value adjustments-(Decrease) increase in contingent liabilities	(3,339)
Fair value adjustments to Co-promote termination liability	2,206
Fair value of level 3 financial instrument liabilities as of June 30, 2013	$ 21,034

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"), now a subsidiary of Pfizer, executed an agreement pursuant to which Pfizer acquired all of the Company's rights in and to Avinza. Pfizer also assumed the Company's co-promote termination obligation to make royalty payments to Organon based on net sales of Avinza. In connection with Pfizer's assumption of this obligation, Organon did not consent to the legal assignment of the co-promote termination obligation to Pfizer. Accordingly, Ligand remains liable to Organon in the event of Pfizer's default of the obligation. Therefore, Ligand recorded an asset as of February 26, 2007 to recognize Pfizer'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 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 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 Pfizer 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 June 30, 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		(1,689)
Fair value adjustments		2,206
Total co-promote termination liability as of June 30, 2013		13,051
Less: current portion of co-promote termination liability as of June 30, 2013		4,472
Long-term portion of co-promote termination liability as of June 30, 2013	$	8,579

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 June 30, 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	$ 656	$ 1,363	$ 1,436	$ 747	$ 4,202
Bioscience and Technology Business Center-Lawrence, KS	December 2014	57	28	—	—	85
Vacated office and research facility-San Diego, CA	July 2015	2,207	2,464	—	—	4,671
Vacated office and research facility-Cranbury, NJ	August 2016	2,563	5,177	436	—	8,176
Total operating lease obligations		$ 5,483	$ 9,032	$ 1,872	$ 747	$ 17,134

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	$ 896	$ 1,000	$ —	$ —	$ 1,896
Office and research facility-Cranbury, NJ	August 2014 and 2016	291	704	58	—	1,053
Net operating lease obligations		$ 4,296	$ 7,328	$ 1,814	$ 747	$ 14,185

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 June 30, 2013 and December 31, 2012, the Company had lease exit obligations of $7.2 million and $9.0 million, respectively. For the three and six months ended June 30, 2013, the Company made cash payments, net of sublease payments received of $0.9 million and $1.9 million, respectively. The Company recognized adjustments for accretion and changes in leasing assumptions of $44,000 and $0.1 million for the three and six months ended June 30, 2013, respectively.

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 and six months ended June 30, 2013 was $0.2 million and $0.4 million, respectively. Rent expense for the three and six months ended June 30, 2012 was $0.1 million and $0.2 million, respectively. The Company recognizes rent expense on a straight-line basis. Deferred rent at June 30, 2013 and December 31, 2012 was $0.4 million and $0.3 million, respectively, and is included in other long-term liabilities.

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 June 30, 2013		
	Ligand	CyDex	Total
Total assets	$ 36,667	$ 62,904	$ 99,571

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

Operating Data:	For the three months ended June 30, 2013		
	Ligand	CyDex	Total
Net revenues from external customers	$ 3,820	$ 5,760	$ 9,580
Depreciation and amortization expense	59	610	669
Write-off of in-process research and development	—	480	480
Operating (loss) income	(1,200)	2,714	1,514
Interest expense, net	453	—	453
Income tax (expense) benefit from continuing operations	(145)	35	(110)
Gain on sale of Avinza Product Line before income taxes	2,397	—	2,397

	For the six months ended June 30, 2013		
	Ligand	CyDex	Total
Net revenues from external customers	$ 10,057	$ 11,174	$ 21,231
Depreciation and amortization expense	117	1,222	1,339
Write-off of in-process research and development	—	480	480
Operating income	198	5,249	5,447
Interest expense, net	1,361	—	1,361
Income tax (expense) benefit	(205)	29	(176)
Gain on sale of Avinza Product Line before income taxes	2,588	—	2,588

	For the three months ended June 30, 2012		
	Ligand	CyDex	Total
Net revenues from external customers	$ 3,929	$ 1,813	$ 5,742
Depreciation and amortization expense	73	605	678
Operating loss	(1,570)	(245)	(1,815)
Interest expense, net	762	—	762
Income tax expense from continuing operations	338	—	338
Gain on sale of Avinza Product Line before income taxes	1,608	—	1,608
Income tax benefit from discontinued operations	191	—	191

	For the six months ended June 30, 2012		
	Ligand	CyDex	Total
Net revenues from external customers	$ 8,030	$ 3,348	$ 11,378
Depreciation and amortization expense	128	1,212	1,340
Operating loss	(1,958)	(696)	(2,654)
Interest expense, net	1,463	—	1,463
Income tax expense from continuing operations	303	—	303
Gain on sale of Avinza Product Line before income taxes	2,588	—	2,588
Income tax benefit from discontinued operations	14	—	14

6. Financing Arrangements

The Company has a secured term loan credit facility ("secured debt"). Under the terms of the secured debt, the Company made 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):

	June 30, 2013	December 31, 2012
Current portion notes payable, 8.64%, due August 1, 2014	$ 9,890	$ 10,792
Current portion notes payable, 8.9012%, due August 1, 2014	3,710	4,043
Total current portion of notes payable	$ 13,600	$ 14,835
Long-term portion notes payable, 8.64%, due August 1, 2014	$ 1,466	$ 9,837
Long-term portion notes payable, 8.9012%, due August 1, 2014	504	3,606
Total long-term portion of notes payable	$ 1,970	$ 13,443

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	$ 14.90	7.8	$ 11,358
Granted	437,429	23.47		
Exercised	(71,885)	15.31		
Forfeited	(50,125)	17.71		
Cancelled	(27,780)	28.32		
Balance as of June 30, 2013	1,914,245	16.56	7.98	40,557
Exercisable as of June 30, 2013	918,623	15.43	6.99	20,847
Options vested and expected to vest as of June 30, 2013	1,914,245	16.56	7.98	40,557

The weighted-average grant date fair value of all stock options granted during the six months ended June 30, 2013 was $14.18 per share. The total intrinsic value of all options exercised during the six months ended June 30, 2013 and 2012 was approximately $0.8 million and $0.3 million, respectively. As of June 30, 2013, there was $9.2 million of total unrecognized compensation cost related to nonvested stock options. That cost is expected to be recognized over a weighted-average period of 2.7 years.

Cash received from options exercised during the six months ended June 30, 2013 and 2012 was approximately $1.1 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.

As of June 30, 2013, 1.4 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 six months ended June 30, 2013 is as follows:

	Shares	Weighted-Average Grant Date Fair Value
Nonvested at December 31, 2012	141,561	$ 12.52
Granted	84,547	27.71
Vested	(76,653)	15.04
Cancelled	(28,667)	11.85
Nonvested at June 30, 2013	120,788	$ 21.71

As of June 30, 2013, there was $2.1 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 5,016 and 7,374 shares of common stock issued under the amended ESPP during the six months ended June 30, 2013 and 2012, respectively. The Company recorded compensation expense related to the ESPP of $26,284 and $22,000 for the six months ended June 30, 2013 and 2012, respectively. As of June 30, 2013, 81,512 shares were available for future purchases under the Amended ESPP.

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 June 30, 2013, 302,750 common shares have been issued under this registration statement for total net proceeds of approximately $5.5 million.

During the three and six months ended June 30, 2013 and 2012, the Company did not issue any common shares pursuant to its at-the-market equity issuance plan.

Corporate Share Repurchase

The Company may repurchase up to $5.0 million of stock in privately negotiated and open market transactions for a period of up to one year, subject to the Company's evaluation of market conditions, applicable legal requirements and other factors. The Company is not obligated to acquire common stock under this program and the program may be suspended at any time. Through June 30, 2013, the Company did not repurchase any common shares pursuant to the repurchase plan.

8. Litigation

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

On July 31, 2013, the Company and The Medicines Company (MedCo) mutually terminated the License Agreement dated June 1, 2011 and the related Supply Agreement dated June 1, 2011. These agreements were with the Company's subsidiary CyDex and related to the development of Captisol-enabled IV clopidogrel. Upon termination, the licensed rights relating to the compound are returned to the Company. MedCo recently conducted a pharmacokinetic and pharmacodynamic study of oral clopidogrel and Captisol-enabled IV clopidogrel in healthy volunteers. The study indicated a potential difference in metabolism between the oral and IV routes of administration for clopidogrel, and MedCo elected not to proceed with further development.

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.

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., and Spectrum Pharmaceuticals, Inc.

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.

In April 2012, we entered into a Research License and Option Agreement with ARES Trading SA (a unit of Merck KGaA), under which we licensed certain rights to an undisclosed anti-inflammatory discovery research program to ARES Trading SA. In May 2013, by virtue of ARES Trading SA not having exercised by that date its option to obtain a further related license from us, the Research License and Option Agreement terminated in the ordinary course in accordance with its terms, and the rights to the program reverted to us.

In May 2013, our partner Rib-X announced the initiation of a Phase 3 clinical trial of Captisol-enabled intravenous (IV) formulation of delafloxacin for the first-line treatment of acute bacterial skin and skin structure infections (ABSSSI), including infections caused by MRSA. Under the terms of a license and supply agreement, we earned a $0.5 million milestone payment.

In June 2013, we announced positive data from preclinical studies of Ligand's novel compound, LGD-6972, demonstrating significant glucose lowering activity in an animal model of type 1 diabetes. We plan to submit an IND for LGD-6972 in the second half of 2013. LGD-6972 was acquired in connection with our acquisition of Metabasis and we may be required to remit payment to the CVR holders upon the sale or partnering of the asset.

In July 2013, we entered into a global license agreement with Azure Biotech for the development of a novel formulation of lasofoxifene. Under the terms of the agreement, we are entitled to receive $2.7 million in potential development and regulatory milestones and a 5% royalty on future net sales. Also under this agreement, we retain the rights to the oral formulation originally developed by Pfizer. Additionally, in July 2013, we entered into a license agreement with Ethicor Pharma Ltd. for the manufacture and distribution of the oral formulation of lasofoxifene in the European Economic Area, Switzerland and the Indian Subcontinent. Under the terms of the agreement, we are entitled to receive potential sales milestones and a double digit royalty on future net sales.

In July 2013, the FDA granted orphan-drug designation for our proprietary Captisol-enabled Topiramate Injection for the treatment of partial onset or primary generalized tonic-clonic seizures in hospitalized epilepsy patients who are unable to take oral topiramate.

In July 2013, we and The Medicines Company (MedCo) mutually terminated the License Agreement dated June 1, 2011 and the related Supply Agreement dated June 1, 2011. These agreements were with our subsidiary CyDex and related to the development of Captisol-enabled IV clopidogrel. Upon termination, the licensed rights relating to the compound are returned to us. MedCo recently conducted a pharmacokinetic and pharmacodynamic study of oral clopidogrel and Captisol-enabled IV clopidogrel in healthy volunteers. The study indicated a potential difference in metabolism between the oral and IV routes of administration for clopidogrel, and MedCo elected not to proceed with further development.

In July 2013, Merck notified us that it has discontinued clinical development of dinaciclib for Chronic Lymphocytic Leukemia.

Results of Operations

Three and six months ended June 30, 2013 and 2012

Total revenues for the three and six months ended June 30, 2013 were $9.6 million and $21.2 million, respectively compared to $5.7 million and $11.4 million, respectively, for the same periods in 2012. We reported income from continuing operations of $3.7 million and $5.0 million, respectively, for the three and six months ended June 30, 2013. We reported a loss from continuing operations of $4.3 million and $5.1 million, respectively, for the three and six months ended June 30, 2012.

Royalty Revenue

Royalty revenues were $4.9 million and $10.7 million, respectively, for the three and six months ended June 30, 2013, compared to $3.0 million and $6.0 million, respectively, for the same periods in 2012. The increase in royalty revenue is primarily due to an increase in Promacta and Kyprolis royalties.

Material Sales

We recorded material sales of $4.0 million and $5.5 million, respectively, for the three and six months ended June 30, 2013, compared to $1.7 million and $2.3 million, respectively, for the same periods in 2012. The increase in material sales for the three and six months ended June 30, 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 $0.7 million and $5.0 million, respectively, for the three and six months ended June 30, 2013, compared to $1.1 million and $3.0 million, respectively, for the same periods in 2012. The decrease of $0.4 million is due to a $0.5 million milestone earned for the three months ended June 30, 2013 compared to a license fee of $1.0 million earned for the three months ended June 30, 2013. The increase of $2.0 million for the six months ended June 30, 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 $1.2 million and $1.9 million, respectively, for the three and six months ended June 30, 2013, compared to $0.4 million and $0.6 million, respectively, for the same periods in 2012. The increase of $0.8 million and $1.3 million, respectively, for the three and six months ended June 30, 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 $2.0 million and $4.5 million, respectively, for the three and six months ended June 30, 2013, compared to $2.9 million and $5.7 million, respectively, for the same periods in 2012. The decrease of $0.9 million and $1.2 million, respectively, for the three and six months ended June 30, 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.

Program	Disease/Indication	Development Phase
Selective Androgen Receptor Modulator	Various	Phase II-ready
Captisol-enabled Topiramate	Epilepsy	PhaseI/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 $4.3 million and $8.8 million, respectively, for the three and six months ended June 30, 2013, compared to $3.9 million and $7.3 million, respectively, for the same periods in 2012. The increase of $0.4 million and $1.5 million, respectively, for the three and six months ended June 30, 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 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. Lease exit and termination costs were $44,000 and $0.1 million, respectively, for the three and six months ended June 30, 2013, compared to $0.4 million and $0.5 million, respectively, for the same periods in 2012. The decrease for the three and six months ended June 30, 2013, compared to the same period in 2012, is primarily due to changes in subleasing assumptions.

Write-off of In-process research and development

For the three and six months ended June 30, 2013, we recorded a non-cash impairment charge of $0.5 million for the write-off of in-process research and development for Captisol-enabled Clopidogrel or MDCO-157. MDCO-157 is an intravenous option of the anti-platelet medication designed for situations where the administration of oral platelet inhibitors is not feasible or desirable. For the three and six months ended June 30, 2012, there was no impairment of in-process research and development.

Interest Expense, net

Interest expense was $0.5 million and $1.4 million, respectively, for the three and six months ended June 30, 2013, compared to $0.8 million and $1.5 million, respectively, for the same periods in 2012. The decrease in interest expense of $0.3 million and $0.1 million, respectively, for the three and six months ended June 30, 2013 is due to a lower principal balance due to the $7 million payoff in March 2013 as well as principal amortization from March through June 2013.

Change in Contingent Liabilities

We recorded a decrease in contingent liabilities of $2.7 million and $0.9 million, respectively, for the three and six months ended June 30, 2013, compared to an increase of $1.4 million and $0.9 million, respectively, for the same periods in 2012. The decrease for the three months ended June 30, 2013 relates to a decrease in the liability for amounts potentially due to holders of CVRs and former license holders associated with our CyDex acquisition of $5.2 million is primarily due to a decrease in amounts potentially due to CyDex CVR holders and former license holders related to Captisol-enabled Clopidogrel. The Medicines Company notified us of of the termination of development of Captisol-enabled IV clopidogrel and the return of the rights to the compound to us. The decrease was partially offset by an increase in amounts potentially due to holders of CVRs associated with our Metabasis acquisition of $2.4 million. The decrease for the six months ended June 30, 2013 is primarily due to a decrease in amounts potentially due to CyDex CVR holders and former license holders of $3.3 million related to Captisol-enabled Clopidogrel, and is partially offset by an increase in Metabasis CVRs of $2.4 million.

The increase for the three months ended June 30, 2012 relates to an increase in the liability for amounts potentially due to holders of CVRs and other license holders associated with our CyDex acquisition, primarily due to the increased likelihood of approval of Kyprolis following an FDA advisory meeting, for which we owed CyDex CVR holders $3.5 million upon approval. Partially offsetting this increase, we recorded a decrease in our liability for amounts potentially due to shareholders associated with our Neurogen acquisition of $0.2 million. The increase of $0.9 million in our contingent liabilities for the six months ended June 30, 2012 is due to an increase in the liability for amounts potentially due to CyDex CVR holders and other license holders associated with our CyDex acquisition of $2.2 million, primarily due to the increased likelihood of approval of Kyprolis. Partially offsetting this increase, for the six months ended June 30, 2012, our liability for CVRs associated with our Metabasis acquisition decreased $1.1 million and our liability for CVRs associated with our Neurogen acquisition decreased $0.2 million.

Income Taxes

We recorded income tax expense from continuing operations of $0.1 million and $0.2 million, respectively, for the three and six months ended June 30, 2013. We recorded income tax expense from continuing operations of $0.3 million for the three and six months ended June 30, 2012. Our estimated annual effective rate of 4.1% is primarily attributable to deferred taxes associated with the amortization of acquired In Process R&D assets for tax purposes. In 2012, our estimated annual effective rate was negative 6.4%. The negative effective rate in 2012 was also due to deferred taxes associated with the amortization of our acquired in-process research and development for tax purposes.

Discontinued Operations

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 and six months ended June 30, 2013 we recognized a pre-tax gain of $2.4 million and $2.6 million, respectively, as a result of subsequent changes in certain estimates and liabilities recorded as of the sale date. We recognized a pre-tax gain of $1.6 million and $3.7 million, respectively, for the three and six months ended June 30, 2012, due to subsequent changes in certain estimates and liabilities recorded as of the sale date.

Income Taxes

We did not record any provision for income taxes related to discontinued operations for the three and six months ended June 30, 2013. We recorded an income tax benefit related to discontinued operations of $0.2 million and $14,000, respectively, for the three and six months ended June 30, 2012.

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 June 30, 2013, our accumulated deficit was $675.2 million and we had negative working capital of $18.0 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 June 30, 2013, 302,750 common shares have been issued under this registration statement for total net proceeds of approximately $5.5 million. During the three and six months ended June 30, 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 for a guaranteed payment. 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 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 June 30, 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. 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 $9.0 million for the six months ended June 30, 2013, compared to $1.1 million of cash used in operating activities for the same period in 2012.

The cash generated for the six months ended June 30, 2013 reflects net income of $7.6 million, adjusted by $2.6 million of gain from discontinued operations and $3.9 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 $1.3 million, share-based compensation of $2.6 million, the non-cash change in the estimated fair value of contingent liabilities of $0.9 million, the change in deferred income taxes of $0.2 million and accretion of note payable of $0.2 million. The cash generated during the six months ended June 30, 2013 is further impacted by changes in operating assets and liabilities due primarily to a decrease in accounts receivable of $3.9 million, a decrease in inventory of $0.4 million, and a decrease in other long term assets of $0.1 million. Partially offset by increases in other current assets of $0.4 million and decreases in accounts payable and accrued liabilities of $2.6 million, other liabilities of $0.4 million, and a decrease in deferred revenue of $0.3 million. Cash used in operating activities of discontinued operations was $0.6 million for the six months ended June 30, 2013.

The cash used for the six months ended June 30, 2012 reflects a net loss of $1.4 million, adjusted by $3.7 million of gain from discontinued operations and $4.9 million of non-cash items to reconcile the net loss to net cash used in operations. These reconciling items primarily reflect the non-cash change in the estimated fair value of contingent liabilities of $0.9 million, depreciation and amortization of $1.3 million, share-based compensation of $2.1 million, and the change in deferred income taxes of $0.3 million. The cash used during the six months ended June 30, 2012 is further impacted by changes in operating assets and liabilities due primarily to an increase in inventory of $0.3 million, a decrease in deferred revenue of $1.6 million, a decrease in accounts payable and accrued liabilities of $3.7 million, and an increase in other current assets of $0.7 million. Partially offset by decreases in accounts receivable of $5.3 million and other long term assets of $0.2 million. Cash used in operating activities of discontinued operations was $0.2 million for the six months ended June 30, 2012.

Investing Activities

Investing activities used cash of $3.7 million for the six months ended June 30, 2013, compared to $3.7 million of cash provided by investing activities for the same 2012 period.

Cash used by investing activities during the six months ended June 30, 2013 primarily reflects the purchase of commercial license rights of $3.6 million.

Cash provided by investing activities during the six months ended June 30, 2012 primarily reflects $8.5 million of proceeds from the sale of short-term investments, partially offset by payment to CVR holders of $4.5 million and purchases of property, equipment and building of $0.3 million.

Financing Activities

Financing activities used cash of $11.7 million for the six months ended June 30, 2013, compared to cash used by financing activities of $0.8 million for the same 2012 period.

Cash used by financing activities for the six months ended June 30, 2013 primarily reflects $12.9 million of repayment of debt, partially offset by proceeds from stock option exercises and the employee stock purchase plan of $1.2 million.

Cash used by financing activities for the six months ended June 30, 2012 primarily reflects $8.5 million of repayment of debt, partially offset by proceeds from the issuance of debt of $7.5 million and proceeds from the issuance of common stock of $0.2 million.

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 June 30, 2013 was $2.4 million and as of 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 make additional payments upon achievement of certain clinical and regulatory milestones to the CyDex shareholders and former license holders. In addition, we will pay CyDex shareholders, for each respective year 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 and six months ended June 30, 2013. The estimated fair value of the contingent liabilities recorded as part of the CyDex acquisiton at June 30, 2013 was $7.6 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 June 30, 2013 and December 31, 2012.

Contractual Obligations

As of June 30, 2013, future minimum payments due under our contractual obligations are as follows (in thousands):

	Payments Due by Period				
	Total	Less than 1 year	2-3 years	4-5 years	More than 5 years
Operating lease obligations (1)	$ 17,134	$ 5,483	$ 9,032	$ 1,872	$ 747

(1) We currently sublease a portion of our facilities through their respective lease terms of July 2015, August 2014 and August 2016. As of June 30, 2013, we expect to receive aggregate future minimum lease payments totaling $2.9 million (nondiscounted) over the duration of the sublease agreements as follows: less than one year, $1.2 million; two to three years, $1.7 million; and four to five years, $0.1 million.

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 June 30, 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 June 30, 2013, we estimate that we have exceeded 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 June 30, 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.

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 June 30, 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.

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 filed its reply brief on June 26, 2013. On July 10, 2013, the Court held a hearing on Ligand and its co-defendants' motions to dismiss. 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.

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 Promacta and Kyprolis 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 and we receive revenue from Onyx based on both sales of Kyprolis and purchases of Captisol material for clinical and commercial uses. These payments are expected to be a substantial portion of our ongoing revenues for some time. As a result, any setback that may occur with respect to Promacta or Kyprolis could significantly impair our operating results and/or reduce the market price of our stock. Setbacks for Promacta and Kyprolis could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation or reimbursement, licenses and approvals, intellectual property rights, competition with existing or new products and physician or patient acceptance of the product, 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. All of CyDex's products and product candidates, as well as the technology that it outlicenses, are based on Captisol. As a result, any setback that may occur with respect to Captisol could significantly impair our operating results and/or reduce the market price of our stock. Setbacks for Captisol could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation or reimbursement, licenses and approvals, intellectual property rights, competition with existing or new products and physician or patient acceptance of the products using Captisol, as well as higher than expected total rebates, returns or discounts for such products.

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

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. Our supplier of Captisol is Hovione FarmaCiencia SA, or Hovione, through its agent Hovione LLC. 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. A series of unusually large orders could rapidly deplete our inventory and cause significant problems with our licensees and disrupt our business. In addition, if we fail to meet certain of our obligations under our supply agreements, our customers could obtain the right to have Captisol manufactured by other suppliers, which would significantly harm our business.

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. 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, but 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.

Aggregate revenues based on sales of Avinza, Conbriza and Nexterone represent a significant portion of our overall current and/or expected future revenues.

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 these products could significantly impair our operating results and/or reduce the market price of our stock. Setbacks for these products could include problems with shipping, distribution, manufacturing, product safety, marketing, government regulation or reimbursement, licenses and approvals, intellectual property rights, competition with existing or new products and physician or patient acceptance of the product, as well as higher than expected total rebates, returns or discounts. These products also are or may become subject to generic competition). Any such setback could reduce our revenue.

The product candidates of our partners and us face significant development and regulatory hurdles prior to partnering and/or marketing which could delay or prevent licensing, sales and/or milestone revenue.

Before we or our partners obtain the approvals necessary to sell any of our unpartnered assets or partnered programs, we must show through preclinical studies and human testing that each potential product is safe and effective. We and/or our partners have a number of partnered programs and unpartnered assets moving toward or currently awaiting regulatory action. Failure to show any product's safety and effectiveness could delay or prevent regulatory approval of a product and could adversely affect our business. The drug development and clinical trials process is complex and uncertain. For example, the results of preclinical studies and initial clinical trials may not necessarily predict the results from later large-scale clinical trials. In addition, clinical trials may not demonstrate a product's safety and effectiveness to the satisfaction of the regulatory authorities. 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 scientific studies and 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 our collaborations. As a result, these collaborative partners may conduct these programs more slowly or in a different manner than expected. Moreover, even if clinical trials are completed, we or our collaborative partners still may not apply for FDA approval in a timely manner or the FDA still may not grant approval.

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

Our strategy for developing and commercializing many of our potential products, including products aimed at larger markets, includes entering into collaboration agreements with corporate partners and others. These agreements 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 unpartnered assets.

In addition, our collaborators may develop drugs, either alone or with others that compete with the types of drugs they are developing with us (or that we are developing on our own). This would result in increased competition for our or our partners' 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 at will or under specified circumstances. If any of our collaborative partners breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully (for example, by not making required payments when due, or at all), our product development under these agreements will be delayed or terminated. Disputes or litigation may also arise with our collaborators (with us and/or with one or more third parties), 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.

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

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.

Generally, our success will depend on our ability and the ability of us and 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.

We have 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. 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. There is no guarantee that our 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.

Our collaborative partners may change their strategy or the focus of their development and commercialization efforts with respect to our partnered programs; the success of our partnered programs 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 partnered programs, we could be required to devote additional resources to our partnered programs, seek new collaborative partners or abandon such partnered programs, all of which could have an adverse effect on our business.

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), Nexterone, 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.

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 or have consummated in the past, whether as a result of unidentified risks, integration difficulties, regulatory setbacks, litigation with current or former employees and other events, our business, results of operations and financial condition could be adversely affected. If we acquire product candidates, we will also need to make certain assumptions about, among other things, development costs, the likelihood of receiving regulatory approval and the market for such product candidates. Our assumptions may prove to be incorrect, which could cause us to fail to realize the anticipated benefits of these transactions.

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

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. 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 $13.1 million as of June 30, 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 partnered programs before our competitors offer products for the same or similar uses, or if our partners are not effective in marketing our partnered programs, 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 partnered programs. 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.

If our business does not perform according to our expectations, we may not be able to pay off our existing debt or have sufficient resources to operate our business as currently contemplated.

Our operations have consumed substantial amounts of cash since inception. As of June 30, 2013, we had negative working capital of $18.0 million. 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 made 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, 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. As of June 30, 2013, the remaining principal balance of the note was $15.6 million. 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.

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 June 30, 2013, 302,750 common shares have been issued under this registration statement for total net proceeds of approximately $5.5 million. During the quarters ended June 30, 2013 and 2012, respectively, the Company did not issue any common shares pursuant to its at-the-market equity issuance plan.

Our cash and cash equivalents as of June 30, 2013 was $5.9 million. 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 ability to use our net operating losses to offset taxes that would otherwise be due could be limited or lost entirely.

Our ability to use our NOLs to offset taxes that would otherwise be due is dependent upon our generation of future taxable income before the expiration dates of the NOLs, and we cannot predict with certainty whether we will be able to generate future taxable income. In addition, even if we generate taxable income, realization of our NOLs to offset taxes that would otherwise be due could be restricted by annual limitations on use of NOLs triggered by a past or future “ownership change” under Section 382 of the Internal Revenue Code and similar state provisions. An “ownership change” may occur when there is a 50% or greater change in total ownership of our company by one or more 5% shareholders within a three-year period. The loss of some or all of our NOLs could materially and adversely affect our business, financial condition and results of operations. In addition, California and certain states have suspended use of NOLs for certain taxable years, and other states may consider similar measures. As a result, we may incur higher state income tax expense in the future. Depending on our future tax position, continued suspension of our ability to use NOLs in states in which we are subject to income tax could have an adverse impact on our operating results and financial condition. The calculation of the amount of our net operating loss carryforwards may be changed as a result of a challenge by the IRS or other governmental authority or our learning of new information about the ownership of, and transactions in, our securities.

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, concentration of ownership and charter documents may hinder or prevent change of control transactions.

Our shareholder rights plan and provisions contained in our certificate of incorporation and bylaws may discourage transactions involving an actual or potential change in our ownership. In addition, our Board of Directors may issue shares of preferred stock without any further action by the stockholders. Our directors and Biotechnology Value Fund (BVF) have over 27.1% ownership as of June 30, 2013 and BVF can increase their ownership level up to 24.99% and has agreed to vote 15% ownership in accordance with the Board's recommendations in the event that BVF exceeds a 19.99% ownership level. Such restrictions, circumstances and issuances may have the effect of delaying or preventing a change in our ownership. If changes in our ownership are discouraged, delayed or prevented, it would be more difficult for our current Board of Directors to be removed and replaced, even if you or our other stockholders believe that such actions are in the best interests of us and our stockholders.

Funding of our drug development programs may not result in future revenues.

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. 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.

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

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 48 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: August 1, 2013

By: /s/ John P. Sharp
John P. Sharp
Vice President, Finance and Chief Financial Officer
Duly Authorized Officer and Principal Financial Officer

INDEX TO EXHIBITS

Exhibit Number	Description
2.1 (1)	Agreement and Plan of Merger, by and among the Company, Pharmacopeia, 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).
3.8 (16)	Second Amended and Restated Bylaws of the Company (Filed as Exhibit 3.1)
4.1 (17)	Specimen stock certificate for shares of Common Stock of the Company.
4.4 (18)	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).
4.5 (19)	First Amendment to 2006 Preferred Shares Rights Agreement dated June 19, 2013 (Filed as Exhibit 4.1)
10.1 (19)	Amended Letter Agreement dated June 19, 2013 between the Company and BVF Partners L.P. (Filed as Exhibit 10.1)
10.2 †	Royalty Stream and Milestone Payments Purchase Agreement dated April 29, 2013 between the Company and Selexis S.A.
24.1 (20)	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.

Exhibit Number	Description
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.

(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 Current Report on Form 8-K filed on April 9, 2013.

(17) 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.

(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 October 17, 2006.

(19) 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 June 19, 2013

(20) 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.

** 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

ROYALTY STREAM AND MILESTONE PAYMENTS PURCHASE AGREEMENT

THIS ROYALTY STREAM AND MILESTONE PAYMENTS PURCHASE AGREEMENT (this "**Agreement**") is made and entered into as of April 29, 2013 by and between **Selexis SA**, a Swiss corporation, with its registered office at 18, chemin des Aulx, 1228 Plan-les-Ouates, Switzerland ("**Seller**") and **Ligand Pharmaceuticals Incorporated**, a Delaware (USA) corporation, with its principal place of business at 11119 North Torrey Pines Road, Suite 200, La Jolla, California 92037, USA ("**Buyer**"; Seller and Buyer, individually, a " **Party**" and, collectively, the "**Parties**").

RECITALS

A. Selexis is a life-science company with innovative technologies and world-class expert services for drug discovery, cell-line development and scale-up to manufacturing of therapeutic proteins.

B. Selexis has licensed certain intellectual property rights to clients under commercial license agreements entitling Selexis, under certain conditions and subject to the terms of these commercial license agreements, to a royalty stream and/or milestone payments.

C. Seller desires to assign and transfer to Buyer, and Buyer desires to acquire from Seller, on the terms and subject to the conditions set forth herein, claims to milestones payments and royalties under certain commercial license agreements entered into by Seller and various counterparties.

NOW, THEREFORE, the Parties agree as follows:

ARTICLE I

DEFINITIONS - INTERPRETATION

Section 1.01 Definitions. As used in this Agreement, in addition to the terms defined above the following terms shall have the following meanings (terms defined in the singular to have a correlative meaning when used in the plural and vice versa).

(a) "**Action**" shall mean any civil, criminal or administrative action, claim, suit, demand, injunction, writ, decree, hearing, litigation, proceeding, arbitral action, governmental or other audit, inquiry, prosecution, investigation or complaint.

(b) "**Affiliate**" shall mean, with respect to any Person, any Person that, directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such Person.

(c) "**Assigned Rights**" shall mean all of Seller's rights under the Commercial License Agreements to receive (after the Closing Date) milestone payments and/or royalties under the Commercial License Agreements, to the exclusion of any other assets, rights or claims. It is understood that the nature of the Assigned Rights is that Buyer would have a direct right and claim against each respective Commercial License Agreement counterparty to receive (after the Closing Date) milestone payments and/or royalties under the applicable Commercial License Agreement (and that Seller would no longer have such a direct right and claim), as opposed to Buyer having merely a claim to receive from Seller an amount measured by receipts of (or rights to receive), after the Closing Date, milestone payments and/or royalties under the Commercial License Agreements.

(d) "**Assignment Notices**" shall have the meaning set forth in Section 2.06.

(e) "**Business Day**" shall mean any day other than a Saturday, Sunday or a day on which the banks in California, USA and Geneva, Switzerland are authorized or obligated by law or executive order to close.

(f) "**Closing**" shall have the meaning set forth in Section 7.01.

(g) "**Closing Date**" shall have the meaning set forth in Section 7.01.

(h) "**Commercial License Agreements**" shall mean the commercial license agreements set forth on Exhibit A, whatever their name.

(i) "**Confidential Information**" shall mean any and all confidential proprietary information, written or oral, including any business information, technical information or data, however embodied, in any medium.

(j) "**Confidentiality Agreement**" shall have the meaning set forth in Section 11.01.

(k) "**Control**" shall mean, with respect to any Person, the possession directly or indirectly of the power to direct or cause the direction of the management and policies of such Person whether through ownership of voting securities, by contract or otherwise; "**controlling**", "**controlled by**" and "**under common control with**" shall be construed accordingly.

(l) "**Deductible**" shall have the meaning set forth in Section 8.05.

(m) "**Default**" shall mean (i) any actual breach or default, (ii) the occurrence of an event that with the passage of time or the giving of notice or both would constitute a breach or default or (iii) the occurrence of an event that with or without the passage of time or the giving of notice or both would give rise to a right of termination or mandatory renegotiation.

(n) "**De Minimis**" shall have the meaning set forth in Section 8.04.

(o) "**Disclosure Schedule**" shall have the meaning set forth in ARTICLE IV.

(p) "**Governmental Body**" shall mean any (i) nation, province, canton, state, county, city, town, village, district, or other jurisdiction of any nature; (ii) federal, provincial, cantonal, state, local, municipal or other government; (iii) governmental authority of any nature (including any governmental agency, branch, department, official, or entity and any court or other tribunal); (iv) multi-national organization or body; or (v) body exercising, or entitled to exercise, any administrative, executive, judicial, legislative, regulatory or taxing power.

(q) "**Indemnified Parties**" shall have the meaning set forth in Section 8.02.

(r) "**Intellectual Property Rights**" shall mean any or all of the following and all rights in, arising out of, or associated therewith: (i) all patents and utility models and applications therefor and all reissues, divisionals, reexaminations, renewals, extensions, provisionals, supplementary protection certificates, continuations and continuations in-part thereof, and equivalent or similar registered rights anywhere in the world; (ii) all trade secrets and other rights in know-how and confidential or proprietary information, inventions and discoveries, including invention disclosures; and (iii) any similar, corresponding or equivalent rights to any of the foregoing anywhere in the world, including moral rights.

(s) "**Knowledge**" shall mean, **[***]**.

(t) "**Laws**" shall mean any laws, statutes, ordinances, regulations, rules, codes, court decisions, principles of law and orders of any Governmental Body or any national securities exchange on which securities of a Party are listed.

(u) "**Liabilities**" shall mean any direct or indirect liability, obligation, commitment, expense, indebtedness, guaranty or endorsement of or by any Person of any type, known or unknown, and whether accrued, absolute, contingent, matured, unmatured, determined or undeterminable, on-or off-balance sheet, or other, including those arising under any Law or Action and those arising (either before or after the Closing) under any Commercial License Agreement (for example, and without limitation, under any Commercial License Agreement representation, warranty, covenant, assistance obligation, indemnification obligation, etc.) or undertaking or otherwise, all whether monetary or non-monetary.

(v) "**Lien**" shall mean any mortgage, pledge, lien, charge, claim, security interest, adverse claim of ownership or use, restrictions on transfer, defect of title or other encumbrance of any sort; provided that the security interest granted under Section 2.08 is excluded from the defined term "Lien".

(w) "**Losses**" shall have the meaning set forth in Section 8.02.

(x) "**Maintenance**" shall have the meaning set forth in Section 9.03.

(y) "**Non-Transferable Assigned Rights**" shall have the meaning set forth in Section 2.04.

(z) "**Patents**" shall mean the patents and patent applications set forth on Exhibit B, and all reissues, divisionals, reexaminations, renewals, extensions, provisionals, supplementary protection certificates, continuations and continuations-in-part thereof, and equivalent or similar registered rights anywhere in the world.

(aa) "**Permits**" shall mean all licenses, permits, approvals, authorizations, consents or orders of, or filings with, any Governmental Body, that relate to the Assigned Rights.

(bb) "**Person**" shall mean any individual, corporation (including any non-profit corporation), general or limited partnership, limited liability company, joint venture, estate, trust, association, organization, labor union, Governmental Body or other entity.

(cc) "**Representative**" shall mean, with respect to any Person, any officer, director, employee, agent, attorney or other representative of such Person.

(dd) "**Seller Account**" shall mean **[***]**.

(ee) "**Seller Closing Deliverables**" shall have the meaning set forth in Section 2.06.

(ff) "**Signature Date**" shall mean the date of execution of this Agreement by both Parties.

(gg) "**Tax**" shall mean any federal, cantonal, state or local income, gross receipts, license, payroll, employment, excise, severance, stamp, occupation, premium, windfall profits, environmental, customs duties, capital stock, escheat, franchise, profits, withholding, social security, unemployment, disability, real property, personal property, sales, use, transfer, registration, value added, alternative or add-on minimum, estimated, or other tax, impost or customs-duty of any kind whatsoever, including any interest, penalty, or addition thereto, whether disputed or not.

(hh) "**Termination Date**" shall have the meaning set forth in Section 10.01.

(ii) "**Transfer Taxes**" shall have the meaning set forth in Section 2.05.

(jj) "**Third Party**" shall mean any Person other than the Parties or their Affiliates.

(kk) "**Third Party Expenses**" shall mean **[***]**.

(ll) "**Transaction Agreements**" shall mean this Agreement and any other agreement or instrument delivered pursuant to or in connection with this Agreement.

Section 1.02 Interpretation. Except to the extent that the context otherwise requires:

(i) when a reference is made in this Agreement to an Article or Exhibit, such reference is to an article or exhibit of this Agreement unless otherwise indicated;

(ii) the headings for this Agreement are for reference purposes only and do not affect in any way the meaning or interpretation of this Agreement;

(iii) whenever the words "include", "includes" or "including" are used in this Agreement, they are deemed to be followed by the words "without limitation";

(iv) the words "hereof", "herein" and "hereunder" and words of similar import, when used in this Agreement, refer to this Agreement as a whole and not to any particular provision of this Agreement; and

(v) the use of "or" is not intended to be exclusive unless expressly indicated otherwise.

ARTICLE II

ASSIGNMENT AND TRANSFER

Section 2.01 Assignment of Assigned Rights. Upon the terms and subject to the conditions set forth herein, Seller hereby agrees to assign and transfer, and shall assign and transfer at Closing, to Buyer, the Assigned Rights, on an exclusive basis, free and clear of any Liens, and Buyer hereby agrees to acquire and purchase, and shall acquire and purchase at Closing, the Assigned Rights, on an exclusive basis, free and clear of any Liens.

Section 2.02 No Assumed Liabilities. Notwithstanding any provision in this Agreement or any other writing to the contrary, Buyer is acquiring only the Assigned Rights and is not assuming and shall not assume or otherwise be responsible for any Liabilities of Seller of whatever nature, whether under any of the Commercial License Agreements or otherwise. All such Liabilities shall be retained by, and remain obligations of, Seller, and shall be paid, performed and discharged by Seller.

Section 2.03 Excluded Assets. Buyer does not, by the purchase of the Assigned Rights, acquire any assets, rights or claims of Seller under the Commercial License Agreements or otherwise, except the Assigned Rights.

Section 2.04 Nontransferable Assigned Rights. To the extent that any Assigned Right to be assigned to Buyer pursuant hereto is not capable of being assigned or transferred without the approval, consent or waiver of the Commercial License Agreement counterparty or any other Third Party (including a Governmental Body), or if such assignment or transfer or attempted assignment or transfer would constitute a Default thereof or a violation of any Law (collectively, with respect to such Assigned Rights, the "**Nontransferable Assigned Rights**"), except as expressly otherwise provided herein this Agreement shall not constitute an assignment or transfer thereof, or an attempted assignment or transfer thereof absent such approvals, consents or waivers. If any such approval, consent or waiver shall not be obtained, or if an attempted assignment or transfer of any such Assigned Rights to Buyer would be ineffective so that Buyer would not in fact receive all such Assigned Rights pursuant hereto, Seller shall use its commercially reasonable efforts to obtain such approval, consent or waiver, and until obtained, cooperate in a mutually agreeable arrangement under which Buyer would obtain (effective from and after the Closing Date), from Seller and/or directly from the Commercial License Agreement counterparty, the benefits of such Assigned Rights in accordance with this Agreement or under which Seller, at Buyer's expense, would enforce for the benefit of Buyer any and all rights of Seller against a Third Party thereto and remit monies to Buyer. The intent of this provision is that pending assignment, Seller shall cooperate to (effective from and after the Closing Date) place Buyer in a position as near as may be (in terms of benefits, costs and risks) as if assignment had occurred on the Signature Date. In any event, as to each respective Assigned Rights, as soon as any and all such required approvals, consents and waivers have been obtained, the assignment of such Assigned Rights from Seller to Buyer shall automatically and immediately be effective without any requirement for further consideration for such assignment.

The Parties further confirm that the Assigned Rights with respect to the Commercial License Agreement **[***]**, listed in **[***]** Exhibit A, **[***]**. Seller shall from and after the Closing Date use its commercially reasonable efforts to obtain such consent (in form and substance consistent with the consents described in Section 4.14 below) from such Commercial License Agreement counterparty or, as applicable, from the assignee (**[***]**) of the rights of such counterparty under such Commercial License Agreement, and until obtained, cooperate in a mutually agreeable arrangement under which Buyer would obtain (effective from and after the Closing Date), from Seller and/or directly from the Commercial License Agreement counterparty, the benefits of such Assigned Rights in accordance with this Agreement or under which Seller, at Buyer's expense, would enforce for the benefit of Buyer any and all rights of Seller against a Third Party thereto and remit monies to Buyer. The intent of this provision is that pending consent/assignment, Seller shall cooperate to (effective from and after the Closing Date) place Buyer in a position as near as may be (in terms of benefits, costs and risks) as if consent/assignment had occurred on the Signature Date. In any event, as to the Assigned Rights with respect to such Commercial License Agreement, as soon as any and all such required approvals, consents and waivers have been obtained, the assignment of such Assigned Rights from Seller to Buyer shall automatically and immediately be effective without any requirement for further consideration for such assignment.

Section 2.05 Transfer Taxes. Seller shall be responsible for the aggregate amount of any and all transfer, sales, value-added, use, gross receipts, registration, stamp duty, excise or similar taxes that may be payable in connection with the sale or purchase of the Assigned Rights (the "**Transfer Taxes**"). The Party required by law to file a tax return with respect to such Transfer Taxes shall do so within the time period prescribed by law (and if Buyer is such Party, Seller shall promptly remit 100% of the amount of any such Transfer Taxes to Buyer upon receipt of notice from Buyer that such Transfer Taxes are payable, as evidenced by any documentation provided to this effect by the relevant Governmental Body or a tax advisor).

Section 2.06 Seller Closing Deliverables. On or before the Closing, Seller shall deliver to Buyer the following (the "**Seller Closing Deliverables**"):

(a) Assignment and Bill of Sale. An assignment and bill of sale in the form attached hereto as Exhibit C, executed by Seller.

(b) Instruction Letters. Letters, addressed to the respective Commercial License Agreements counterparties at the official address for notice set forth in the applicable Commercial License Agreement and signed by Seller, irrevocably instructing such counterparty to make all royalty and milestone payments under the Commercial License Agreement (and to provide all associated reports and notices) to Buyer rather than to Seller and to follow all further instructions which may be given from time to time by Buyer to the counterparty with respect to royalty and milestone payments under the Commercial License Agreement (and all associated reports and notices) (the "**Assignment Notices**").

(c) Milestone Payments. Payment by wire transfer, to an account designated by Buyer to Seller in writing before the Closing, of an amount equal to **[***]**% of any and all milestone payments received from any Commercial License Agreement counterparties between the Signature Date and the Closing Date.

(d) Patent Security Agreement. A Patent Security Agreement in the form attached hereto as Exhibit D,

executed by Seller and appropriately notarized.

(e) Bringdown Certificate. A customary bringdown certificate signed by an officer of Seller and dated as of the Closing Date.

(f) Commercial License Agreements. An unredacted copy of every Commercial License Agreement (including all amendments thereto), certified by an officer of Seller to be correct, complete and in full force and effect.

Section 2.07 Buyer Closing Deliverables. On or before the Closing, Buyer shall deliver to Seller the following (the "**Buyer Closing Deliverables**"):

(a) Closing Payment. Buyer shall pay to Seller USD 3,500,000 by wire transfer to the Seller Account or to such other bank account designated before the Closing by Seller to Buyer in writing.

(b) Bringdown Certificate. A customary bringdown certificate signed by an officer of Buyer and dated as of the Closing Date.

(c) Secretary's Certificate. A customary Secretary's certificate signed by the Secretary of Buyer and dated as of the Closing Date.

Section 2.08 Security. To secure the performance of its obligations to Buyer under this Agreement, Seller hereby grants to Buyer a continuing (as of the Closing Date) first security interest in the Patents. Buyer shall however not be authorized to, and Buyer irrevocably and unconditionally covenants not to, exercise (other than to perfect and maintain the security interest) its security interest rights other than in the event of Seller's bankruptcy, receivership or assignment for the benefit of creditors. **[***]**.

Section 2.09 Taking of Necessary Action; Further Action. As soon as possible after the Closing Date, Buyer shall send the Assignment Notices to the respective Commercial License Agreements counterparties at the official address for notice set forth in the applicable Commercial License Agreement. From time to time after the Closing, at the request and at the costs and expenses of Buyer, Seller shall use its commercially reasonable efforts to execute and deliver such other instruments of sale, transfer, assignment and confirmation and take such action as Buyer may reasonably determine is necessary to transfer and assign to Buyer (and/or to more perfectly evidence or confirm such transfer and assignment), and to confirm Buyer's title to or interest in, the Assigned Rights.

ARTICLE III

PURCHASE PRICE

Section 3.01 Purchase Price. The purchase price for the Assigned Rights shall be USD 4,500,000 to be paid to Seller in two installments:

(a) USD 3,500,000 at Closing; and

(b) USD 1,000,000 (less any amount which Seller owes to Buyer pursuant to or under this Agreement) on the first anniversary of the Closing Date.

ARTICLE IV

REPRESENTATIONS AND WARRANTIES OF SELLER

Seller hereby represents and warrants to Buyer that the statements contained in this Article IV are (subject to exceptions as are disclosed in the disclosure schedule delivered by Seller to Buyer before the Signature Date (the "**Disclosure Schedule**")) true and correct as of the Signature Date; provided that the representations and warranties made as of a specified date will be true and correct as of such date. Buyer acknowledges that, other than as expressly provided in this Agreement, Seller has not made and does not make any representation or warranty, express or implied, pertaining to the subject matter of this Agreement. In particular and without limitation to the foregoing, Buyer acknowledges that Seller is not making any representations as to budgets, business plans or any projections of a financial or business nature relating to the Assigned Rights, nor as to the scientific prospects of the Commercial License Agreements programs or the solvency of the Commercial License Agreements counterparties.

Section 4.01 Organization, Qualification, and Corporate Power. Seller (a) is a corporation duly organized and validly existing under the laws of Switzerland, (b) has the full right, power and authority to enter into this Agreement and the other Transaction Agreements to which it is a party and (c) has obtained all necessary corporate approvals to execute, deliver and perform this Agreement and the other Transaction Agreements to which it is a party.

Section 4.02 Authorization. Seller has all requisite right, power and authority to execute, deliver and perform this Agreement and the other Transaction Agreements to which it is a party, to consummate the transactions contemplated hereby and thereby and to perform its obligations hereunder and thereunder. The execution and delivery of this Agreement and the other Transaction Agreements by Seller, and the consummation by Seller of the transactions contemplated hereby and thereby, have been duly approved by Seller, and no further action is required on the part of Seller or its shareholders to authorize this Agreement and any other Transaction Agreements to which it is a party and the transactions contemplated hereby and thereby. This Agreement has been duly executed and delivered by Seller and, upon execution and delivery by all other parties thereto of this Agreement and the other Transaction Agreements to which Seller is a party, this Agreement and the Transaction Agreements to which Seller is a party shall constitute legal, valid and binding obligations of Seller, enforceable against Seller in accordance with their terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws affecting enforcement of creditor's rights generally and except insofar as the availability of equitable remedies may be limited by applicable Laws.

Section 4.03 Title to Assets. Seller has, and as of immediately following the Closing, Buyer will have, good and valid title to all the Assigned Rights, in each case free and clear of any Liens. Seller has not agreed to assign or transfer any of the Assigned Rights to any Person other than Buyer. Seller has, and as of immediately following the Closing, Seller will have, good and valid title to all the Patents, free and clear of any Liens.

Section 4.04 Consents. No consent, waiver, approval, order or authorization of, or registration, declaration or filing with any Governmental Body or any Third Party, including a party to the Commercial License Agreements, is required by or with respect to Seller in connection with the execution and delivery of this Agreement and the other Transaction Agreements or the consummation of the transactions contemplated hereby and thereby.

Section 4.05 No Conflicts. The execution and delivery by Seller of this Agreement and the other Transaction Agreements, and the consummation of the transactions contemplated hereby and thereby, will not conflict with or result in any violation of or Default under or give rise to an additional or diminished payment obligation, a right of termination, cancellation, modification or acceleration of any obligation or loss of any benefit under, or the creation or imposition of any Lien on (a) any Commercial License Agreement, (b) any Assigned Rights, (c) any provision of Seller's charter documents, (d) any Law, or (e) the Patents or Seller's rights in the Patents.

Section 4.06 Status of Commercial License Agreements. Seller has provided to Buyer true, complete and correct copies of every Commercial License Agreement. **[***]**.

Section 4.07 Litigation. There is no Action of any nature pending, or to the Knowledge of Seller, threatened, against Seller or any of its officers or directors (with respect to any Commercial License Agreement or Assigned Rights) **[***]**. There is no Law, executive order, injunction, order or other legal restraint in existence which would prohibit, prevent or delay, and there is no Action of any nature pending or, to the Knowledge of Seller, threatened, against Seller which challenges or seeks to enjoin, prohibit, prevent or delay, any of the transactions contemplated by the this Agreement and the other Transaction Agreements.

Section 4.08 Intellectual Property Rights.

(a) The Patents are owned by Seller free and clear of all Liens. The Patents are valid, enforceable and subsisting, and have not expired, been cancelled, or abandoned.

(b) All issuance, renewal, maintenance and other material payments that are or have become due with respect to the Patents have been timely paid by or on behalf of Seller. All documents, certificates and other materials in connection with the Patents have, for the purposes of maintaining such Patents, been filed in a timely manner with each appropriate Governmental Body. Seller has properly filed, prosecuted, maintained, perfected, preserved and renewed all Patents.

(c) **[***]**.

(d) **[***]**.

(e) No Patent is subject to any Action, reexamination, opposition or interference, or any outstanding order, judgment or settlement agreement or stipulation against Seller, nor to the Knowledge of Seller against any Third Parties from whom Seller acquired or licensed Intellectual Property Rights, that restricts in any material way the use or licensing of such Patents by Seller or may affect the validity, use or enforceability of such Patents.

(f) **[***]**.

(g) **[***]**.

Section 4.09 Absence of Certain Changes or Events. There has not been any:

(a) sale, assignment, transfer, lease, license or disposition by Seller of any Commercial License Agreements or Assigned Rights;

(b) acceptance by or on behalf of Seller of any prepayment under any Commercial License Agreements;

(c) cancellation or waiver of any claims or rights of Seller with respect to any Commercial License Agreements or Assigned Rights;

(d) amendment, cancellation or termination of any Commercial License Agreements;

(e) failure by Seller to perform any material obligation relating to the Commercial License Agreements;

(f) settlement by Seller of any pending or threatened Action with respect to any Commercial License Agreements or Assigned Rights;

(g) agreement by Seller to do any of the foregoing; or

(h) to the Knowledge of Seller, damage, destruction or loss adversely affecting the operation by any Commercial License Agreements counterparty of its program to which such Commercial License Agreement relates.

Section 4.10 Permits. Seller has, and at all times has had, all material Permits required under any Law in connection with the Commercial License Agreements. Seller is not in Default, nor has it received any notice, whether written or oral, of any claim of Default, with respect to any such Permit.

Section 4.11 Restrictions on Business Activities. There is no agreement (not to compete or otherwise), commitment, judgment, injunction, order or decree to which Seller is a party relating to the Commercial License Agreements or otherwise binding upon Seller which has or may have the effect of (a) impairing the Commercial License Agreements or Assigned Rights (or Buyer's enjoyment of the Assigned Rights) or (b) prohibiting or impairing the transactions contemplated by this Agreement and the other Transaction Agreements. Seller has not entered into any agreement under which Seller's use of the Patents, Commercial License Agreements or Assigned Rights is restricted or which places any restrictions upon Seller with respect to any of the Patents, Commercial License Agreements or Assigned Rights, or under which Buyer's use of the Assigned Rights would be restricted or which would place any restrictions upon Buyer with respect to any of the Assigned Rights.

Section 4.12 Milestone Payments. **[***]**.

Section 4.13 Brokers' Fees. Seller does not have and has not created any liability or obligation, for which Buyer would be responsible, to pay any fees or commissions to any broker, finder, or agent with respect to the transactions contemplated by this Agreement.

Section 4.14 Consents. Seller has, before the Signature Date, delivered to Buyer duly executed consents of each Commercial License Agreement counterparty (other than as described in the second paragraph of Section 2.04), in a form satisfactory to Buyer, in each of which, unless agreed otherwise with Buyer, such counterparty has (a) given its consent to the assignment of the Assigned Rights to Buyer and confirmed that it shall consider the Buyer, as of the Closing Date, as the sole party entitled to exercise the Assigned Rights, (b) given its consent to Seller disclosing to Buyer the terms of the applicable Commercial License Agreement and the contents of any future reports as to Net Sales, royalties and/or milestone events provided by such counterparty to Seller and the results of any future audit or inspection performed by or in the name of Seller pursuant to the applicable Commercial License Agreement (subject to Buyer agreeing to treat confidential information in like manner as Seller would have to under the Commercial License Agreements), and (c) given its consent to any future public disclosure by Buyer of such counterparty's identity, and the name and date of the applicable Commercial License Agreement.

Section 4.15 Disclosure. None of the representations or warranties made by Seller, nor any statement made in any writing furnished by Seller to Buyer pursuant to this Agreement or in connection with the transactions contemplated by this Agreement contains at the Signature Date any untrue statement of a material fact or omits to state at the Signature Date any material fact actually known to Seller at the Signature Date and required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading.

ARTICLE V

REPRESENTATIONS AND WARRANTIES OF BUYER

Buyer hereby represents and warrants to Seller that the statements contained in this ARTICLE V are true and correct as of the Signature Date; provided that the representations and warranties made as of a specified date will be true and correct as of such date. Seller acknowledges that, other than as expressly provided in this Agreement, Buyer has not made and does not make any representation or warranty, express or implied, pertaining to the subject matter of this Agreement.

Section 5.01 Organization, Qualification, and Corporate Power. Buyer hereby represents, warrants and covenants to Seller that it (a) is a corporation duly organized, validly existing, and in good standing under the laws of Delaware, USA, (b) has obtained all necessary corporate approvals to enter into and execute this Agreement and the other Transaction Agreements to which it is a party and (c) has the full right, power, and authority to enter into this Agreement and the other Transaction Agreements to which it is a party.

Section 5.02 Authorization. Buyer has all requisite right, power and authority to execute, deliver and perform this Agreement and the other Transaction Agreements to which it is a party, to consummate the transactions contemplated hereby and thereby and to perform its obligations hereunder and thereunder. The execution and delivery of this Agreement and the other Transaction Agreements by Buyer, and the consummation by Buyer of the transactions contemplated hereby and thereby have been duly approved by Buyer, and no further action is required on the part of Buyer to authorize the Agreement and any other Transaction Agreements to which it is a party and the transactions contemplated hereby and thereby. This Agreement has been duly executed and delivered by Buyer and, upon execution and delivery by all other parties thereto of this Agreement and the other Transaction Agreements to which Buyer is a party, this Agreement and the other Transaction Agreements to which Buyer is a party shall constitute legal, valid and binding obligations of Buyer, enforceable against Buyer in accordance with their terms, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws affecting enforcement of creditor's rights generally and except insofar as the availability of equitable remedies may be limited by applicable Law.

Section 5.03 No Conflicts. The execution and delivery by Buyer of this Agreement and the other Transaction Agreements, and the consummation of the transactions contemplated thereby, will not conflict with or result in any violation of or Default under (with or without notice or lapse of time, or both) or give rise to an additional payment obligation, a right of termination, cancellation, modification or acceleration of any obligation or loss of any benefit or under (a) any provision of Buyer's certificate of incorporation or bylaws or (b) any Law applicable to Buyer.

Section 5.04 Brokers' Fees. Buyer does not have and has not created any liability or obligation, for which Seller would be responsible, to pay any fees or commissions to any broker, finder, or agent with respect to the transactions contemplated by this Agreement.

Section 5.05 Due Diligence. Buyer has been given access during the due diligence to an electronic data room containing information and documentation concerning the Commercial License Agreements and the Assigned Rights. Buyer has such knowledge and experience in financial and business matters that Buyer is capable of evaluating the merits and risks of the purchase of the Assigned Rights.

ARTICLE VI

COVENANTS BETWEEN SIGNING AND CLOSING

Section 6.01 Restrictions Regarding Assigned Rights. Except as contemplated by this Agreement, during the period from the Signature Date to the Closing, Seller shall not, without the written consent of Buyer (such written consent not to be unreasonably withheld):

(a) sell, lease, license or dispose of any Assigned Rights;

(b) incur or assume any liabilities which would impair the Assigned Rights or impose any liability on Buyer;

(c) accept the payment of any monies in respect of any Assigned Rights;

(d) mortgage or pledge or subject any Assigned Rights to a Lien;

(e) enter into any contract with respect to or which negatively affects any Assigned Rights;

(f) terminate (except pursuant to its terms), or grant any waiver under, or materially modify or amend

any Commercial License Agreements;

(g) cancel or compromise or waive or release any rights of Seller under or pertaining to any Assigned Rights, or

(h) agree to take any of the foregoing actions.

Section 6.02 Reasonable Efforts. Each of the Parties will use commercially reasonable efforts to take all action and to do all things necessary, proper, or advisable in order to timely consummate and make effective the transactions contemplated by this Agreement (including satisfaction, but not waiver, of the closing conditions set forth in ARTICLE VII).

ARTICLE VII

CLOSING; CONDITIONS TO CLOSING

Section 7.01 Closing, Closing Place, Time and Date. The closing of the transactions contemplated by this Agreement (the "**Closing**") shall be held at the offices of Buyer, 11119 North Torrey Pines Road, Suite 200, La Jolla, California 92037 USA, on the Signature Date forthwith after the execution and delivery of this Agreement, if all conditions to the obligations of the Parties set forth in this ARTICLE VII (excluding conditions that, by their terms, are to be satisfied at the Closing, but subject to satisfaction or waiver of such conditions) are satisfied or waived on the Signature Date, or (if later) on the **[***]** Business Day following the satisfaction or waiver of the conditions to the obligations of the Parties set forth in this ARTICLE VII (excluding conditions that, by their terms, are to be satisfied at the Closing, but subject to satisfaction or waiver of such conditions), or at such other place and such other time and/or date as the Parties shall mutually agree (the actual date on which the Closing shall occur being referred to herein as the "**Closing Date**").

Section 7.02 Conditions to Each Party's Obligation to Close. The obligations of Buyer and Seller hereunder are subject to the fulfillment or satisfaction on and as of the Closing, of each of the following conditions (any one or more of which may be waived by Buyer and Seller together):

(a) No Order; Injunctions; Restraints; Illegality. No Governmental Body shall have enacted, issued, promulgated, enforced or entered any Laws, executive order, injunction, order or other legal restraint (whether temporary, preliminary or permanent) which is in effect and which has the effect of making the transactions contemplated in the Transaction Agreements illegal or otherwise prohibiting or preventing consummation of such transactions.

(b) Other Governmental Approvals. All Permits required to be obtained before the Closing from any Governmental Body in connection with the execution and delivery of the Transaction Agreements and the transactions contemplated thereby shall have been obtained.

(c) Litigation. There shall be no Action of any nature pending or threatened against Seller or Seller's officers or directors arising out of, or in any way connected with, the Assigned Rights or this Agreement or the other Transaction Agreements or the transactions contemplated thereby or thereby.

Section 7.03 Conditions to Buyer's Obligation to Close. The obligations of Buyer hereunder are subject to the fulfillment or satisfaction on, and as of the Closing, of each of the following conditions (any one or more of which may be waived by Buyer):

(a) Representations and Warranties and Covenants. The representations and warranties of Seller set forth in ARTICLE IV shall be true and correct in all material respects as of the Signature Date and as of the Closing Date (except to the extent expressly made as of a particular date, in which case as of such date), except for each of the representations and warranties of Seller set forth in ARTICLE IV that is limited by materiality, which shall be true and correct in all respects as of the Closing Date (except to the extent expressly made as of a particular date, in which case as of such date); and Seller shall have performed and complied in all material respects with all covenants and obligations under this Agreement required to be performed and complied with by Seller at or before the Closing.

(b) Closing Deliverables. Seller shall have delivered or caused to be delivered to Buyer the Seller Closing Deliverables.

Section 7.04 Conditions to Seller's Obligation to Close. The obligations of Seller hereunder are subject to the fulfillment or satisfaction on and as of the Closing, of each of the following conditions (any one or more of which may be waived by Seller):

(a) Representations and Warranties and Covenants. The representations and warranties of Buyer set forth in ARTICLE V shall be true and correct in all material respects as of the Signature Date and also as of the Closing; and Buyer shall have performed and complied in all material respects with all covenants and obligations under this Agreement required to be performed and complied with by Buyer at or before the Closing.

(b) Closing Deliverables. Buyer shall have delivered or cause to be delivered to Seller the Buyer Closing Deliverables.

ARTICLE VIII

SURVIVAL OF REPRESENTATIONS AND WARRANTIES; INDEMNIFICATION

Section 8.01 Survival of Representations and Warranties. The representations and warranties of Seller and Buyer made in this Agreement shall **[***]**.

Section 8.02 Indemnification. Each Party agrees to indemnify, defend and hold harmless the other Party, including its officers, directors, employees, Affiliates and agents (each an "**Indemnified Party**" and collectively, the "**Indemnified Parties**"), against all Actions and all losses, liabilities, damages, deficiencies, diminution in value, costs, interest, awards, judgments, penalties, settlements and expenses, including reasonable out-of-pocket attorneys' fees and expenses ("**Losses**") paid, suffered, incurred, sustained or accrued by the Indemnified Parties, or any of them, as a result of, arising out of or in connection with (a) any inaccuracy of any representation or warranty of such Party in this Agreement, (b) any breach by a Party of any covenant or agreement contained in this Agreement, or (c) any act of fraud or willful breach by a Party or such Party's Representative related to this Agreement or any other Transaction Agreement. In addition, Seller shall indemnify, defend and hold harmless Buyer and Buyer's related Indemnified Parties against all Actions and all Losses paid, suffered, incurred, sustained or accrued by them, or any of them, as a result of, arising out of or in connection with any Liabilities of Seller.

Section 8.03 Exclusion of Liability. In no event shall a Party be liable to the Indemnified Parties for loss of goodwill, loss of business or loss of anticipated profits. In addition, no Party shall be liable to the Indemnified Parties for any indirect, special, consequential or punitive damages, regardless of the form of action, whether in contract, tort or otherwise, and even if such Party has been advised of the possibility of such damages.

Section 8.04 De Minimis. Seller shall have no liability for indemnification under this ARTICLE VIII for Losses that individually are below USD **[***]**(the "**De Minimis**").

Section 8.05 Deductible. Seller shall have no liability for indemnification under this ARTICLE VIII until the Losses, in the aggregate and subject to the De Minimis, exceed USD **[***]** (the "**Deductible**"), after which only the amount of the excess over the Deductible shall be due.

Section 8.06 Maximum Recovery. Seller's liability for indemnification under this ARTICLE VIII shall not (except in the case of fraud or willful misrepresentation under Section 4.01 to Section 4.15 or willful breach of the representations and warranties of Seller in Section 4.01 to Section 4.15) exceed USD **[***]**, including statutory interest.

Section 8.07 Knowledge of Buyer. No claim for indemnity for a breach of a particular representation, warranty, covenant or undertaking shall be made after the Closing if Buyer had actual knowledge of such breach as of the Closing, which shall be deemed to include matters fairly disclosed by Seller to Buyer before the Signature Date by means of the electronic data room established by Seller.

Section 8.08 Exclusions. The liability of Seller under this ARTICLE VIII shall be excluded:

(i) in case of actual knowledge of Buyer, as specified in Section 8.07; and/or

(ii) to the extent that Seller has, within **[***]** days following receipt of a notice from Buyer of the failure or breach of a representation or warranty, provided that such remedy is feasible for such failure or breach, remedied such failure or breach such that no Indemnified Party has incurred any Losses; and/or

(iii) if and to the extent any damage or loss has been caused by any act or omission of Buyer or its Representatives before or after Closing or by the fact that Buyer or its Representatives shall have failed to take all reasonable steps to mitigate the Losses caused by a misrepresentation or breach of warranty; and/or

(iv) if and to the extent Buyer has received recovery for such damage or loss under any title whatsoever from any Third Party (including from an insurer);and/or

(v) if and to the extent the Losses are the result of a change in law or change of judicial or administrative practice (including with respect to Tax) decreed after the Closing Date; and/or

(vi) if it would lead to any double dipping which would allow the Indemnified Parties to be compensated for the same Loss twice.

Section 8.09 Defense. The Indemnified Party intending to claim indemnification under this ARTICLE VIII shall promptly notify the Indemnifying Party of any Action or Loss in respect of which the Indemnified Party intends to claim such indemnification, and the Indemnifying Party shall be entitled to assume and control the defense thereof (with counsel selected by the Indemnifying Party) whether or not such Action is rightfully brought; provided, however, that an Indemnified Party shall have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnified Party, unless Indemnifying Party does not assume the defense, in which case the reasonable fees and expenses of counsel retained by the Indemnified Party shall be paid by the Indemnifying Party. The Indemnified Party, and its employees and agents, shall cooperate fully with the Indemnifying Party and its legal representatives in the investigation and defense of any Action or Loss. The Indemnifying Party shall not be liable for the indemnification of any Action or Loss settled (or resolved by consent to the entry of judgment) without the written consent of the Indemnifying Party. Also, if the Indemnifying Party shall control the defense of any such Action, the Indemnifying Party shall have the right to settle such Action; provided, that the Indemnifying Party shall obtain the prior written consent (which shall not be unreasonably withheld or delayed) of the Indemnified Party before entering into any settlement of (or resolving by consent to the entry of judgment upon) such Action unless (A) there is no finding or admission of any violation of law or any violation of the rights of any Person by an Indemnified Party, no requirement that the Indemnified Party admit fault or culpability, and no adverse effect on any other claims that may be made by or against the Indemnified Party and (B) the sole relief provided is monetary damages that are paid in full by the Indemnifying Party or its insurer and such settlement does not require the Indemnified Party to take (or refrain from taking) any action.

Section 8.10 Dispute Resolution. Any and all disputes or controversies arising out of or relating to this ARTICLE VIII (including all such disputes or controversies between a Party and any Indemnified Party) shall be exclusively and finally resolved by binding arbitration of the matter under Section 12.02 unless the value of the Loss that is at issue is the subject of a pending Action with a Third Party, in which event arbitration shall not be commenced until such amount is ascertained or the Parties agree to arbitration.

Section 8.11 Exclusive Remedies. Except in the case of fraud or willful misrepresentation under Section 4.01 to Section 4.15 or willful breach of the representations and warranties of Seller in Section 4.01 to Section 4.15 or of Buyer in Sections 5.01 and 5.04, the remedies contained in this Agreement shall be exhaustive and not in addition to any other remedies provided for by applicable Law and all other remedies shall not, to the extent permitted by applicable Law, apply and are hereby expressly waived. Except in the case of fraud or willful misrepresentation under Section 4.01 to Section 4.15 or willful breach of the representations and warranties of Seller in Section 4.01 to Section 4.15, any right of rescission or revocation of this Agreement is expressly excluded; in case of fraud or willful misrepresentation under Section 4.01 to Section 4.15 or willful breach of the representations and warranties of Seller in Section 4.01 to Section 4.15, any right of rescission or revocation shall however lapse **[***]** (**[***]**) months after the Closing Date.

ARTICLE IX

POST-CLOSING COVENANTS

Section 9.01 Commercial License Agreements. Subject to Section 9.02, Seller shall exercise fully all of its rights, and comply fully with all of its obligations, under the Commercial License Agreements and shall not, without Buyer's prior written consent (not to be unreasonably withheld or delayed), permit any amendment or take any other action (or omit to take any action) with respect thereto which could reasonably be expected to materially impair the Assigned Rights. Without Buyer's prior written consent, Seller shall not sell, transfer, assign or otherwise dispose of, or grant any Lien on, the Commercial License Agreements or any Patents or its rights under this Agreement, other than a transfer, assignment or disposal to a Person who/which first (by an enforceable written agreement of which Buyer is an express third-party beneficiary, a copy of which is to be delivered by Seller to Buyer) expressly assumes Seller's obligations to Buyer hereunder with respect to the Commercial License Agreements.

Section 9.02 Restrictions Regarding Assigned Rights. Seller shall not, without the written consent of Buyer (such written consent not to be unreasonably withheld or delayed):

(c) incur or assume any liabilities which would impair the Assigned Rights or impose any liability on Buyer;

(d) accept the payment of any monies in respect of any Assigned Rights (except as contemplated by

and subject to Section 9.09);

(e) mortgage or pledge or subject any Assigned Rights to a Lien;

(f) enter into any contract or instrument which negatively affects any Assigned Rights;

(g) terminate any Commercial License Agreements;

(h) grant any waiver under, or modify or amend any Commercial License Agreements, in any manner which could or would negatively affect any Assigned Rights;

(i) agree to take any of the foregoing actions; or

(j) purport to take any of the foregoing actions, or otherwise intentionally seek to impair any of the Assigned Rights.

Section 9.03 Patent Maintenance.

(h) Seller shall, to the fullest extent permitted by law, at all times after the Closing, at Seller's expense, maintain, perfect, preserve, renew and defend against reexaminations, oppositions and interferences (collectively, the "**Maintenance**") all Patents which as of the Signature Date were issued. With respect to patent applications included in the Patents, Seller shall in good faith exercise reasonable judgment in the continued prosecution and Maintenance of each patent application included in the Patents and of any continuation or divisional patent application thereof.

(i) If Seller elects to abandon any patent application included in the Patents, or of any continuation or divisional patent application thereof, Seller shall notify Buyer not less than **[***]** days before such action.

(j) If Seller has not, by the **[***]** day before the deadline date for taking a prosecution or Maintenance action on a Patent, taken such relevant prosecution or Maintenance action, then Seller shall immediately so notify Buyer with full details and within **[***]** days after such notice Buyer shall have the right (but not the obligation) to give written notice to Seller that Buyer is taking over such prosecution or Maintenance action for such Patent and thereupon and thereafter Buyer shall have the sole right (but not the obligation) to take such prosecution or Maintenance action for such Patent. Seller shall, at Seller's expense, provide all reasonable cooperation and assistance to Buyer in connection with Buyer taking such prosecution or Maintenance action for such Patent. Seller shall reimburse Buyer, within **[***]** days of the date of Buyer's invoice setting forth such costs and expenses, for **[***]**% of the costs and expenses of such prosecution or Maintenance action.

Section 9.04 Patent Enforcement Against Commercial License Agreement Counterparties. **[***]**.

Section 9.05 Payments Enforcement Against Commercial License Agreement Counterparties. **[***]**.

Section 9.06 Seller Participation in Actions. **[***]**.

Section 9.07 Audits. Seller shall, upon request by Buyer and at the Buyer's costs and expenses, exercise the right, to the extent available to Seller under a respective Commercial License Agreement and to the extent reporting the contents and results to the Buyer is permitted by the relevant Commercial License Agreement (taking into account the waiver as contemplated under Section 4.14), to enforce the recordkeeping and reporting provisions of the Commercial License Agreement as to Net Sales, royalties and/or milestone events and audit and/or inspect the Commercial License Agreement counterparty's books and records to verify such counterparty's compliance or noncompliance with the counterparty's royalty and milestone payment obligations within the Assigned Rights, perform such audit and/or inspection in good faith and with appropriate diligence, and report to Buyer the contents of such reports and the results of such audit and/or inspection.

Section 9.08 No Backfilling. Seller covenants never to (a) directly or indirectly (including by licensing to a Third Party with a right to sublicense to such counterparty or such counterparty's Affiliate, successor or assign) re-license the Patents to any Commercial License Agreement counterparty (or its Affiliate, successor or assign) for any use that as of the Signature Date was covered by a Commercial License Agreement with such counterparty, nor (b) directly or indirectly covenant not to sue under the Patents any Commercial License Agreement counterparty (or its Affiliate, successor or assign) for any use that as of the Signature Date was covered by a Commercial License Agreement with such counterparty. Seller acknowledges that such covenants are necessary to prevent important harm to Buyer's financial interest, inasmuch as a Commercial License Agreement counterparty might terminate the Commercial License Agreement for convenience, or a Commercial License Agreement counterparty might procure a termination of the Commercial License Agreement for breach. (And it is further acknowledged that Buyer's financial interest and expectations would be further harmed if Seller or Seller's Affiliates or Representatives had any involvement in such

termination; but that such involvement would be difficult to prove and that it would be unfair to require Buyer to prove involvement by Seller or Seller's Affiliates or Representatives.) If the counterparty was free of the Commercial License Agreement and the Assigned Rights no longer applied, and Seller had previously re-enabled or thereafter re-enabled the counterparty commercially without Buyer having the benefit of the Assigned Rights in connection with such activity, it would (whether or not Seller benefited from such re-enablement) materially harm Buyer. Accordingly, Seller agrees that in the event of a breach by Seller of its covenant in the first sentence of this Section, any such re-enablement shall be void, and Section 9.04 of this Agreement shall apply, and in addition Seller shall be liable to Buyer in an amount equal **[***]**.

Section 9.09 Direction of Payments. If any Commercial License Agreement counterparty (or any Person acting on its behalf) delivers to Seller any amount in respect of any Commercial License Agreement royalty or milestone payment to which Buyer is entitled pursuant to the Assigned Rights, Seller shall receive such amount in trust for Buyer and shall immediately transmit **[***]**% of such amount to Seller, and shall instruct in writing such Commercial License Agreement counterparty (and any such Person acting on its behalf) to in the future pay directly to Buyer all Commercial License Agreement royalty and milestone payments to which Buyer is entitled pursuant to the Assigned Rights. In addition, if any Commercial License Agreement counterparty (or any Person acting on its behalf) corresponds or communicates with Buyer regarding the size or timing of any Commercial License Agreement royalty or milestone payment to which Buyer is entitled pursuant to the Assigned Rights or the Commercial License Agreement counterparty's obligation (or lack of obligation) in connection therewith, Buyer shall make no response which is prejudicial to Seller's interest and shall immediately and fully inform Seller in writing of such correspondence or communication, and shall request such Commercial License Agreement counterparty (and any such Person acting on its behalf) to in the future correspond or communicate directly with Buyer as to such matters. If Buyer receives any check or other negotiable instrument in respect of any Commercial License Agreement royalty or milestone payment to which Buyer is entitled pursuant to the Assigned Rights, which is made in favor of Seller, Buyer shall be entitled to, in the name of and on behalf of Seller, endorse such check or other negotiable instrument to Buyer.

Section 9.10 Confidentiality of Counterparty Information. Buyer agrees to be bound by the confidentiality undertakings binding Seller under each Commercial License Agreement for which the counterparty has delivered a consent as contemplated by Section 4.14, as if Buyer was a party thereto, and to treat the counterparty's confidential information disclosed by such counterparty or by Seller to Buyer in like manner as Seller would have to under the Commercial License Agreement, but subject to the express disclosure permissions set forth in the consent delivered by the relevant counterparty.

ARTICLE X

TERMINATION

Section 10.01 Termination of Agreement. Buyer or Seller may terminate this Agreement before the Closing, as provided below:

(k) Buyer and Seller may terminate this Agreement by mutual written consent;

(l) Buyer or Seller may terminate this Agreement if the Closing shall not have occurred by **[***]** (the "**Termination Date**"); provided that the right to terminate this Agreement under this Section 10.01(b) shall not be available to any Party whose breach of or failure to fulfill any obligation under this Agreement has been a principal cause of or resulted in the failure of the Closing to occur on or before such date;

(m) Buyer may terminate this Agreement by giving written notice to Seller in the event Seller is in breach of any representation, warranty or covenant contained in this Agreement, and such breach, individually or in combination with any other such breach, (i) would cause the conditions set forth in clauses (a) or (b) of Section 7.03 not to be satisfied and (ii) is not cured upon the earlier of (x) **[***]**;

(n) Seller may terminate this Agreement by giving written notice to Buyer in the event Buyer is in breach of any representation, warranty or covenant contained in this Agreement, and such breach, individually or in combination with any other such breach, (i) would cause the conditions set forth in clause (a) of Section 7.04 not to be satisfied and (ii) is not cured upon the earlier of (x) **[***]**.

Section 10.02 Effect of Termination. Any termination of this Agreement pursuant to Section 10.01 above shall be **[***]**. If any Party terminates this Agreement pursuant to Section 10.01, all obligations of the Parties hereunder shall terminate without any liability of any Party to any other Party (except for any liability of any Party for willful breaches of this Agreement). Notwithstanding the foregoing, the provisions of ARTICLE XI and ARTICLE XII shall survive the termination of this Agreement.

ARTICLE XI

MISCELLANEOUS

Section 11.01 Entire Agreement. This Agreement and the other Transaction Agreements (including the exhibits hereto and thereto and the documents referred to therein) and that certain confidentiality agreement between the Parties dated **[***]** (the "**Confidentiality Agreement**") constitute the entire agreement between the Parties with respect to the subject matter hereof and thereof and supersede any prior or contemporaneous understandings, agreements, or representations by or between the Parties, written or oral, to the extent they related in any way to the subject matter hereof and thereof, except that the Confidentiality Agreement is not superseded and continues in full force and effect. The Confidentiality Agreement is hereby modified to enable Confidential Information received thereunder to be used for the effectuation of the purposes of this Agreement as well as for assessing, evaluating and structuring a possible transaction. The Parties acknowledge and agree that no promises or representations were made to them concerning the subject matter of this Agreement (or of the other Transaction Agreements) which do not appear written herein or therein.

Section 11.02 Amendment. This Agreement, including this Section 11.02, may be amended or waived by mutual execution of an instrument in writing expressly stating such amendment or waiver, but not in any other way.

Section 11.03 Waivers. Neither the failure to exercise nor any delay by any Party in exercising any right, power or privilege under this Agreement or the documents referred to in this Agreement will operate as a waiver of such right, power or privilege, and no single or partial exercise of such right, power, or privilege will preclude any other or further exercise of such right, power, or privilege or the exercise of any other right, power, or privilege. To the maximum extent permitted by applicable Law, (a) no claim or right arising out of this Agreement or the documents referred to in this Agreement can be discharged by one Party, in whole or in part, by a waiver or renunciation of the claim or right unless in writing signed by the other Party; (b) no waiver that may be given by a Party will be applicable except in the specific instance for which it is given; and (c) no notice to or demand on one Party will be deemed to be a waiver of any obligation of such Party or of the right of the Party giving such notice or demand to take further action without notice or demand as provided in this Agreement or the documents referred to in this Agreement.

Section 11.04 Further Assurances. The Parties hereby covenant and agree to, without the necessity of any further consideration, execute, acknowledge and deliver any and all such other documents and take any such other action as may be reasonably necessary or appropriate to effectuate or more perfectly evidence the intent of this Agreement.

Section 11.05 Notices. All notices and other communications required or permitted hereunder shall be in writing, shall be effective when given, and shall in any event be deemed to be given upon receipt or, if earlier, (a) upon delivery, if delivered by hand, (b) two Business Days after deposit with a recognized international overnight courier, freight prepaid or (c) upon sending by email (or, if the email is sent other than before the close of business on a Business Day, then on the next Business Day), and shall be addressed to the intended recipient as set forth below.

If to Buyer:

Addressed to: Ligand Pharmaceuticals Incorporated
11119 North Torrey Pines Road, Suite 200
La Jolla, CA 92037
Attn: General Counsel
Email: **[***]**

If to Seller:

Addressed to: Selexis SA
18 chemin des Aulx
1228 Plan-les-Ouates
Geneva, Switzerland
Attn: CEO
Email: **[***]**

A Party may change the address to which notices and other communications required or permitted hereunder are to be delivered by giving the other Party 10 days' advance written notice to the other Party pursuant to the provisions above.

In the event a Commercial License Agreement counterparty delivers to Seller any notice or other communication which pertains to the Assigned Rights, Seller shall forthwith deliver such notice or other communication to Buyer by a means set forth in this Section 11.05.

Section 11.06 Relationship of Parties. Each of the Parties is an independent contractor and nothing in this Agreement is intended or shall be deemed to constitute a partnership, agency or joint venture relationship between the

Parties. Except as is expressly set forth herein, neither Party shall have the right to, and each Party agrees not to purport to, incur any debts or make any commitments or contracts for the other.

Section 11.07 Public Announcements. Neither Party shall use the name, trademark, trade name or logo of the other Party, its Affiliates or their Representatives in any publicity, promotion, news release or public disclosure relating to this Agreement or its subject matter, without the prior express written permission of the other Party, such permission not to be unreasonably withheld, except as may be required by Law or with the written approval of the other Party, such approval not to be unreasonably withheld.

Section 11.08 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Parties named herein and their respective successors and assigns. No assignment shall have the effect of relieving any Party to this Agreement of any of its obligations hereunder. The name of a Party appearing herein shall be deemed to include the names of such Party's successors and assigns to the extent necessary to carry out the intent of this Agreement.

Section 11.09 Expenses and Fees. Whether or not the Closing occurs, all fees and expenses incurred in connection with this transactions contemplated by this Agreement, including all Third Party Expenses, shall be the obligation of the respective Party incurring such fees and expenses.

Section 11.10 Counterparts/Electronic Delivery. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which taken together shall constitute one and the same instrument. A facsimile or .pdf signature shall be deemed an original.

Section 11.11 English Language Version. The version of this Agreement written in the English language shall control over any version written in any other language.

Section 11.12 Severability. This Agreement is severable. If any provision of this Agreement is determined by a final and binding court or arbitration judgment to be invalid, illegal or unenforceable to any extent, such provision shall not be not affected or impaired up to the limits of such invalidity, illegality or unenforceability; the validity, legality and enforceability of the remaining provisions of this Agreement shall not be affected or impaired in any way; and the Parties agree to negotiate in good faith to replace such invalid, illegal and unenforceable provision (or portion of provision) with a valid, legal and enforceable provision that achieves, to the greatest lawful extent under this Agreement, the economic, business and other purposes of such invalid, illegal or unenforceable provision (or portion of provision).

Section 11.13 Construction. The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement.

ARTICLE XII

GOVERNING LAW AND ARBITRATION

Section 12.01 Governing Law. This Agreement and the transactions contemplated hereby shall be governed, interpreted and construed by, under and pursuant to the laws of **[***]**, without regard to conflict of laws principles thereof.

Section 12.02 Arbitration.

(a) Any and all disputes, controversies or claims arising out of or relating to this Agreement (including the validity, invalidity, breach or termination hereof) shall be exclusively and finally resolved by binding arbitration. Such arbitration shall be held in New York, New York, under the rules of international arbitration of the International Chamber of Commerce then in effect. The arbitration shall be conducted by a sole arbitrator, reasonably knowledgeable about the pharmaceutical industry. The arbitrator shall determine how, when and by whom all expenses relating to the arbitration shall be paid, including the respective attorneys' fees and other expenses of each Party, the fees of the arbitrator and the administrative fee of the International Chamber of Commerce. Judgment upon any award rendered by the arbitrator may be entered in any court having jurisdiction.

(b) All arbitration proceedings hereunder shall be confidential and the arbitrator shall issue appropriate protective orders to safeguard each Party's Confidential Information. Except as required by applicable Laws, no Party shall make (or instruct the arbitrator to make) any public announcement with respect to the proceedings or decision of the arbitrator without prior written consent of the other Party.

(c) Each Party shall, in addition to all other remedies accorded by law (or in equity) 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. But, 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 12.02, or (ii) for such interim injunctive relief.

(d) The language of the arbitration shall be English.

IN WITNESS WHEREOF, the Parties have executed this Royalty Stream and Milestone Payments Purchase Agreement on and as of the date first above written.

SELEXIS SA

By:__

Name:__

Title:__

LIGAND PHARMACEUTICALS INCORPORATED

By:__

Name:__

Title:__

Exhibits:
A-Commercial License Agreements
B-Patents
C-Assignment and Bill of Sale
D-Patent Security Agreement

EXHIBIT A

Commercial License Agreements

[***]

EXHIBIT B

Patents

App/Pub/Pat No.	Title	Assignee	Filing Date	Issue Date	Expiration Date	Status	Exemplary Claims
Family 1							
[***] [***] [***]	[***]	[***] [***]	[***] [***]	[***]	[***] [***]	[***]	[***]

[***] [***]	[***]		[***]		[***]	[***]	[***]
Family 2							
[***] [***] [***]	[***]	[***]	[***] [***]	[***]	[***] [***]	[***]	[***]
[***] [***]			[***]			[***]	
[***] [***]	[***]		[***] [***]		[***]	[***]	
[***]			[***] [***]			[***]	
[***]			[***]		[***]	[***]	[***]
[***]			[***]		[***]	[***]	[***]
[***]			[***]		[***]	[***]	[***]
[***]			[***]		[***]	[***]	[***]
[***]			[***]			[***]	[***]
[***]			[***]			[***]	[***]
[***]			[***]			[***]	[***]
[***]			[***]			[***]	[***]

[***]

EXHIBIT C

Assignment and Bill of Sale

ASSIGNMENT AND BILL OF SALE

THIS ASSIGNMENT AND BILL OF SALE is made this 29th day of April, 2013 (the " **Effective Date**") by **Selexis SA**, a Swiss corporation with offices at 18 chemin des Aulx, 1228 Plan-les-Ouates, Geneva, Switzerland ("**Selexis**"), in favor of **Ligand Pharmaceuticals Incorporated,** a Delaware corporation with offices at 11119 North Torrey Pines Road, Suite 200, La Jolla, California 92037, USA ("**Ligand**").

RECITALS

WHEREAS, Selexis and Ligand entered into a Royalty Stream and Milestone Payments Purchase Agreement dated April 29, 2013 (the "**RSMPPA**"); and

WHEREAS, as contemplated by the RSMPPA, Selexis desires to assign to Ligand the Assigned Rights (as defined in the RSMPPA); and

NOW, **THEREFORE**, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Selexis hereby, with effect from the Effective Date, assigns to Ligand the Assigned Rights and all of Selexis' rights, title and interest in and under the Assigned Rights, for Ligand and any successors or assigns of Ligand to have and to hold forever.

Entire Agreement. This Assignment and Bill of Sale, together with the RSMPPA, constitutes the entire agreement of Selexis and Ligand with respect to its subject matter and merges and supersedes all prior or contemporaneous agreements, commitments, discussions and writings with respect hereto.

Governing law. This Assignment and Bill of Sale and the transactions contemplated hereby shall be governed, interpreted and construed by, under and pursuant to the laws of **[***]**, without regard to conflict of laws principles thereof.

Arbitration. Any and all disputes, controversies or claims arising out of or relating to this Assignment and Bill of Sale

(including the validity, invalidity, breach or termination hereof) shall be exclusively and finally resolved by binding arbitration in accordance with all of the provisions of Section 12.02 of the RSMPPA.

IN WITNESS WHEREOF, Selexis has executed this Assignment and Bill of Sale as of the Effective Date.

SELEXIS SA

By: _____

Name: _____
Title: _____

Acknowledged and agreed

LIGAND PHARMACEUTICALS INCORPORATED

By: _____

Name: _____
Title: _____

EXHIBIT D

Patent Security Agreement

PATENT SECURITY AGREEMENT

This **PATENT SECURITY AGREEMENT** (this "**Patent Security Agreement**") is made this 29th day of April, 2013, between **Selexis SA**, a Swiss corporation with offices at 18 chemin des Aulx, 1228 Plan-les-Ouates, Geneva, Switzerland ("**Grantor**"), and **Ligand Pharmaceuticals Incorporated,** a Delaware corporation with offices at 11119 North Torrey Pines Road, Suite 200, La Jolla, California 92037, USA ("**Secured Party**").

W I T N E S S E T H:

WHEREAS, Secured Party has agreed to provide valuable consideration to Grantor pursuant to a certain Royalty Stream and Milestone Payments Purchase Agreement dated April 29, 2013 (as amended, restated, supplemented or otherwise modified from time to time, the "**Agreement**") between Grantor and Secured Party but only upon the condition, among others, that the Grantor grants a certain security interest in certain collateral to Secured Party; and

WHEREAS, pursuant to the Agreement, Grantor is required to execute and deliver to Secured Party this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor hereby agrees as follows:

Defined Term. The defined term "**Patents**" shall mean the patents and patent applications set forth on Schedule I hereto, and all reissues, divisionals, reexaminations, renewals, extensions, provisionals, supplementary protection certificates, continuations and continuations-in-part thereof, and equivalent or similar registered rights anywhere in the world.

Grant of security interest in patents . Grantor hereby grants to Secured Party a continuing (as of the date first written above) first security interest in the Patents.

Security for obligations. **[***]**.

Agreement. Each of Grantor and Secured Party hereby acknowledges and affirms that all the terms and provisions of the Agreement are incorporated by reference herein as if fully set forth herein. In case of conflict between the terms of the Agreement and the terms of this Patent Security Agreement, the terms of the Agreement shall prevail.

Counterparts. This Patent Security Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all such separate counterparts shall together constitute but one and the same instrument. In proving this Patent Security Agreement in any proceedings, it shall not be necessary to produce or account for more than one such counterpart signed by the party against whom such enforcement is sought. Any signatures delivered by a party by facsimile transmission or by other electronic means of transmission shall be deemed an original executed counterpart hereof.

Governing Law. This Patent Security Agreement and the transactions contemplated hereby shall be governed, interpreted and construed by, under and pursuant to the laws of **[***]**, without regard to conflict of laws principles thereof.

Arbitration. Any and all disputes, controversies or claims arising out of or relating to this Patent Security Agreement (including the validity, invalidity, breach or termination hereof) shall be exclusively and finally resolved by binding arbitration in accordance with all of the provisions of Section 12.02 of the Agreement.

In witness thereof, Grantor and Secured Party have caused this Patent Security Agreement to be executed and delivered by their respective authorized officers as of the date first set forth above.

SELEXIS SA

By:_____
Name:_____
Title:_____

LIGAND PHARMACEUTICALS INCORPORATED

By:_____
Name:_____
Title: _____

Schedule I – Patents [**[***]**]

Exhibit 31.1

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: August 1, 2013

/s/ John L. Higgins

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

Exhibit 31.2

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: August 1, 2013

/s/ John P. Sharp
John P. Sharp
Vice President, Finance and Chief Financial Officer
(Principal Financial Officer)

Exhibit 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

In connection with the accompanying Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated (the "Company") for the quarter ended June 30, 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 June 30, 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 June 30, 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 June 30, 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: August 1, 2013

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

Exhibit 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

In connection with the accompanying Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated (the "Company") for the quarter ended June 30, 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 June 30, 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 June 30, 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 June 30, 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: August 1, 2013

/s/ John P. Sharp
John P. Sharp
Vice President, Finance and Chief Financial Officer
(Principal Financial Officer)