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

# FORM 10-Q

Mark One

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

For the quarterly period ended September 30, 2009

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.)** |
| **10275 Science Center Drive San Diego, CA** | **92121-1117** |
| **(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 ☐ Smaller Reporting Company ☐
(Do not check if a smaller reporting company)

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

As of October 30, 2009, the registrant had 113,016,515 shares of common stock outstanding.

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**LIGAND PHARMACEUTICALS INCORPORATED**
**QUARTERLY REPORT**

**FORM 10-Q**

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* No information provided due to inapplicability of item.

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**PART I. FINANCIAL INFORMATION**

**ITEM 1. FINANCIAL STATEMENTS**

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

| | September 30, 2009 | December, 31 2008 |
|---|---|---|
| **ASSETS** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 5,160 | $ 28,753 |
| Short-term investments | 39,033 | 51,918 |
| Accounts receivable, net | 2,110 | — |
| Other current assets | 1,667 | 2,300 |
| Current portion of co-promote termination payments receivable | 11,925 | 10,958 |
| Total current assets | 59,895 | 93,929 |
| Restricted investments | 1,341 | 1,341 |
| Property and equipment, net | 9,893 | 12,903 |
| Goodwill and other identifiable intangible assets | 482 | 5,375 |
| Long-term portion of co-promote termination payments receivable | 45,374 | 47,524 |
| Restricted indemnity account | — | 10,232 |
| Other assets | 101 | 144 |
| Total assets | $ 117,086 | $ 171,448 |
| **LIABILITIES AND STOCKHOLDERS' DEFICIT** | | |
| Current liabilities: | | |
| Accounts payable | $ 14,379 | $ 14,627 |
| Accrued liabilities | 12,411 | 12,665 |
| Allowances for loss on returns, rebates and chargebacks related to discontinued operations | 354 | 9,590 |
| Current portion of accrued litigation settlement costs | 1,180 | 8,680 |
| Current portion of deferred gain | 1,702 | 1,964 |
| Current portion of co-promote termination liability | 11,925 | 10,958 |
| Current portion of equipment financing obligations | 172 | 1,829 |
| Current portion of deferred revenue | 10,924 | 10,301 |
| Total current liabilities | 53,047 | 70,614 |
| Long-term portion of co-promote termination liability | 45,374 | 47,524 |
| Long-term portion of equipment financing obligations | — | 2,178 |
| Long-term portion of deferred revenue | 4,866 | 16,819 |
| Long-term portion of deferred gain | 2,128 | 23,292 |
| Other long-term liabilities | 12,824 | 9,041 |
| Total liabilities | 118,239 | 169,468 |
| Commitments and contingencies | | |
| Common stock subject to conditional redemption; 674,230 and 997,568 shares issued and outstanding at September 30, 2009 and December 31, 2008, respectively | 8,344 | 12,345 |
| Stockholders' deficit: | | |
| Convertible preferred stock, $0.001 par value; 5,000,000 shares authorized; none issued | — | — |
| Common stock, $0.001 par value; 200,000,000 shares authorized; 118,940,150 and 118,562,748 shares issued at September 30, 2009 and December 31, 2008, respectively | 119 | 119 |
| Additional paid-in capital | 716,785 | 711,195 |
| Accumulated other comprehensive income | 317 | 81 |
| Accumulated deficit | (684,584) | (679,626) |
| Treasury stock, at cost; 6,607,905 shares at September 30, 2009 and December 31, 2008, respectively | (42,134) | (42,134) |
| Total stockholders' deficit | (9,497) | (10,365) |
| | $ 117,086 | $ 171,448 |

*See accompanying notes.*

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

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2009 | 2008 | 2009 | 2008 |
| Revenues: | | | | |
| Royalties | $ 1,651 | $ 5,248 | $ 6,386 | $ 14,926 |
| Collaborative research and development and other revenues | 6,250 | — | 18,577 | — |
| Total revenues | 7,901 | 5,248 | 24,963 | 14,926 |
| Operating costs and expenses: | | | | |
| Research and development | 9,921 | 6,165 | 29,744 | 19,707 |
| General and administrative | 2,415 | 5,929 | 12,190 | 20,579 |
| Lease termination costs | 15,235 | — | 15,235 | — |
| Write-off of acquired in-process research and development. | — | — | 442 | — |
| Total operating costs and expenses | 27,571 | 12,094 | 57,611 | 40,286 |
| Accretion of deferred gain on sale leaseback | (20,444) | (491) | (21,426) | (1,473) |
| Income (loss) from operations | 774 | (6,355) | (11,222) | (23,887) |
| Other income (expense): | | | | |
| Interest income | 176 | 421 | 436 | 1,899 |
| Interest expense | (21) | (45) | (257) | (136) |
| Other, net | 126 | (155) | 137 | (1,427) |
| Total other income (expense), net | 281 | 221 | 316 | 336 |
| Income (loss) before income taxes | 1,055 | (6,134) | (10,906) | (23,551) |
| Income tax expense | — | (2,990) | — | (179) |
| Income (loss) from continuing operations | 1,055 | (9,124) | (10,906) | (23,730) |
| Discontinued operations: | | | | |
| Gain (loss) on sale of AVINZA Product Line before income tax benefit | 608 | 122 | 5,331 | 7,287 |
| Gain (loss) on sale of Oncology Product Line before income tax benefit | 140 | (12,799) | 591 | (12,569) |
| Income tax benefit on discontinued operations | — | 3,676 | — | 525 |
| Discontinued operations | 748 | (9,001) | 5,922 | (4,757) |
| Net income (loss): | $ 1,803 | $ (18,125) | $ (4,984) | $ (28,487) |
| Basic and diluted per share amounts: | | | | |
| Income (loss) from continuing operations | $ 0.01 | $ (0.10) | $ (0.09) | $ (0.25) |
| Discontinued operations | 0.01 | (0.09) | 0.05 | (0.05) |
| Net income (loss) | $ 0.02 | $ (0.19) | $ (0.04) | $ (0.30) |
| Weighted average number of common shares - basic | 113,006,842 | 95,068,102 | 113,102,455 | 95,059,166 |
| Weighted average number of common shares - diluted | 113,139,102 | 95,068,102 | 113,102,455 | 95,059,166 |

*See accompanying notes.*

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

| | For the nine months ended September 30, | |
|---|---|---|
| | 2009 | 2008 |
| **Operating activities** | | |
| Net loss | $ (4,984) | $ (28,487) |
| Less: gain (loss) from discontinued operations | 5,922 | (4,757) |
| Loss from continuing operations | (10,906) | (23,730) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Accretion of deferred gain on sale leaseback | (21,426) | (1,473) |
| Impairment and amortization of acquired intangible assets | 1,500 | — |
| Depreciation and amortization of property and equipment | 2,370 | 814 |
| Non-cash lease costs | 345 | 4,975 |
| Non-cash development milestone revenue | (915) | — |
| Write-off of acquired in-process research and development | 441 | — |
| Loss (gain) on asset write-offs | (2) | 776 |
| Realized loss on investment | (72) | 1,395 |
| Stock-based compensation | 2,441 | 2,787 |
| Other | (3) | 8 |
| Changes in operating assets and liabilities, net of acquisition: | | |
| Accounts receivable, net | (2,110) | — |
| Other current assets | 633 | 1,564 |
| Other long term assets | 10,064 | (147) |
| Accounts payable and accrued liabilities | (7,936) | (9,870) |
| Other liabilities | 3,367 | (568) |
| Deferred revenue | (6,996) | — |
| Net cash used in operating activities of continuing operations | (29,205) | (23,469) |
| Net cash used in operating activities of discontinued operations | (3,307) | (3,349) |
| Net cash used in operating activities | (32,512) | (26,818) |
| **Investing activities** | | |
| Purchases of property and equipment | (537) | (454) |
| Proceeds from sale of property and equipment and building | 16 | 42 |
| Purchases of short-term investments | (32,806) | (62,373) |
| Proceeds from sale of short-term investments | 45,760 | 19,263 |
| Other, net | 261 | 80 |
| Net cash provide by (used in) investing activities of continuing operations | 12,694 | (43,442) |
| Net cash provided by investing activities of discontinued operations | — | 8,058 |
| Net cash provided by (used in) investing activities | 12,694 | (35,384) |
| **Financing activities** | | |
| Principal payments on equipment financing obligations | (392) | (1,267) |
| Repayment of debt | (3,443) | — |
| Net proceeds from issuance of common stock | 60 | 71 |
| Repurchase of common stock | — | (1,613) |
| Net cash used in financing activities | (3,775) | (2,809) |
| Net decrease in cash and cash equivalents | (23,593) | (65,011) |
| Cash and cash equivalents at beginning of period | 28,753 | 76,812 |
| Cash and cash equivalents at end of period | $ 5,160 | $ 11,801 |

*See accompanying notes.*

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

## 1. Basis of Presentation

The accompanying condensed consolidated financial statements of Ligand Pharmaceuticals Incorporated (the "Company" or "Ligand") were prepared in accordance with instructions for this Quarterly Report on Form 10-Q for the quarter ended September 30, 2009 and, therefore, do not include all information necessary for a complete presentation of financial condition, results of operations, and cash flows in conformity with accounting principles generally accepted in the United States of America. However, all adjustments, consisting of normal recurring adjustments, which, in the opinion of management, are necessary for a fair presentation of the condensed consolidated financial statements, have been included. The results of operations and cash flows for the nine months ended September 30, 2009 and 2008 are not necessarily indicative of the results that may be expected for the entire fiscal year or any other future period. These statements should be read in conjunction with the consolidated financial statements and related notes, which are included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008.

The Company's and its partners' products are in various stages of development. Potential products that are at early stages of development may not reach the market for a number of reasons. Prior to generating revenues from these products, the Company or its collaborative partners must complete the development of the products in the human health care market. No assurance can be given that: (1) product development efforts will be successful, (2) required regulatory approvals for any indication will be obtained, (3) any products, if introduced, will be capable of being produced in commercial quantities at reasonable costs, or (4) patient and physician acceptance of these products will be achieved. The Company faces risks common to companies whose products are in various stages of development. These risks include, among others, the Company's need for additional financing to complete its research and development programs and commercialize its technologies. The Company has incurred significant losses since its inception. At September 30, 2009, the Company's accumulated deficit was $684.6 million. Management expects that the Company will continue to incur substantial research and development expenses. As further discussed in Note 2, the Company sold its oncology product line ("Oncology") on October 25, 2006 and its AVINZA product line ("AVINZA") on February 26, 2007. The operating results for Oncology and AVINZA have been presented in the accompanying condensed consolidated financial statements as "Discontinued Operations."

*Principles of Consolidation*

The condensed consolidated financial statements include the Company's wholly owned subsidiaries, Ligand Pharmaceuticals International, Inc., Ligand Pharmaceuticals (Canada) Incorporated, Seragen, Inc. ("Seragen"), Nexus Equity VI LLC ("Nexus") and Pharmacopeia, LLC. All significant intercompany accounts and transactions have been eliminated in consolidation.

*Use of Estimates*

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

*Income (Loss) Per Share*

Basic earnings 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. For the nine months ended September 30, 2009 and 2008 and the three months ended September 30, 2008, no potential common shares are included in the computation of any diluted per share amounts,

including income (loss) per share from discontinued operations and net income (loss) per share, as the Company reported a loss from continuing operations. Potential common shares, the shares that would be issued upon the exercise of outstanding stock options and warrants and the vesting of restricted shares, were 5.7 million and 4.0 million at September 30, 2009 and 2008, 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 September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2009 | 2008 | 2009 | 2008 |
| Net income (loss) from continuing operations | $ 1,055 | $ (9,124) | $ (10,906) | $ (23,730) |
| Discontinued operations | 748 | (9,001) | 5,922 | (4,757) |
| Net income (loss) | 1,803 | (18,125) | (4,984) | (28,487) |
| Shares used to compute basic income (loss) per share | 113,006,842 | 95,068,102 | 113,102,455 | 95,059,166 |
| Dilutive potential common shares: | | | | |
| Stock Options | — | — | — | — |
| Restricted stock | 132,260 | — | — | — |
| Shares used to compute diluted income (loss) per share | 113,139,102 | 95,068,102 | 113,102,455 | 95,059,166 |
| Basic and diluted per share amounts: | | | | |
| Income (loss) from continuing operations | $ 0.01 | $ (0.10) | $ (0.09) | $ (0.25) |
| Discontinued operations | 0.01 | (0.09) | 0.05 | (0.05) |
| Net income (loss) | $ 0.02 | $ (0.19) | $ (0.04) | $ (0.30) |

*Guarantees and Indemnifications*

Under its amended and restated bylaws, the Company has agreed to indemnify its officers and directors for certain events or occurrences arising as a result of the officer's or director's serving in such capacity. The term of the indemnification period is for the officer's or director's lifetime. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited. The Company has a directors and officers liability insurance policy that limits its exposure and enables it to recover a portion of any future amounts paid. As a result of its insurance policy coverage, management believes the estimated fair value of these indemnification agreements is minimal and has no liabilities recorded for these agreements as of September 30, 2009 and December 31, 2008.

*Revenue Recognition*

Royalties on sales of AVINZA and PROMACTA are recognized in the quarter reported by the respective partner. PROMACTA royalties are recorded net of amounts due to other parties.

Revenue from research funding under the Company's collaboration agreements is earned and recognized on a percentage of completion basis as research hours are incurred in accordance with the provisions of each agreement.

Nonrefundable, up-front license fees and milestone payments with standalone value that are not dependent on any future performance by the Company under the Company's 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.

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) collectibility 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.

*Income Taxes*

The Company recognizes liabilities or assets for the deferred tax consequences of temporary differences between the tax bases of assets or liabilities and their reported amounts in the financial statements. These temporary differences will result in taxable or deductible amounts in future years when the reported amounts of the assets or liabilities are recovered or settled. A valuation allowance is established when management determines that it is more likely than not that all or a portion of a deferred tax asset will not be realized. Management evaluates the realizability of its net deferred tax assets on a quarterly basis and valuation allowances are provided, as necessary. During this evaluation, management reviews its forecasts of income in conjunction with other positive and negative evidence surrounding the realizability of its deferred tax assets to determine if a valuation allowance is required. Adjustments to the valuation allowance will increase or decrease the Company's income tax provision or benefit.

The Company recognizes windfall tax benefits associated with the exercise of stock options directly to stockholders' equity only when realized. Accordingly, deferred tax assets are not recognized for net operating loss carryforwards resulting from windfall tax benefits occurring from January 1, 2006 onward. A windfall tax benefit occurs when the actual tax benefit realized by the Company upon an employee's disposition of a share-based award exceeds the deferred tax asset, if any, associated with the award that the Company had recorded.

A tax position must meet a minimum probability threshold before a financial statement benefit is recognized. The minimum threshold is defined as a tax position that is more likely than not to be sustained upon examination by the applicable taxing authority, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The Company recognizes interest and penalties related to uncertain tax positions in income tax expense.

*Accounting for Stock-Based Compensation*

Stock-based compensation expense for awards to employees and non-employee directors is recognized on a straight-line basis over the vesting period until the last tranche vests. Compensation cost for consultant awards is recognized over each separate tranche's vesting period. The Company recognized compensation expense of $0.7 million and $0.9 million for the three months ended September 30, 2009 and 2008, respectively. The compensation expense related to share-based compensation arrangements is recorded as components of research and development expenses ($0.5 million and $0.3 million) and general and administrative expenses ($0.2 million and $0.6 million) for the three months ended September 30, 2009 and 2008, respectively.

The Company recognized compensation expense of $2.4 million and $2.8 million for the nine months ended September 30, 2009 and 2008, respectively. The compensation expense related to share-based compensation arrangements is recorded as a component of research and development expense ($1.4 million and $0.9 million) and general and administrative expense ($1.0 million and $1.9 million) for the nine months ended September 30, 2009 and 2008, respectively.

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 September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2009 | 2008 | 2009 | 2008 |
| Risk-free interest rate | 2.8% | 3.4% | 2.1% | 3.0% |
| Dividend yield | — | — | — | — |
| Expected volatility | 72% | 67% | 74% | 65% |
| Expected term | 6.0 years | 6.0 years | 5.7 years | 6.0 years |

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.

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 at December 31, 2008 | 3,030,076 | $ 6.55 | | |
| Granted | 1,597,850 | 2.65 | | |
| Exercised | (1,250) | 2.37 | | |
| Forfeited | (280,587) | 4.20 | | |
| Cancelled | (209,845) | 8.08 | | |
| Balance at September 30, 2009 | 4,136,244 | $ 5.13 | 6.95 | $ 44 |
| Exercisable at September 30, 2009 | 2,006,646 | $ 7.02 | 5.12 | $ 44 |
| Options expected to vest as of September 30, 2009 | 3,897,884 | $ 5.23 | 6.84 | $ 44 |

The weighted-average grant-date fair value of all stock options granted during the nine months ended September 30, 2009 was $1.68 per share. The total intrinsic value of all options exercised during the nine months ended September 30, 2009 was $1,000. As of September 30, 2009, there was $5.5 million of total unrecognized compensation cost related to nonvested stock options. That cost is expected to be recognized over a weighted-average period of 2.8 years.

On May 29, 2009, the Company's stockholders approved the amendment and restatement of the Company's 2002 Stock Incentive Plan (the "Amended 2002 Plan"). The Company's 2002 Stock Incentive Plan was amended to (i) increase the number of shares available for issuance under the Amended 2002 Plan by 7,600,000 shares, (ii) revise the list of performance criteria that may be used by the compensation committee for purposes of granting awards under the Amended 2002 Plan that are intended to qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code, as amended, and (iii) eliminate the automatic option grant program for non-employee directors, the director fee stock issuance program and the director fee option grant program, which programs have been superseded by the Company's amended and restated Director Compensation Policy. As of September 30, 2009, 8.3 million shares were available for future option grants or direct issuance under the Amended 2002 Plan.

Restricted Stock Activity

Restricted stock activity for the nine months ended September 30, 2009 is as follows:

| | Shares | Weighted-Average Grant Date Stock Price |
|---|---|---|
| Nonvested at December 31, 2008 | 598,672 | $ 5.14 |
| Granted | 304,460 | 2.72 |
| Vested | (268,246) | 6.52 |
| Forfeited | (75,749) | 3.61 |
| Nonvested at September 30, 2009 | 559,137 | $ 3.37 |

The weighted-average grant-date fair value of restricted stock granted during the nine months ended September 30, 2009 was $2.72 per share. As of September 30, 2009, there was $1.1 million of total unrecognized compensation cost related to nonvested restricted stock. That cost is expected to be recognized over a weighted-average period of 1.9 years.

Employee Stock Purchase Plan

On May 29, 2009, the Company's stockholders approved the amendment and restatement of the Company's Employee Stock Purchase Plan (the "Amended ESPP"). The Amended ESPP was amended to (a) increase the number of shares authorized for issuance under the Employee Stock Purchase Plan by 800,000, (b) extend the term of the Employee Stock Purchase Plan until June 2019, (c) reduce the length of offering periods from twenty-four months to six months and reduce the number of purchase intervals during each offering period from eight to one, (d) eliminate the requirement that an employee have at least three months of employment as a condition to his or her eligibility to participate in the Amended ESPP, (e) provide that a participant will be eligible to purchase up to 7,500 shares of Ligand common stock during each offering period, but in no event may a participant purchase more than 7,500 shares of common stock during any calendar year, and (f) update the plan to conform it to recently issued Treasury Regulations applicable to employee stock purchase plans.

The Amended ESPP allows employees to purchase a limited amount of 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 35,802 shares of common stock issued under the Amended ESPP during the nine months ended September 30, 2009, resulting in a compensation expense of $45,000. There were 32,362 shares of common stock issued under the Amended ESPP during the nine months ended September 30, 2008, resulting in a compensation expense of $20,000. As of September 30, 2009, 811,589 shares were available for future purchases under the Amended ESPP.

Warrants

As of September 30, 2009, warrants to purchase 867,637 shares of the Company's common stock were outstanding with an exercise price of $8.59 per share and warrants to purchase 105,554 shares of the Company's common stock were outstanding with an exercise price of $9.47 per share. The warrants were assumed in the acquisition of Pharmacopeia, Inc. and expire in April 2012 and March 2011, respectively.

Share Repurchases

In March 2007, the Company's Board of Directors authorized up to $100.0 million in share repurchases over the subsequent 12 months. The Company repurchased an aggregate of 6.5 million shares of its common stock totaling $41.2 million prior to the expiration of the repurchase period on March 31, 2008.

*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. The following table summarizes the various investment categories at September 30, 2009 and December 31, 2008 (in thousands):

| | Cost | Gross unrealized gains | Gross unrealized losses | Estimated fair value |
|---|---|---|---|---|
| **September 30, 2009** | | | | |
| U.S. government securities | $20,395 | $ 62 | $ — | $20,457 |
| Certificates of deposit | 6,279 | — | (1) | 6,278 |
| Corporate obligations | 12,059 | 239 | — | 12,298 |
| | 38,733 | 301 | (1) | 39,033 |
| Certificates of deposit - restricted | 1,341 | — | — | 1,341 |
| | $40,074 | $ 301 | $ (1) | $40,374 |
| **December 31, 2008** | | | | |
| U.S. government securities | $50,174 | $ 81 | $ — | $50,255 |
| Corporate obligations | 1,663 | — | — | 1,663 |
| | 51,837 | 81 | — | 51,918 |
| Certificates of deposit - restricted | 1,341 | — | — | 1,341 |
| | $53,178 | $ 81 | $ — | $53,259 |

In July 2007, the Company purchased $5.0 million of commercial paper issued by Golden Key Ltd. The investment was highly-rated and within the Company's investment policy at the time of purchase, but during the third quarter of 2007, large credit rating agencies downgraded the quality of this security. In addition, as a result of not meeting certain liquidity covenants, the assets of Golden Key Ltd. were assigned to a trustee who established a committee of the largest senior credit holders to determine the next steps. Subsequently, Golden Key Ltd. defaulted on its obligation to settle the security on the stated maturity date of October 10, 2007. Based on available information, management estimated that it would be able to recover approximately $1.7 million of this investment as of September 30, 2009 and December 31, 2008. As a result of ongoing volatility in the liquidity of the capital markets, the Company may be exposed to additional impairment for this investment until it is fully recovered or disposed of.

*Other Current Assets*

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

| | September 30, 2009 | December 31, 2008 |
|---|---|---|
| Income taxes receivable | $ — | $ 817 |
| Prepaid expenses | 1,045 | 1,147 |
| Other receivables | 622 | 325 |
| Other | — | 11 |
| | $ 1,667 | $ 2,300 |

*Property and Equipment*

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

| | September 30, 2009 | December 31, 2008 |
|---|---|---|
| Equipment and leasehold improvements | $ 54,140 | $ 54,664 |
| Less accumulated depreciation and amortization | (44,247) | (41,761) |
| | $ 9,893 | $ 12,903 |

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. During the third quarter 2008, the Company conducted a physical count of its fixed assets that resulted in the write-off of gross fixed assets totaling $23.8 million and related accumulated depreciation of $23.7 million.

*Goodwill and Other Identifiable Intangible Assets*

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

| | September 30, 2009 | December 31, 2008 |
|---|---|---|
| Collaborative research and development with Schering-Plough | $ 482 | $ 2,000 |
| Goodwill | — | 3,375 |
| | $ 482 | $ 5,375 |

The collaborative research and development with Schering-Plough was being amortized on a straight-line basis over a period of three years. As discussed in Note 11, in July 2009, the Company and N.V. Organon, which was acquired by Schering-Plough in November 2007, mutually agreed to terminate the research collaboration under their collaboration and license agreement. Schering-Plough will continue to fund research collaboration activities on those targets currently under investigation through December 2009. As a result of the termination, the Company recorded an impairment charge of $1.1 million during the quarter ended September 30, 2009 and adjusted its remaining useful life to four months. During the three and nine months ended September 30, 2009, the Company recorded $0.1 million and $0.4 million, respectively, of amortization expense. Additionally, during the three months ended March 31, 2009, the Company adjusted its preliminary purchase price allocation for Pharmacopeia, Inc., which resulted in an increase in transaction costs of $0.3 million and decreases in property and equipment of $1.1

million, liabilities assumed of $4.4 million and goodwill of $3.0 million. During the three months ended June 30, 2009, the Company further adjusted its purchase price allocation for Pharmacopeia, Inc., which resulted in an increase in the write-off of acquired in-process research and development of $0.4 million and decreases in property and equipment of $0.1 million, acquired intangible assets of $17,000 and goodwill of $0.3 million.

*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 discussed above, during the quarter ended September 30, 2009, the Company recorded an impairment charge of $1.1 million to research and development expense as a result of the termination of its collaborative research and development agreement with Schering-Plough. During the nine months ended September 30, 2008, the Company recorded an impairment charge of $0.7 million to general and administrative expense as a result of vacating a building in February 2008. As of September 30, 2009, management believes that the future cash flows to be received from its long-lived assets will exceed the assets' carrying value.

*Accrued Liabilities*

Accrued liabilities consist of the following (in thousands):

| | September 30, 2009 | December 31, 2008 |
|---|---|---|
| Warrant liability | $ 598 | $ 670 |
| Compensation | 2,367 | 2,686 |
| Legal | 162 | 4,166 |
| Restructuring costs | 64 | 848 |
| Lease termination payments | 5,307 | — |
| Other | 3,913 | 4,295 |
| | $ 12,411 | $ 12,665 |

The following summarizes the activity in the allowances for loss on returns, rebates and charge-backs related to discontinued operations for the nine months ended September 30, 2009 (in thousands):

| | Charge-backs and Rebates | Returns | Total |
|---|---|---|---|
| Balance at December 31, 2008 | $ 508 | $ 9,082 | $ 9,590 |
| AVINZA Transaction Provision (1) | (27) | (5,362) | (5,389) |
| Oncology Transaction Provision (2) | (48) | (728) | (776) |
| Payments | (232) | — | (232) |
| Charges | — | (2,839) | (2,839) |
| Balance at September 30, 2009 | $ 201 | $ 153 | $ 354 |

(1) The AVINZA transaction provision amounts represent changes in the estimates of the accruals for rebates, chargebacks and returns recorded in connection with the sale of the AVINZA product line.

(2) The Oncology transaction provision amounts represent changes in the estimates of the accruals for rebates, chargebacks and returns recorded in connection with the sale of the Oncology product line.

*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). Comprehensive income (loss) is as follows (in thousands):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2009 | 2008 | 2009 | 2008 |
| Net income (loss) as reported | $1,803 | $(18,125) | $(4,984) | $(28,487) |
| Unrealized net gain (loss) on available-for-sale securities | 223 | 131 | 236 | 94 |
| Comprehensive income (loss) | $2,026 | $(17,994) | $(4,748) | $(28,393) |

*Recently Adopted Accounting Pronouncements*

The FASB established the *FASB Accounting Standards Codification*™ ("Codification") as the source of authoritative U.S. generally accepted accounting principles ("GAAP") recognized by the FASB to be applied by nongovernmental entities in the preparation of financial statements issued for interim and annual periods ending after September 15, 2009. The Codification has changed the manner in which U.S. GAAP guidance is referenced, but did not have an impact on the Company's consolidated financial position, results of operations or cash flows.

**2. Discontinued Operations**

*Oncology Product Line*

On September 7, 2006, the Company, Eisai Inc., a Delaware corporation and Eisai Co., Ltd., a Japanese company (together with Eisai Inc., "Eisai"), entered into a purchase agreement (the "Oncology Purchase Agreement") pursuant to which Eisai agreed to acquire all of the Company's worldwide rights in and to the Company's 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 the Company's four marketed oncology drugs: ONTAK, Targretin capsules, Targretin gel and Panretin gel. For the three and nine months ended September 30, 2009, the Company recorded pre-tax gains of $0.1 million and $0.6 million, respectively, due to subsequent changes in certain estimates of assets and liabilities recorded as of the sale date. For the three and nine months ended September 30, 2008, the Company recorded pre-tax losses of $12.8 million and $12.6 million, respectively, which include $13.0 million of litigation settlement costs for The Salk Institute as well as subsequent changes in certain estimates of assets and liabilities recorded as of the sale date.

Prior to the Oncology sale, the Company recorded accruals for rebates, chargebacks, and other discounts related to Oncology products when product sales were recognized as revenue under the sell-through method. Upon the Oncology sale, the Company accrued for rebates, chargebacks, and other discounts related to Oncology products in the distribution channel which had not sold-through at the time of the Oncology sale and for which the Company retained the liability subsequent to the sale. These products expired at various dates through July 31, 2008. The Company's accruals for Oncology rebates, chargebacks, and other discounts total $0.2 million and $0.4 million as of September 30, 2009 and December 31, 2008, respectively.

Additionally, and pursuant to the terms of the Oncology Purchase Agreement, the Company retained the liability for returns of product from wholesalers that had been sold by the Company prior to the close of the transaction. Accordingly, as part of the accounting for the gain on the sale of the Oncology Product Line, the Company recorded a reserve for Oncology product returns. Under the sell-through revenue recognition method, the Company previously did not record a reserve for returns from wholesalers. The Company's reserve for Oncology returns is $23,000 and $0.9 million as of September 30, 2009 and December 31, 2008, respectively.

*AVINZA Product Line*

On September 6, 2006, the Company and King Pharmaceuticals, Inc. ("King"), entered into a purchase agreement (the "AVINZA Purchase Agreement"), pursuant to which King agreed to acquire all of the Company's 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 (collectively, the "Transaction"). For the three and nine months ended September 30, 2009, the Company recorded pre-tax gains of $0.6 million and $5.3 million, respectively, due to subsequent changes in certain estimates of assets and liabilities recorded as of the sale date. For the three and nine months ended September 30, 2008, the Company recorded pre-tax gains of $0.1 million and $7.3 million, respectively, due to subsequent changes in certain estimates of assets and liabilities recorded as of the sale date.

Prior to the AVINZA sale, the Company recorded accruals for rebates, chargebacks, and other discounts related to AVINZA products when product sales were recognized as revenue under the sell-through method. Upon the AVINZA sale, the Company accrued for rebates, chargebacks, and other discounts related to AVINZA products in the distribution channel which had not sold-through at the time of the AVINZA sale and for which the Company retained the liability subsequent to the sale. These products expired at various dates through June 30, 2009. The Company's accruals for AVINZA rebates, chargebacks, and other discounts total $8,000 and $0.1 million as of September 30, 2009 and December 31, 2008, respectively.

Additionally, and 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 the Company 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. AVINZA products sold by the Company may be returned through a specified period subsequent to the product expiration date, but no later than December 31, 2009. Under the sell-through revenue recognition method, the Company previously did not record a reserve for returns from wholesalers. The Company's reserve for AVINZA returns is $0.1 million and $8.2 million as of September 30, 2009 and December 31, 2008, respectively.

**3. Financial Instruments**

The Company measures certain financial assets and liabilities at fair value on a recurring basis, including available-for-sale fixed income and equity securities and other equity securities. The fair value of these certain financial assets and liabilities was determined using the following inputs at September 30, 2009:

| | 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: | | | | |
| Fixed income available-for-sale securities | $39,033 | $ 37,298 | $ 1,735 | $ — |
| Total assets | 39,033 | 37,298 | 1,735 | — |
| Liabilities: | | | | |
| Warrant liability | 598 | — | — | 598 |
| Total liabilities | $ 598 | $ — | $ — | $ 598 |

The Company's short-term investments are fixed income available-for-sale securities and include U.S. Government Notes, Corporate Notes and Corporate Discount Commercial Paper. The fair value of the Company's short-term investments are determined using quoted market prices in active markets. The fair value of the warrant liability is determined using the Black-Scholes option-pricing model, which uses certain significant observable inputs, including stock price (quoted market prices in active market), warrant exercise price (defined in warrant agreement), expected life of warrant (defined in warrant agreement), dividend yields (determined by the Company), and risk-free interest rate (quoted market prices based on expected life assumption).

**4. AVINZA Co-Promotion**

In February 2003, the Company and Organon Pharmaceuticals USA Inc. ("Organon") announced that they had entered into an agreement for the co-promotion of AVINZA. Subsequently in January 2006, the Company 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 and return of rights under the terms of the agreement, the Company agreed to and paid Organon $37.8 million in October 2006. The Company further agreed to and paid Organon $10.0 million in January 2007, in consideration of certain minimum sales calls during a Transition Period. In addition, following the Transition Period, the Company agreed to make 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.

On February 26, 2007, the Company consummated its agreement with King pursuant to which King acquired all of the Company's rights in and to AVINZA, assumed certain liabilities, and reimbursed the Company the $47.8 million previously paid to Organon (comprised of the $37.8 million paid in October 2006 and the $10.0 million that the Company paid in January 2007). King also assumed the Company's co-promote termination obligation to make payments to Organon based on net sales of AVINZA. In connection with King's purchase of AVINZA, Organon did not consent to the legal assignment of the co-promote termination obligation to King. Accordingly, the Company remains liable to Organon in the event of King's default of the obligation. Therefore, the Company recorded an asset as of February 26, 2007 to recognize King's assumption of the obligation, while continuing to carry the co-promote termination liability in the Company's consolidated financial statements to recognize the Company's legal obligation as primary obligor to Organon. This asset represents a non-interest bearing receivable for future payments to be made by King and is recorded at its fair value based on management's estimate of future sales of AVINZA. As of September 30, 2009 and thereafter, the receivable and liability will remain equal and adjusted each quarter for changes in the estimated fair value of the obligation including for any changes in the estimate of future net AVINZA product sales. This receivable will be assessed on a quarterly basis for impairment (e.g., in the event King defaults on the assumed obligation to pay Organon). As of September 30, 2009 and December 31, 2008, the fair value of the co-promote termination liability (and the corresponding receivable) was determined using a discount rate of 15%.

On an annual 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 September 30, 2009 is as follows (in thousands):

| | |
|---|---|
| Net present value of payments based on estimated future net AVINZA product sales as of December 31, 2008 | $ 58,482 |
| Assumed payments made by King or assignee | (6,559) |
| September 30, 2009 fair value adjustment of estimated future payments based on estimated future net AVINZA product sales | 5,376 |
| Total co-promote termination liability as of September 30, 2009 | 57,299 |
| Less: current portion of co-promote termination liability as of September 30, 2009 | (11,925) |
| Long-term portion of co-promote termination liability as of September 30, 2009 | $ 45,374 |

**5. Property Leases**

In August 2009, the Company entered into a lease termination agreement for its 82,500 square foot office and laboratory facility in San Diego, California, which had a lease term through November 2021. Under the terms of the termination agreement, the Company will pay a termination fee of $14.3 million as follows: $4.5 million was paid upon signing, $4.5 million in July 2010 and $5.3 million in April 2011. As a result, during the third quarter of 2009, the Company recorded lease termination costs of $15.2 million, which included the net present value of the lease termination payments of $14.3 million and $0.9 million of other costs associated with the lease termination. In addition, the Company entered into a new lease for a period of 27 months commencing October 2009, for premises consisting of approximately 30,000 square feet of office and lab space located in San Diego to serve as its new corporate headquarters. Under the terms of the new lease, the Company pays a basic annual rent of $1.2 million

(subject to an annual fixed percentage increase, as set forth in the agreement), plus other normal and necessary expenses associated with the lease.

The Company leases approximately 99,000 square feet in three facilities in Cranbury, New Jersey under leases that expire in 2016. The leases for the New Jersey facilities provide generally for scheduled rent increases, options to extend the leases with certain changes to the terms of the lease agreement, and refurbishment allowances. Commencing September 2009, the Company sublet 5,100 square feet of space through August 2014. As of September 30, 2009, the Company expects to receive $0.5 million in aggregate future lease payments over the duration of the sublease agreement.

The Company also leases an office and research facility in San Diego, California under an operating lease arrangement through July 2015. Commencing January 2008, the Company sublet this facility through July 2015 and fully vacated this facility in February 2008. The lease agreement provides for increases in annual rents based on changes in the Consumer Price Index or fixed percentage increases ranging from 3% to 7%. The sublease agreement provides for a 3% increase in annual rents. As of September 30, 2009, the Company expects to receive aggregate future minimum lease payments totaling $5.1 million (nondiscounted) over the duration of the sublease agreement. The Company recorded a net charge to operating expenses of $4.3 million for exit costs when it fully ceased use of this facility in the first quarter of 2008. The net charge consisted of a $6.5 million charge for future rent payments offset by a $2.3 million reversal of deferred rent. As of September 30, 2009 and December 31, 2008, $5.6 million and $6.0 million, respectively, has been recorded as a liability for these exit costs on the condensed consolidated balance sheets.

**6. Litigation**

The SEC issued a formal order of private investigation dated September 7, 2005, which was furnished to the Company's legal counsel on September 29, 2005, to investigate the circumstances surrounding the Company's restatement of its consolidated financial statements for the years ended December 31, 2002 and 2003, and for the first three quarters of 2004. In April 2009, the Company received notification from the SEC that it had completed its investigation and was not recommending enforcement action at this time against the Company relating to the previously disclosed SEC investigation in connection with the restatement of the Company's financial statements as of and for the years ended December 31, 2002 and 2003 and for the first three quarters of 2004. As a result, in April 2009, the Company received $10.3 million from a restricted indemnity account which had been established in a trust account with Dorsey & Whitney LLP, counsel to the Company's independent directors and to the Audit Committee of the Company's Board of Directors, to support the Company's indemnification obligations to continuing and departing directors in connection with the SEC investigation and related matters.

On March 4, 2008, The Rockefeller University (Rockefeller) filed suit against the Company alleging, among other things, a breach by the Company of their September 30, 1992 license agreement with Rockefeller, as well as other causes of action for unjust enrichment, quantum meruit, specific performance to perform an audit and declaratory relief. In February 2009, the Company reached a settlement with Rockefeller whereby the parties resolved all disputes that have arisen between them, including Rockefeller's primary claim relating to the development of PROMACTA as well the Company's counterclaims. As part of the settlement, the parties executed mutual releases and agreed to jointly seek dismissal with prejudice of all claims, demands and causes of action, whether known or unknown, arising out of or based upon the license agreement, the ongoing litigation, PROMACTA, LGD-4665, and any other compound developed by the Company that was subject to the license agreement. The Company also agreed to pay Rockefeller $5.0 million immediately upon settlement, $1.0 million on or before February 10, 2010, $1.0 million on or before February 10, 2011, and 50% of any milestone payment and 5.88% to 7.0% of certain royalties, in each case received by the Company pursuant to an agreement with SmithKline Beecham Corporation (now known as GlaxoSmithKline) entered into on December 29, 1994. The Company also agreed to pay Rockefeller 1.5% of world-wide net sales of LGD-4665 as certain payments are received by the Company pursuant to its agreement with SmithKline Beecham Corporation entered into on December 17, 2008. As of September 30, 2009, the Company has recorded a liability of $2.0 million related to the settlement, of which $1.0 million is included in other long-term liabilities.

On October 10, 2008, the Company received notice that a putative class action complaint was filed in the Superior Court of New Jersey, Mercer County (Equity Division) by Allen Heilman, one of Phamacopeia's stockholders, against Pharmacopeia, the members of its Board of Directors, Ligand and two of Ligand's wholly owned subsidiaries. The complaint generally alleged that Pharmacopeia's Board of Directors' decision to enter into the proposed transaction with Ligand on the terms contained in the merger agreement constitutes a breach of fiduciary duty and gives rise to other unspecified state law claims. The complaint also alleged that Ligand and two of Ligand's wholly owned subsidiaries aided and abetted Pharmacopeia's Board of Directors' breach of fiduciary duty. In addition, the complaint alleged that the named plaintiff sought "equitable relief," including among other

things, an order preliminarily and permanently enjoining the proposed transaction. While management believes that neither Ligand nor Pharmacopeia engaged in any wrongful acts, in an effort to minimize the cost and expense of any litigation, the parties entered into a stipulation of settlement, pursuant to which Pharmacopeia agreed to make certain additional disclosures in its SEC Form 14d-9 and not oppose a fee award to plaintiffs' attorneys of up to $180,000, which is included in current portion of accrued litigation settlement costs at September 30, 2009. On October 20, 2009, the court granted final approval of the stipulation of settlement and dismissed the class action with prejudice.

On September 9, 2009, the Company received notice that a class action complaint was filed in the Connecticut Superior Court for the Judicial District of New Haven by Gabriel Guzman, one of Neurogen's stockholders, against Neurogen, the members of its Board of Directors, Ligand and one of Ligand's wholly owned subsidiaries. The amended complaint generally alleged that Neurogen's Board of Directors' decision to enter into the transaction with Ligand on the terms contained in the merger agreement constituted a breach of fiduciary duty. The amended complaint also alleges that Ligand and one of Ligand's wholly owned subsidiaries aided and abetted Neurogen's Board of Directors' breach of fiduciary duty. Management believes that neither Ligand nor Neurogen engaged in any wrongful acts and on October 22, 2009, the Company filed a motion to strike the complaint.

In addition, from time to time the Company is subject to various lawsuits and claims with respect to matters arising out of the normal course of its business. Due to the uncertainty of the ultimate outcome of these matters, the impact on future financial results is not subject to reasonable estimates.

**7. Acquisition of Pharmacopeia**

On December 23, 2008, the Company completed the acquisition of Pharmacopeia, Inc., a clinical development stage biopharmaceutical company dedicated to discovering and developing novel small molecule therapeutics to address significant medical needs, under which the Company acquired all outstanding shares of Pharmacopeia in a cash and stock transaction. The acquisition was accounted for as a business combination. In connection with the acquisition, the Company issued 17,997,039 shares of common stock to Pharmacopeia stockholders, or 0.5985 shares for each outstanding Pharmacopeia share, as well as $9.3 million in cash. The value of the common stock issued was derived from the number of Ligand common shares issued at a price of $3.14 per share determined by the average closing price of Ligand shares for the two days prior, the day of, and the two days subsequent to the public announcement on September 24, 2008. In addition, Pharmacopeia security holders received a contingent value right (CVR) that entitles each holder the right to receive a proportionate share of an aggregate of $15.0 million if Ligand enters into a license, sale, development, marketing or option agreement with respect to any product candidate from Pharmacopeia's DARA program (other than any agreement with Bristol-Meyers Squibb or any of its affiliates) on or prior to December 31, 2011. The estimated fair value of the CVRs is not included in the total purchase price as the Company's management has deemed, based on currently available information, that the likelihood of payment is not probable. The results of Pharmacopeia's operations have been included in the consolidated financial statements commencing December 23, 2008.

During the three months ended March 31, 2009, the Company adjusted its purchase price allocation for Pharmacopeia, which resulted in an increase in transaction costs of $0.3 million and decreases in property and equipment of $1.1 million, liabilities assumed of $4.4 million and goodwill of $3.0 million. During the three months ended June 30, 2009, the Company further adjusted its purchase price allocation for Pharmacopeia, which resulted in an increase in in-process research and development of $0.4 million and decreases in property and equipment of $0.1 million, acquired intangible assets of $15,000 and goodwill of $0.3 million. The components of the final purchase price allocation for Pharmacopeia are as follows:

| **Purchase Consideration:** | |
|---|---|
| **(in thousands)** | |
| Fair value of common stock issued to Pharmacopeia shareholders | $ 56,439 |
| Cash paid to Pharmacopeia shareholders | 9,337 |
| Transaction costs | 4,558 |
| Total purchase consideration | $ 70,334 |
| **Allocation of Purchase Price:** | |
| **(in thousands)** | |
| Cash acquired | $ 17,754 |
| Other current assets | 1,390 |
| Property and equipment | 10,329 |
| Acquired intangible assets | 1,985 |
| In-process research and development | 72,441 |
| Other assets | 144 |
| Liabilities assumed | (33,709) |
| | $ 70,334 |

**8. Warrant Liability**

In connection with the acquisition of Pharmacopeia, Inc., the Company assumed approximately 867,637 warrants (as adjusted as a result of the merger from the original 1,450,000) to purchase its common stock. To qualify as permanent equity, an equity derivative must permit the issuer to settle in unregistered shares. Under securities law, if the warrants were issued in connection with a public offering and have a cash settlement feature at the holder's option, a company does not have the ability to settle in unregistered shares. Therefore, the warrants cannot be classified as permanent equity and are instead classified as a liability. The warrants issued as part of Pharmacopeia's equity financing in October 2006 meet this criteria, and have been recorded as a liability in the accompanying balance sheet. The fair value of the warrants is remeasured at each reporting date until the warrants are exercised or have expired. Changes in the fair value of the warrants are reported in the statement of operations as income (decreases) or expense (increases). At September 30, 2009 and December 31, 2008, the fair value of the warrants was approximately $0.6 million and $0.7 million, respectively, and included in accrued liabilities.

The fair value of the warrants was calculated using the Black-Scholes option-pricing model with the following assumptions at September 30, 2009 and December 31, 2008:

| | September 30, 2009 | December 31, 2008 |
|---|---|---|
| Risk-free interest rate | 1.5% | 1.0% |
| Dividend yield | — | — |
| Expected volatility | 84% | 78% |
| Expected term | 2.6 years | 3.3 years |

**9. Note Payable**

In December 2006, Pharmacopeia, Inc. entered into a loan and security agreement (the Line of Credit) with a lending institution to provide up to a total of $5.0 million in funding in the form of term loans, from time to time through December 2008. Term loans secured by laboratory equipment have a fixed term of 48 months. Term loans secured by all other collateral categories have a fixed term of 36 months.

As of December 31, 2008, the aggregate balance of term loans originated under the Line of Credit was approximately $3.4 million, of which approximately $2.1 million was classified as equipment financing obligations, long-term. Interest rates on these term loans range from 10.08% to 10.28%. The Company paid off the Line of Credit in full in January 2009.

**10. Common Stock Subject to Conditional Redemption**

During the three months ended March 31, 2009, the Company earned a milestone from Pfizer, Inc. (Pfizer). In April 2009, pursuant to the Company's 1991 research agreement and 1996 settlement agreement with Pfizer, Pfizer elected to pay the milestone by returning 323,338 shares of stock it owns in the Company, which at the date the milestone was earned had a market value of $0.9 million. Ligand retired the tendered shares in May 2009. The difference between the fair value of the shares tendered and the carrying value of such shares based on the contractual exchange ratio, approximately $3.1 million, was credited to additional paid-in capital. The Company is entitled to royalties on future sales from Pfizer, which pursuant to the 1996 settlement agreement, Pfizer may elect to pay by returning up to 674,230 shares of stock it owns in Ligand.

**11. Termination of Collaboration Agreement**

On July 29, 2009, the Company and N.V. Organon, which was acquired by Schering-Plough in November 2007, mutually agreed to terminate the research collaboration under their collaboration and license agreement pursuant to which the parties agreed to work collaboratively to discover, develop and commercialize therapeutic products across a broad range of indications. As a result of the termination, Organon will continue to fund research collaboration activities on those targets currently under investigation through December 2009, and the Company is eligible to receive potential milestone payments and royalties under certain circumstances. The Company recognized $4.4 million of revenue under the collaboration agreement for the nine months ended September 30, 2009.

**12. Acquisition of Neurogen**

On August 23, 2009, the Company and its direct wholly owned susidiary, Neon Signal, LLC, entered into a merger agreement with Neurogen Corporation. Pursuant to the terms of the merger agreement, the Company will acquire Neurogen and in exchange the Company will issue to Neurogen stockholders a number of shares of the Company's common stock equal to approximately $11 million based on the twenty-day volume weighted average

closing price of the Company's common stock shortly prior to the Neurogen stockholders meeting with respect to the merger. In connection with the merger, Neurogen's stockholders will also receive contingent value rights that entitle them to cash and/or shares of third-party stock under certain circumstances. The merger is subject to customary closing conditions, including obtaining the approval of Neurogen's stockholders.

**13. Acquisition of Metabasis**

On October 26, 2009, the Company entered into a definitive merger agreement under which the Company will acquire all of the outstanding shares of Metabasis Therapeutics, Inc ("Metabasis"). Pursuant to the terms of the merger agreement, Metabasis stockholders will receive a cash payment at the closing of the transaction of approximately $3.2 million, less Metabasis' estimated net liabilities at closing and an amount to be deposited in the stockholders' representative's fund. In addition, Metabasis stockholders will receive for each Metabasis share four tradable Contingent Value Rights ("CVRs") that will be registered on a Form S-4 registration statement to be filed by the Company with the Securities and Exchange Commission. The CVRs will entitle Metabasis stockholders to cash payments as frequently as every six months as cash is received by the Company from proceeds from the sale or partnering of any of the Metabasis drug development programs, among other triggering events. The Company has also committed to spend at least $8 million in new research and development funding on the Metabasis programs within 42 months following the closing of the transaction. The merger is subject to customary closing conditions, including obtaining the approval of Metabasis' stockholders.

## 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 Item 1A "Risk Factors." This outlook represents our current judgment on the future direction of our business. These statements include those related to our AVINZA and PROMACTA 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 or close our announced merger transactions. We cannot assure you that we will receive expected AVINZA and PROMACTA 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 Pharmaceuticals (Canada) Incorporated; Ligand Pharmaceuticals International, Inc.; Seragen, Inc. ("Seragen"); Nexus Equity VI LLC ("Nexus"); and Pharmacopeia, LLC.

### Overview

We are a biotechnology company that focuses on drug discovery and early-stage development of pharmaceuticals that address critical unmet medical needs or that are more effective and/or safer than existing therapies, more convenient to administer and are cost effective. Our goal is to build a profitable company by generating income from research, milestone, and royalty revenues resulting from our collaborations with pharmaceutical partners.

On December 23, 2008, we acquired all of the outstanding common shares of Pharmacopeia, Inc., or Pharmacopeia. Pharmacopeia was a clinical development stage biopharmaceutical company dedicated to discovering and developing novel small molecule therapeutics to address significant medical needs. Pharmacopeia's strategy was to retain the rights to product candidates at least to clinical validation, and to continue with (i) development on its own New Drug Application, or NDA, filings and (ii) commercialization for selected indications. Pharmacopeia had a broad portfolio of clinical and preclinical candidates under development internally or by partners.

On August 23, 2009, we entered into a definitive merger agreement with Neurogen Corporation, or Neurogen. Pursuant to the terms of the merger agreement, we would acquire Neurogen and in exchange we would issue to Neurogen stockholders a number of shares of our common stock equal to approximately $11 million based on the twenty-day volume weighted average closing price of our common stock shortly prior to the Neurogen stockholders meeting with respect to the merger, but not to exceed a total of 4.2 million shares of our common stock. In connection with the merger, Neurogen's stockholders would also receive contingent value rights that entitle them to cash and/or shares of third-party stock under certain circumstances. The merger is subject to customary closing conditions, including obtaining the approval of Neurogen's stockholders. Neurogen is a drug development company historically focusing on small-molecule drugs to improve the lives of patients suffering from psychiatric and neurological disorders with significant unmet medical need.

On October 26, 2009, we entered into a definitive merger agreement under which we would acquire all of the outstanding shares of Metabasis Therapeutics, Inc., or Metabasis. Under the transaction, Metabasis stockholders would receive a cash payment at the closing of the transaction of approximately $3.2 million, less Metabasis' estimated net liabilities at closing and an amount to be deposited in the stockholders' representative's fund. In addition, Metabasis stockholders would receive for each Metabasis share four tradable Contingent Value Rights ("CVRs") that would be registered on a Form S-4 registration statement to be filed by us with the Securities and Exchange Commission. The CVRs would entitle Metabasis stockholders to cash payments as frequently as every six months as cash is received by us from proceeds from the sale or partnering of any of the Metabasis drug

development programs, among other triggering events. We also committed to spend at least $8 million in new research and development funding on the Metabasis programs within 42 months following the closing of the transaction. The merger is subject to customary closing conditions, including obtaining the approval of Metabasis' stockholders. Metabasis is a biopharmaceutical company with a product pipeline for metabolic diseases such as diabetes and hyperlipidemia, and for the treatment of liver diseases such as hepatitis and primary liver cancer.

Our business strategy includes targeted internal drug research and early-stage development capabilities. We also have research and development collaborations for our product candidates with numerous global pharmaceutical companies. We aim to create value for shareholders by advancing our internally developed programs, typically through early clinical development, and then entering licensing agreements with larger pharmaceutical and biotechnology companies with substantially greater development and commercialization infrastructure. In addition to advancing our R&D programs, we expect to collect licensing fees and royalties from existing and future license agreements. We aim to build a profitable company by generating income from our corporate licenses.

We currently receive royalty revenues from King Pharmaceuticals, or King, and GlaxoSmithKline, or GSK. In February 2007, we completed the sale of our AVINZA product line to King. As a result of the sale, we received the right to future royalties on the net sales of AVINZA through 2017. Through October 2008, we received a 15% royalty on AVINZA net sales. Subsequent royalty payments are to be based upon calendar year net sales, recognized on a quarterly basis. If calendar year net sales are less than $200.0 million, the royalty payment due will be 5% of all net sales. If calendar year net sales are greater than $200.0 million, the royalty payment due will be 10% of all net sales less than $250.0 million, plus 15% of net sales greater than $250.0 million.

In November 2008, the U.S. Food and Drug Administration, or FDA, granted approval of GSK's PROMACTA for the treatment of thrombocytopenia in patients with chronic immune (idiopathic) thrombocytopenic purpura, or ITP, who have had an insufficient response to corticosteroids, immunoglobulins or splenectomy. PROMACTA is the first oral thrombopoietin, or TPO, receptor agonist therapy for the treatment of adult patients with chronic ITP. As a result of the FDA's approval of PROMACTA, we are entitled to receive tiered royalties on annual net sales of PROMACTA. As part of a settlement agreement and mutual release we entered into on February 11, 2009 with The Rockefeller University, or Rockefeller, we agreed to pay a share of such royalties to Rockefeller. Accordingly, after paying Rockefeller, we are entitled to retain tiered royalties in the range of 4.7%—9.3% on annual net sales of PROMACTA.

We also have the potential to receive near-term royalties on product candidates resulting from our research and development collaboration arrangements with third party pharmaceutical companies if and when any such product candidate is ultimately approved by the FDA and successfully marketed. Our near-term product candidates are discussed below.

In March 2009, Pfizer received approval from the European Commission (EC) for FABLYN (lasofoxifene) Tablets, a selective estrogen receptor modulator (SERM) for the treatment of osteoporosis in post-menopausal women at increased risk of fracture. As a result, we earned a milestone which, pursuant to our 1991 research agreement and 1996 settlement agreement with Pfizer, Pfizer elected to pay by returning 323,338 shares of stock it owns in Ligand, which at the date the milestone was earned had a market value of $0.9 million. We are entitled to royalties from Pfizer on future sales, which pursuant to the 1996 settlement agreement, Pfizer may elect to pay by returning up to 674,230 shares of stock it owns in Ligand. Pfizer also submitted an NDA for osteoporosis treatment in December 2007. In September 2008, the FDA Advisory Committee voted 9-3 in favor of approval of this drug and in January 2009, Pfizer received a complete response letter from the FDA requesting additional information for FABLYN. Pfizer is reviewing the letter and intends to work with the FDA to determine the appropriate next steps regarding its application. Pfizer has also submitted NDAs for osteoporosis prevention and vaginal atrophy, and the FDA issued non-approvable letters for both NDAs. Under the terms of our agreement with Pfizer, we are entitled to receive royalty payments equal to 6% of worldwide net sales of lasofoxifene for any indication. We previously sold to Royalty Pharma AG, or Royalty Pharma, the rights to 3% of net sales of lasofoxifene for a period of ten years following the first commercial sale of lasofoxifene. Accordingly, after paying Royalty Pharma, we are entitled to retain approximately 3% of worldwide net annual sales of lasofoxifene.

In December 2008, GSK submitted a marketing authorization application in the EU and international for Revolade (Eltrombopag) for the treatment of thrombocytopenia in patients with chronic immune (idiopathic) thrombocytopenic purpura, or ITP. EU action is anticipated in late 2009/early 2010. PROMACTA was recognized as "Best Biotechnology Product" by the Prix Galien USA committee on October 1, 2009.

Bazedoxifene is a product candidate that resulted from our collaboration with Wyeth. Bazedoxifene is a synthetic drug that was specifically designed to reduce the risk of osteoporotic fractures while at the same time

protecting breast and uterine tissue. In April 2009, Wyeth received approval from the EC for CONBRIZA™ (bazefoxifene) for the treatment of post-menopausal osteoporosis in women at increased risk of fracture. As a result, we earned a $0.6 million milestone and are entitled to royalties on future sales. In June 2006, Wyeth submitted an NDA for bazedoxifene to the FDA for the prevention of postmenopausal osteoporosis. The FDA issued an approvable letter for bazedoxifene for this indication in April 2007. Wyeth received a second approvable letter in December 2007 and plans to have further discussions with the FDA to discuss the issues raised for the prevention indication. Wyeth also submitted a second NDA for bazedoxifene in the United States in July 2007 for the treatment of osteoporosis and a marketing authorization application (MAA) to the European Medicines Agency (EMEA) in September 2007 for the prevention and treatment of osteoporosis. Wyeth received a third approvable letter in the second quarter of 2008 for bazedoxifene for the treatment of osteoporosis. In the letter, the FDA requested information similar to that outlined in its approvable letter for bazedoxifene's NDA for the prevention of postmenopausal osteoporosis issued in December 2007. This included further analyses concerning the incidence of stroke and venous thrombotic events. Wyeth indicated that it will file a complete response in 2009 and expects the FDA will convene an advisory committee to review the pending NDAs for both the treatment and prevention of postmenopausal osteoporosis with bazedoxifene.

Wyeth is also developing bazedoxifene in combination with PREMARIN (Aprela) for the treatment of moderate to severe menopausal vasomotor symptoms, such as hot flashes and night sweats, and for the prevention of post-menopausal osteoporosis. Two Phase III studies with bazedoxifene/conjugated estrogens (Aprela), showed reduced number and severity of hot flashes in symptomatic postmenopausal women by up to 80 percent, when compared with placebo. Wyeth expects to file an initial NDA no earlier than the first half of 2010.

We previously sold to Royalty Pharma the rights to a total of 3.0% of net sales of bazedoxifene for a period of ten years following the first commercial sale of each product. After giving effect to the royalty sale, we will receive 0.5% of the first $400.0 million in net annual sales. If net annual sales are between $400.0 million and $1.0 billion, we will receive a net royalty of 1.5% on the portion of net sales between $400.0 million and $1.0 billion, and if annual sales exceed $1.0 billion, we will receive a net royalty of 2.5% on the portion of net sales exceeding $1.0 billion. Additionally, the royalty owed to Royalty Pharma may be reduced by one third if net product sales exceed certain thresholds across all indications.

**Results of Operations**

Total revenues for the three and nine months ended September 30, 2009 were $7.9 million and $25.0 million, respectively, compared to $5.2 million and $14.9 million for the same 2008 periods. We reported income from continuing operations of $1.1 million and a loss from continuing operations of $10.9 million for the three and nine months ended September 30, 2009, respectively, compared to losses from continuing operations of $9.1 million and $23.7 million for the same 2008 periods.

*Royalty Revenue*

Royalty revenues were $1.7 million and $6.4 million for the three and nine months ended September 30, 2009, respectively, compared to $5.2 million and $14.9 million for the same periods in 2008. The decreases in royalty revenues of $3.6 million and $8.5 million, respectively, for the three and nine months ended September 30, 2009, compared to the same periods in 2008, are primarily due to a reduction in the contractual royalty rate from 15% to 5% under our agreement with King for AVINZA sales, partially offset by PROMACTA royalties.

*Collaborative Research and Development and Other Revenues*

We recorded collaborative research and development and other revenues of $6.3 million and $18.6 million for the three and nine months ended September 30, 2009, respectively, compared to zero for the same periods in 2008. The increase of $6.3 million for the three months ended September 30, 2009, compared to the same period in 2008, is primarily due to collaboration revenues resulting from agreements acquired from Pharmacopeia. The increase of $18.6 million for the nine months ended September 30, 2009, compared to the same period in 2008, is primarily due to $14.3 million in collaboration revenues resulting from agreements acquired in the merger with Pharmacopeia, $3.9 million of milestones earned from GlaxoSmithKline, Pfizer, Schering-Plough and Wyeth and a $0.4 million license fee.

*Research and Development Expenses*

The major components of research and development expenses are as follows (in thousands):

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2009 | 2008 | 2009 | 2008 |
| Internal research programs | $ 2,418 | $ 4,463 | $ 9,304 | $12,315 |
| Collaborative research | 6,754 | — | 14,822 | — |
| Development | 749 | 1,702 | 5,618 | 7,392 |
| Total research and development | $ 9,921 | $ 6,165 | $29,744 | $19,707 |

Research and development expenses were $9.9 million and $29.7 million for the three and nine months ended September 30, 2009, respectively, compared to $6.2 million and $19.7 million for the same 2008 periods. The increase of $3.7 million for the three months ended September 30, 2009, compared to the same period in 2008, is primarily due to $6.8 million of costs associated with servicing our collaboration agreements partially offset by a $1.0 million reduction in clinical trial costs as we completed our ongoing LGD 4665 clinical trials, $1.0 million in reduced consulting and outside service costs associated with internal research programs and $1.0 million of litigation settlement costs related to The Rockefeller University that were recorded in the third quarter of 2008. The increase of $10.0 million for the nine months ended September 30, 2009, compared to the same period in 2008, is primarily due to $14.8 million of costs associated with servicing our collaboration agreements partially offset by $2.3 million in reduced consulting and outside service costs associated with internal research programs as well as $1.8 million reduction in drug supply costs associated with clinical trials.

A summary of our significant internal research and development programs as of September 30, 2009 is as follows:

| Program | Disease/Indication | Development Phase |
|---|---|---|
| Dual-Acting angiotensin and endothelin Receptor Antagonist (DARA) | Diabetic Nephropathy* | Phase II |
| Selective Androgen Receptor Modulators (SARMs) (agonists) | Muscle wasting and frailty | Phase I |
| Chemokine Receptor (CCR1) | Inflammatory and autoimmune diseases | Pre-clinical |
| Small molecule Erythropoiein (EPO) receptor agonists | Chemotherapy-induced anemia and anemia due to kidney failure | Research |

* Phase II clinical trials conducted so far have studied patients with hypertension

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 EMEA, 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 $2.4 million and $12.2 million for the three and nine months ended September 30, 2009, respectively, compared to $5.9 million and $20.6 million for the same periods in 2008. The decrease of $3.5 million for the three months ended September 30, 2009, compared to the same period in 2008, is primarily due to $2.9 million of reduced legal expenses as settlements were reached with Rockefeller University and the Securities and Exchange Commission (SEC) in the first quarter of 2009 and $0.8 million of lower headcount costs as a result of staff reductions. The decrease of $8.4 million for the nine months ended September 30, 2009, compared to the same period in 2008, is primarily due to $4.1 million of expenses incurred during the first quarter of 2008 as a result of exiting a facility, reduced legal expenses of $4.0 million, lower headcount costs of $1.0 million and $0.8 million of costs associated with asset disposals in the third quarter of 2008. These decreases were partially offset by $1.9 million of costs associated with operating our New Jersey facility incurred as a result of our acquisition of Pharmacopeia in December 2008.

*Lease Termination Costs*

In August 2009, we entered into a lease termination agreement for our corporate facility in San Diego. Under the terms of the agreement, we will pay a termination fee of $14.3 million as follows: $4.5 million was paid upon signing, $4.5 million in July 2010 and $5.3 million in April 2011. As a result, during the third quarter of 2009, we recorded lease termination costs of $15.2 million, which includes the net present value of the lease termination payments of $14.3 million and $0.9 million of other costs associated with the lease termination.

*Write-off of acquired in-process research and development*

For acquisitions prior to January 1, 2009, the fair value of acquired In-Process Research and Development (IPR&D) projects, which have no alternative future use and which have not reached technological feasibility at the date of acquisition, were immediately expensed. As a result of adjustments to our purchase price allocation related to our acquisition of Pharmacopeia, Inc. in December 2008, we wrote-off an additional $0.4 million of acquired in-process research and development during the quarter ended June 30, 2009.

*Accretion of Deferred Gain on Sale Leaseback*

On November 9, 2006, we sold real property located in San Diego, California for a sale price of $47.6 million. This property includes our corporate headquarter building totaling approximately 82,500 square feet, the land on which the building is situated, and two adjacent vacant lots. As part of the sale transaction, we agreed to leaseback the building for a period of 15 years. We recognized an immediate pre-tax gain on the sale transaction of $3.1 million and deferred a gain of $29.5 million on the sale of the building. The deferred gain was being recognized on a straight-line basis over the 15 year term of the lease at a rate of approximately $2.0 million per year. In August 2009, we entered into a lease termination agreement for this building. As a result, we recognized $20.4 million of accretion of deferred gain during the quarter ended September 30, 2009, and will recognize the remaining balance of the deferred gain through the term of our new building lease, which expires in December 2011. The amount of the deferred gain recognized for the three and nine months ended September 30, 2009 was $20.4 million and $21.4 million, respectively, compared to $0.5 million and $1.0 million, respectively, for the same periods in 2008.

*Interest Income*

Interest income was $0.2 million and $0.4 million for the three and nine months ended September 30, 2009, respectively, compared to $0.4 million and $1.9 million for the same periods in 2008. The decrease in interest income in 2009 compared to 2008 is primarily due to lower yields as a result of macro-economic conditions as well as lower cash and investment balances.

*Income Taxes*

We recorded no provision for income taxes for the three and nine months ended September 30, 2009 as we did not realize any taxable income from either continuing or discontinued operations.

We recorded income tax expense related to continuing operations of $3.0 million and $0.2 million for the three and nine months ended September 30, 2008, respectively. The income tax expense for the three months ended September 30, 2008 was recorded to offset income tax benefits recorded during the first half of 2008. The income tax expense for the nine months ended September 30, 2008 relates to the filing of amended state tax returns from previous years.

*Discontinued Operations*

*Oncology Product Line*

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

Prior to the Oncology sale, we recorded accruals for rebates, chargebacks, and other discounts related to Oncology products when product sales were recognized as revenue under the sell-through method. Upon the Oncology sale, we accrued for rebates, chargebacks, and other discounts related to Oncology products in the distribution channel which had not sold-through at the time of the Oncology sale and for which we retained the liability subsequent to the Oncology sale.

Additionally, and pursuant to the terms of the Oncology 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 the Oncology product line, we recorded a reserve for Oncology product returns. Under the sell-through revenue recognition method, we previously did not record a reserve for returns from wholesalers.

During the three and nine months ended September 30, 2009, we recognized a $0.1 million and a $0.6 million of pre-tax gain, respectively, due to subsequent changes in certain estimates and liabilities recorded as of the sale date. During the three and nine months ended September 30, 2008, we recognized $12.8 million and $12.6 million of pre-tax losses, respectively, due to $13.0 million of litigation settlement costs related to the Salk Institute for Biological Studies in addition to subsequent changes in certain estimates and liabilities recorded as of the sale date.

*AVINZA Product Line*

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

In connection with the sale, we agreed to indemnify King in certain cases for a period of 30 months after the closing of the Transaction, including any breach of certain of our representations, warranties or covenants contained in the Avinza Purchase Agreement. Under our agreement with King, $15.0 million of the total upfront cash payment was deposited into an escrow account to secure our indemnification obligations to King following the closing. Of the escrowed amount, $7.5 million was released to us in August 2007, and the remaining $7.5 million, plus interest of $0.6 million, was released to us in February 2008 and recorded as gain on sale of our AVINZA product line.

Prior to the AVINZA sale, we recorded accruals for rebates, chargebacks, and other discounts related to AVINZA products when product sales were recognized as revenue under the sell-through method. Upon the AVINZA sale, we accrued for rebates, chargebacks, and other discounts related to AVINZA products in the distribution channel which had not sold-through at the time of the AVINZA sale and for which we retained the liability subsequent to the sale.

Additionally, and 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. Under the sell-through revenue recognition method, we previously did not record a reserve for returns from wholesalers.

During the three and nine months ended September 30, 2009, we recognized pre-tax gains of $0.6 million and $5.3 million, respectively due to subsequent changes in certain estimates and liabilities recorded as of the sale date. During the three and nine months ended September 30, 2008, we recognized pre-tax gains of $0.1 million and $7.3 million, respectively, due to subsequent changes in certain estimates and liabilities recorded as of the sale date as well as the release of $8.1 million in funds from an escrow account related to the AVINZA sale.

*Income Taxes*

We recorded no provision for income taxes related to discontinued operations for the three and nine months ended September 30, 2009 as we did not realize any taxable income from discontinued operations.

For the three and nine months ended September 30, 2008, we recorded an income tax benefit on discontinued operations of $3.7 million and $0.5 million, respectively. The tax benefits were generated from a taxable loss from discontinued operations, which offset previous taxable gains.

**Liquidity and Capital Resources**

We have financed our operations through offerings of our equity securities, issuance of convertible notes, product sales and the subsequent sales of our commercial assets, royalties, collaborative research and development and other revenues, capital and operating lease transactions, accounts receivable factoring and equipment financing arrangements and investment income.

Working capital was $6.8 million at September 30, 2009 compared to $23.3 million at December 31, 2008. Available cash, cash equivalents and short-term investments totaled $44.2 million as of September 30, 2009 compared to $80.7 million as of December 31, 2008. We primarily invest our cash in certificates of deposit and United States government and investment grade corporate debt securities.

On July 19, 2007, we purchased $5.0 million of commercial paper issued by Golden Key Ltd. The investment was highly-rated and within our investment policy at the time of purchase, but during the third quarter of 2007, large credit rating agencies downgraded the quality of this security. In addition, as a result of not meeting certain liquidity covenants, the assets were assigned to a trustee who established a committee of the largest senior credit holders to determine the next steps. Subsequently, Golden Key defaulted on its obligation to settle the security on the stated maturity date of October 10, 2007. Based on available information, we currently estimate that we will be able to recover approximately $1.7 million on this security. Further, liquidity in the capital markets has continued to be volatile. Accordingly, we may be exposed to additional impairment for this investment until it is fully recovered.

In April 2009, we received notification from the SEC that it had completed its investigation and will not recommend enforcement action against us relating to the previously disclosed SEC investigation in connection with the restatement of our financial statements as of and for the years ended December 31, 2002 and 2003 and for the first three quarters of 2004. As a result, in April 2009, we received $10.3 million from a restricted indemnity account which had been established in a trust account with Dorsey & Whitney LLP, counsel to our independent directors and to the Audit Committee of our Board of Directors, to support our indemnification obligations to continuing and departing directors in connection with the SEC investigation and related matters.

In August 2009, we entered into a lease termination agreement for our corporate facility in San Diego. Under the terms of the agreement, we will pay a termination fee of $14.3 million as follows: $4.5 million was paid upon signing, $4.5 million in July 2010 and $5.3 million in April 2011. In addition, we entered into a new lease for a period of 27 months commencing October 2009, for premises consisting of office and lab space located in San Diego to serve as our new corporate headquarters.

Based on our current business outlook, we believe our currently available cash, cash equivalents, and short-term investments as well as our current and future royalty 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 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 AVINZA and PROMACTA; the efforts of our collaborative partners; obligations under our operating lease agreements and lease termination agreement; and the capital requirements of any companies we may acquire, including Neurogen and Metabasis.

*Operating Activities*

Operating activities of continuing operations used cash of $32.5 million for the nine months ended September 30, 2009, compared to $26.8 million for the same period in 2008. The cash used in operating activities for the nine months ended September 30, 2009 includes $8.5 million of non-recurring litigation settlement payments to Rockefeller University and the Salk Institute as well as a $4.5 million lease termination payment.

The use of cash for the nine months ended September 30, 2009 reflects a net loss of $5.0 million, adjusted by $5.9 million of gain from discontinued operations and $15.3 million of non-cash items to reconcile the net income to net cash used in operations. These reconciling items primarily reflect the accretion of deferred gain on the sale leaseback of the building of $21.4 million and non-cash development milestones of $0.9 million, partially offset by the recognition of $2.4 million of stock-based compensation expense, depreciation of assets of $2.4 million, realized loss on investment of $0.1 million, non-cash lease costs of $0.3 million, write-off of acquired in-process research and development of $0.4 million and the amortization of acquired intangible assets of $1.5 million. The use of cash during the nine months ended September 30, 2009 is further impacted by changes in operating assets and liabilities due primarily to decreases in accounts payable and accrued liabilities of $0.4 million, a decrease in accrued litigation settlement costs of $7.5 million, an increase in accounts receivable, net of $2.1 million and a decrease in deferred revenue of $7.0 million partially offset by the release of our $10.1 million restricted indemnity account as a result of the completion of the SEC investigation and a further decrease in other current and long term assets of $0.6 million and an increase in other liabilities of $3.4 million. Net cash used in operating activities of discontinued operations was $3.3 million for the nine months ended September 30, 2009.

The use of cash for the nine months ended September 30, 2008 reflects a net loss of $28.5 million, adjusted by $4.8 million of gain from discontinued operations and $9.3 million of non-cash items to reconcile the net loss to net cash used in operations. These reconciling items primarily reflect the recognition of $2.8 million of stock-based compensation expense, depreciation of assets of $0.8 million, realized loss on investment of $1.4 million, non-cash lease costs of $5.0 million and the write-off of assets of $0.8 million, partially offset by the accretion of deferred gain on the sale leaseback of the building of $1.5 million. The use of cash during the nine months ended September 30, 2008 is further impacted by changes in operating assets and liabilities due primarily to decreases in accounts payable and accrued liabilities of $13.2 million and other liabilities of $0.6 million, partially offset by decreases in other current assets of $1.0 million. Net cash used in operating activities of discontinued operations was $3.3 million for the nine months ended September 30, 2008.

*Investing Activities*

Investing activities provided cash of $12.7 million for the nine months ended September 30, 2009, compared to $35.4 million of cash used for the same 2008 period.

Cash provided by investing activities during the nine months ended September 30, 2009 primarily reflects the net proceeds from the sale of short-term investments of $13.0 million, partially offset by purchases of property and equipment of $0.5 million. None of the cash used in investing activities for the nine months ended September 30, 2009 related to discontinued operations.

Cash used in investing activities during the nine months ended September 30, 2008 primarily reflects the net purchases of short-term investments of $43.1 million and $0.5 million of purchases of property and equipment. Net cash provided by investing activities of discontinued operations was $8.1 million for the nine months ended September 30, 2008.

*Financing Activities*

Financing activities used cash of $3.8 million for the nine months ended September 30, 2009, compared to $2.8 million for the same 2008 period.

Cash used for the nine months ended September 30, 2009 primarily reflects payments under equipment financing obligations of $0.4 million and the repayment of debt of $3.4 million related to an equipment line of credit acquired from Pharmacopeia that was paid off in January 2009.

Cash used for the nine months ended September 30, 2008 primarily reflects payments under equipment financing obligations of $1.3 million and repurchases of our common stock of $1.6 million.

None of the cash used in financing activities for the nine months ended September 30, 2009 and 2008 relates to discontinued operations.

*Other*

As part of certain of our strategic alliances with our research partners, we have received up-front cash payments and licenses to certain product candidates. In connection with these agreements, we are obligated to perform significant research and development activities over multiple years and as such, expect to incur significant costs

performing such activities. The following table provides the period over which these research and development activities are to be provided, as well as the deferred revenue currently recorded for each agreement as of September 30, 2009:

| Collaborative Agreement | Expiration of Initial Research Term | Deferred Revenue |
|---|---|---|
| 2007 Schering-Plough Agreement | December 2009 | $ 2,123 |
| BMS Discovery Collaboration Agreement | December 2010 | 5,442 |
| GSK Agreement | March 2011 | 4,033 |
| Wyeth Agreement | December 2009 | 883 |
| Cephalon Agreement | November 2009 | 11 |
| Trevena Agreement | January 2011 | 753 |

Certain of our property and equipment is pledged as collateral under various equipment financing arrangements. As of September 30, 2009, $0.2 million was outstanding under such arrangements and classified as current. During January 2009, we paid off the remaining $3.4 million of financing obligations acquired from Pharmacopeia in December 2008.

In connection with the acquisition of Pharmacopeia on December 23, 2008, Pharmacopeia security holders received a contingent value right that entitles them to an aggregate cash payment of $15.0 million under certain circumstances.

*Leases and Off-Balance Sheet Arrangements*

We lease our office and research facilities under agreements accounted for as operating leases with varying terms through August 2016. The agreements provide for increases in annual rents based on changes in the Consumer Price Index or fixed percentage increases ranging from 3% to 7%. Commencing January 2008, we also sublease a portion of our facilities through July 2015. The sublease agreement provides for a 3% increase in annual rents.

*Contractual Obligations*

As of September 30, 2009, future minimum payments due under our contractual obligations are as follows (in thousands):

| | Payments Due by Period | | | | |
|---|---|---|---|---|---|
| | Total | Less than 1 year | 1-3 years | 3-5 years | More than 5 years |
| Equipment financing obligations (1) | $ 179 | $ 179 | $ — | $ — | $ — |
| Operating lease obligations (2) | 33,478 | 5,939 | 11,100 | 9,687 | 6,752 |
| Consulting agreements | 239 | 239 | — | — | — |
| Lease termination payments | 9,800 | 4,500 | 5,300 | — | — |
| Co-promote termination liability (3) | — | — | — | — | — |
| Total contractual obligations | $43,696 | $ 10,857 | $16,400 | $9,687 | $ 6,752 |
| (1) Includes interest payments as follows: | $ 7 | $ 7 | $ — | $ — | $ — |

(2) We lease an office and research facility under an operating lease arrangement through July 2015. Commencing January 2008, we sublet this facility through July 2015. The sublease agreement provides for a 3% increase in annual rents. As of September 30, 2009, we expect to receive aggregate future minimum lease payments totaling $5.1 million (nondiscounted) over the duration of the sublease agreement as follows: less than one year, $0.8 million; one to three years, $1.7 million; three to five years, $1.8 million; and more than five years, $0.7 million.

(3) Our co-promote termination obligation to Organon was assumed by King pursuant to the AVINZA Purchase Agreement. However, as Organon did not consent to the legal assignment of the obligation to King, we remain liable to Organon in the event of King's default of the obligation. We have excluded payments under the co-promote termination liability from the table as amounts are expected to be reimbursed by King. As of September 30, 2009, the total estimated amount of the obligation is $57.3 million on an undiscounted basis.

As of September 30, 2009, we have net open purchase orders (defined as total open purchase orders at year end less any accruals or invoices charged to or amounts paid against such purchase orders) totaling approximately $3.2 million. We plan to spend approximately $0.1 million on capital expenditures during the remainder of 2009.

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

At September 30, 2009, our investment portfolio included fixed-income securities of $40.4 million. These securities are subject to interest rate risk and will decline in value if interest rates increase. However, due to the short duration of our investment portfolio, an immediate 10% change in interest rates is not expected to have a material impact on our financial condition, results of operations or cash flows. At September 30, 2009, we also have certain equipment financing arrangements with variable rates of interest. Due to the relative insignificance of such arrangements, however, an immediate 10% change in interest rates would have no material impact on our financial condition, results of operations, or cash flows. Declines in interest rates over time will, however, reduce our interest income, while increases in interest rates over time will increase our interest expense.

We do not have a significant level of transactions denominated in currencies other than U.S. dollars and as a result we have limited foreign currency exchange rate risk. 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.

## 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. Based on this evaluation, our principal executive officer and principal financial officer concluded as of the Evaluation Date that our disclosure controls and procedures were effective such that the information relating to us, including our consolidated subsidiaries, required to be disclosed in our SEC reports (i) is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and (ii) is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of any changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during our most recently completed fiscal quarter. Based on that evaluation, our principal executive officer and principal financial officer concluded that there has not been any change in our internal control over financial reporting during that quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## PART II. OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

We and Seragen, Inc., our subsidiary, were named parties to *Sergio M. Oliver, et al. v. Boston University, et al.*, a shareholder class action filed on December 17, 1998 in the Court of Chancery in the State of Delaware. We and Seragen were dismissed from the action, but such dismissal is subject to appeal and we and Seragen may have possible indemnification obligations with respect to certain defendants. As of September 30, 2009, we have not accrued an indemnification obligation based on our assessment that our responsibility for any such obligation is not probable or estimable.

On October 10, 2008, we received notice that a putative class action complaint was filed in the Superior Court of New Jersey, Mercer County (Equity Division) by Allen Heilman, one of Phamacopeia's stockholders, against Pharmacopeia, the members of its Board of Directors, us and two of our wholly owned subsidiaries. The complaint generally alleged that Pharmacopeia's Board of Directors' decision to enter into the transaction with us on the terms contained in the merger agreement constituted a breach of fiduciary duty and gave rise to other unspecified state law claims. The complaint also alleged that we and two of our wholly owned subsidiaries aided and abetted Pharmacopeia's Board of Directors' breach of fiduciary duty. In addition, the complaint alleged that the named plaintiff sought "equitable relief," including among other things, an order preliminarily and permanently enjoining the transaction. While we believe that neither Ligand nor Pharmacopeia engaged in any wrongful acts, in an effort to minimize the cost and expense of any litigation, the parties entered into a stipulation of settlement, pursuant to which Pharmacopeia agreed to make certain additional disclosures in its SEC Form 14d-9 and not oppose a fee award to plaintiffs' attorneys of up to $180,000, which is included in current portion of accrued litigation settlement costs at September 30, 2009. On October 20, 2009, the court granted final approval of the stipulation of settlement and dismissed the class action with prejudice.

On September 9, 2009, the Company received notice that a class action complaint was filed in the Connecticut Superior Court for the Judicial District of New Haven by Gabriel Guzman, one of Neurogen's stockholders, against Neurogen, the members of its Board of Directors, Ligand and one of Ligand's wholly owned subsidiaries. The amended complaint generally alleged that Neurogen's Board of Directors' decision to enter into the transaction with us on the terms contained in the merger agreement constituted a breach of fiduciary duty. The amended complaint also alleges that Ligand and one of Ligand's wholly owned subsidiaries aided and abetted Neurogen's Board of Directors' breach of fiduciary duty. Management believes that neither Ligand nor Neurogen engaged in any wrongful acts and on October 22, 2009, the Company filed a motion to strike the complaint.

In addition, 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.

## ITEM 1A. RISK FACTORS

*The following is a summary description of some of the many risks we face in our business including any risk factors as to which there may have been a material change from those set forth in our Annual Report on Form 10-K for the year ended December 31, 2008. 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.*

*We have marked with an asterisk (*) those risk factors that reflect substantive changes from the risk factors included in our previously filed Annual Report on Form 10-K for the year ended December 31, 2008.*

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

***We are substantially dependent on AVINZA and PROMACTA royalties for our revenues.****

King is obligated to pay us royalties based on its sales of AVINZA and GSK is obligated to pay us royalties on its sales of PROMACTA. These royalties represent and will for some time represent substantially all of our ongoing revenue. Although we may also receive royalties and milestones from our partners in various past and future collaborations, the amount of revenue from such royalties and milestones is unknown and highly uncertain. As a result, any setback that may occur with respect to AVINZA or PROMACTA could significantly impair our operating results and/or reduce the market price of our stock. Setbacks could include problems with shipping, distribution, manufacturing, product safety, marketing, government licenses and approvals, intellectual property rights, competition with existing or new products and physician or patient acceptance of the products, as well as higher than expected total rebates, returns or discounts.

King and GSK's sales efforts for AVINZA and PROMACTA, respectively, could be affected by a number of factors and decisions regarding their organizations, operations, and activities as well as events both related and unrelated to AVINZA or PROMACTA, including sales force reorganizations and lower than expected sales calls and prescription volumes. AVINZA and PROMACTA could also face stiffer competition from existing or future products. The negative impact on the sales of AVINZA or PROMACTA will negatively affect our royalties, revenues and earnings.

Sales of AVINZA and PROMACTA may also be negatively impacted by higher than expected discounts (especially pharmacy benefit management/group purchasing organization rebates and Medicaid rebates, which can be substantial), returns and chargebacks and/or slower than expected market penetration. Other setbacks that AVINZA could face in the sustained-release opioid market include abuse issues and the inability to obtain sufficient quotas of morphine from the Drug Enforcement Agency to support production requirements.

AVINZA or PROMACTA could also face regulatory action and product safety issues. For example, the FDA previously requested expanded warnings on the AVINZA label to alert doctors and patients to the dangers of using AVINZA with alcohol. Changes were subsequently made to the label. The FDA also requested clinical studies to investigate the risks associated with taking AVINZA with alcohol. Any additional warnings, studies and any further regulatory action could have significant adverse effects on AVINZA sales.

On September 10, 2007, King reported that Actavis, a manufacturer of generic pharmaceutical products headquartered in Iceland, had filed with the FDA an Abbreviated New Drug Application, or ANDA, with a Paragraph IV Certification pertaining to AVINZA, the rights to which were acquired by King from us in February 2007. According to the report, Actavis's Paragraph IV Certification sets forth allegations that U.S. Patent No. 6,066,339, or the 339 patent, which pertains to AVINZA, and which is listed in the FDA's Approved Drug Products With Therapeutic Equivalence Evaluations, will not be infringed by Actavis's manufacture, use, or sale of the product for which the ANDA was submitted. The expiration date for this patent is November 2017. King, King Pharmaceuticals Research and Development, Inc., Elan Corporation, plc and Elan Pharma International Ltd. jointly filed suit in federal district court in New Jersey on October 18, 2007 against Actavis, Inc. and Actavis Elizabeth LLC for patent infringement under the 339 patent. The lawsuit seeks a judgment that would, among other things, prevent Actavis from commercializing its proposed morphine product until after expiration of the 339 patent.

On July 21, 2009, King, King Pharmaceuticals Research and Development, Inc., Elan Corporation, plc and Elan Pharma International Ltd. jointly filed suit in federal district court in New Jersey against Sandoz Inc., or Sandoz, for patent infringement under the 339 patent. According to the complaint, Sandoz filed an ANDA for morphine sulfate extended release capsules and, in connection with the ANDA filing, Sandoz provided written certification to the FDA alleging that the claims of the 339 patent are invalid, unenforceable and/or will not be infringed by the manufacture, use or sale of Sandoz's proposed morphine product. Similar to the lawsuit against Actavis, this

lawsuit seeks a judgment that would, among other things, prevent Sandoz from commercializing its proposed morphine product until after expiration of the 339 patent.

AVINZA was licensed from Elan Corporation, or Elan, which is its sole manufacturer. Any problems with Elan's manufacturing operations or capacity could reduce sales of AVINZA, as could any licensing or other contract disputes with Elan, raw materials suppliers, or others.

Further, pursuant to the agreement with King, we are no longer be entitled to receive AVINZA royalties on a quarterly basis, but will collect royalties on an annual basis, which may adversely impact our cash flows.

***Our product candidates face significant regulatory hurdles prior to marketing which could delay or prevent sales.***

Before we obtain the approvals necessary to sell any of our potential products, we must show through preclinical studies and human testing that each product is safe and effective. We and our partners have a number of products moving toward or currently awaiting regulatory action, including bazedoxifene, lasofoxifene, PS433540 and PS178990. Failure to show any product's safety and effectiveness could delay or prevent regulatory approval of a product and could adversely affect our business. The clinical trials process is complex and uncertain. For example, the results of preclinical studies and initial clinical trials may not necessarily predict the results from later large-scale clinical trials. In addition, clinical trials may not demonstrate a product's safety and effectiveness to the satisfaction of the regulatory authorities. Recently, a number of companies have suffered significant setbacks in advanced clinical trials or in seeking regulatory approvals, despite promising results in earlier trials. The FDA may also require additional clinical trials after regulatory approvals are received. Such additional trials may be expensive and time-consuming, and failure to successfully conduct those trials could jeopardize continued commercialization of a product.

The rate at which we complete our clinical trials depends on many factors, including, but not limited to, our ability to obtain adequate supplies of the products to be tested and patient enrollment. Patient enrollment is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites and the eligibility criteria for the trial. Delays in patient enrollment for our trials may result in increased costs and longer development times. For example, the trial entitled "Eltrombopag To Reduce The Need For Platelet Transfusion In Subjects With Chronic Liver Disease And Thrombocytopenia Undergoing Elective Invasive Procedures (ELEVATE)" was suspended in October 2009 in accordance with an IDMC Recommendation. In addition, our collaborative partners have rights to control product development and clinical programs for products developed under the collaborations. As a result, these collaborative partners may conduct these programs more slowly or in a different manner than expected. Moreover, even if clinical trials are completed, we or our collaborative partners still may not apply for FDA approval in a timely manner or the FDA still may not grant approval.

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

Our strategy for developing and commercializing many of our potential products, including products aimed at larger markets, includes entering into collaborations with corporate partners and others. These collaborations have provided us with funding and research and development resources for potential products for the treatment of a variety of diseases. These agreements also give our collaborative partners significant discretion when deciding whether or not to pursue any development program. Our existing collaborations may not continue or be successful, and we may be unable to enter into future collaborative arrangements to develop and commercialize our product candidates.

In addition, our collaborators may develop drugs, either alone or with others that compete with the types of drugs they are developing with us. This would result in increased competition for our programs. If products are approved for marketing under our collaborative programs, revenues we receive will depend on the manufacturing, marketing and sales efforts of our collaborative partners, who generally retain commercialization rights under the collaborative agreements. Generally, our current collaborative partners also have the right to terminate their collaborations under specified circumstances. If any of our collaborative partners breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully, our product development under these agreements will be delayed or terminated. Disputes or litigation may also arise with our collaborators, including disputes or litigation over ownership rights to intellectual property, know-how or technologies developed with our collaborators. Such disputes or litigation could adversely affect our rights to one or more of our product candidates, including our PS433540 and PS178990 compounds. 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.

***If we consume cash more quickly than expected, and if we are unable to raise additional capital, we may be forced to curtail operations.***

Our operations have consumed substantial amounts of cash since inception. Clinical and preclinical development of drug candidates is a long, expensive and uncertain process. Also, we may acquire companies, businesses or products and the consummation of such acquisitions may consume additional cash. For example, as part of the consideration for our recent acquisition of Pharmacopeia we distributed approximately $9.3 million in cash to Pharmacopeia stockholders. Security-holders of Pharmacopeia also received contingent value rights under which we could be required to make an aggregate cash payment of $15.0 million to such security-holders under certain circumstances.

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 twelve months. However, changes may occur that would cause us to consume available capital resources before that time. Examples of relevant potential changes that could impact our capital resources include:

- the costs associated with our drug research and development activities, and additional costs we may incur if our development programs are delayed or are more expensive to implement than we currently anticipate;
- changes in existing collaborative relationships, including the funding we receive in connection with those relationships;
- the progress of our milestone and royalty producing activities;
- acquisitions of other businesses or technologies;
- the termination of our lease agreements;
- the purchase of additional capital equipment;
- cash payments or refunds we may be required to make pursuant to certain agreements with third parties;
- competing technological and market developments; and
- the cost of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights, and the outcome of related litigation.

Additional capital may not be available on favorable terms, or at all. If additional capital is not available, we may be required to curtail operations significantly or to obtain funds by entering into arrangements with partners or other third parties that may require us to relinquish rights to certain of our technologies, products or potential markets that we would not otherwise relinquish.

***If, as the result of a merger, or otherwise, our collaborative partners were to change their strategy or the focus of their development and commercialization efforts with respect to our alliance products, the success of our alliance products could be adversely affected.***

Our collaborative partners may change the focus of their development and commercialization efforts as the result of a merger. Pharmaceutical and biotechnology companies have historically re-evaluated their priorities from time to time, including following mergers and consolidations which are common in these industries, and two of our collaborative partners have recently entered into merger agreements. In October 2009, Wyeth, a collaborative partner of ours, and Pfizer announced that Pfizer had completed its acquisition of Wyeth in a cash and stock transaction. Furthermore, in March 2009, Schering-Plough Corporation, another of our collaborative partners, and Merck & Co., Inc., or Merck, announced that their boards of directors unanimously approved a definitive merger agreement pursuant to which Merck and Schering-Plough will combine, under the name Merck, in a stock and cash transaction. As a result of the consummation of these mergers, our collaborative partners may develop and commercialize, either alone or with others, products and services that are similar to or competitive with our alliance

products. Furthermore, the ability of our alliance products to reach their potential could be limited if our collaborative partners reduce or fail to increase spending related to such products as a result of these mergers.

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

***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 AVINZA, PROMACTA, bazedoxifene, lasofoxifene, LGD-4665, PS433540, PS178990 and any 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.

On March 4, 2008, Rockefeller filed suit in the United States District Court for the Southern District of New York, against us alleging, among other things, a breach by us of our September 30, 1992 license agreement with Rockefeller, as well as other causes of action for unjust enrichment, quantum meruit, specific performance to perform an audit and declaratory relief. In February 2009 we reached a settlement with Rockefeller whereby the parties resolved all disputes that have arisen between them, including Rockefeller's primary claim relating to the development of PROMACTA as well our counterclaims.

Other possible 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.

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

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

***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.

The Financial Industry Regulatory Authority, or FINRA, (formerly the National Association of Securities Dealers, Inc.) and the Securities and Exchange Commission, or SEC, have adopted certain new rules. If we were unable to continue to comply with the new rules, we could be delisted from trading on the NASDAQ Global Market, or Nasdaq, and thereafter trading in our common stock, if any, would be conducted through the over-the-counter market or on the Electronic Bulletin Board of FINRA. As a consequence of such delisting, an investor would likely find it more difficult to dispose of, or to obtain quotations as to the price of, our common stock. Delisting of our common stock could also result in lower prices per share of our common stock than would otherwise prevail.

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

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

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

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

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

We were founded in 1987. We have incurred significant losses since our inception. As of September 30, 2009, our accumulated deficit was $684.6 million.

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

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

***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.****

While no material weaknesses were identified as of September 30, 2009, we cannot assure you that material weaknesses will not be identified in future periods. The existence of one or more material weakness or significant deficiency 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.

***Challenges to or failure to secure patents and other proprietary rights may significantly hurt our business.***

Our success will depend on our ability and the ability of our licensors to obtain and maintain patents and proprietary rights for our potential products both in the United States and in foreign countries. Patents may not be issued from any of these applications currently on file, or, if issued, may not provide sufficient protection. Our patent position, like that of many biotechnology and pharmaceutical companies, is uncertain and involves complex legal and technical questions for which important legal principles are unresolved. We may not develop or obtain rights to products or processes that are patentable. Even if we do obtain patents, such patents may not adequately protect the technology we own or have licensed. In addition, others may challenge, seek to invalidate, infringe or circumvent any patents we own or license and rights we receive under those patents may not provide competitive advantages to us.

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.

***We will have continuing obligations to indemnify the buyers of our commercial product lines, and may be subject to other liabilities related to the sale of our commercial product lines.***

We agreed to indemnify Eisai, the purchaser of our Oncology product line, for damages suffered by Eisai arising from any breach of our representations, warranties, covenants or obligations in the asset purchase agreement. Our obligation to indemnify Eisai extends beyond the closing of the sale of our Oncology product line in October 2006 up to, in some cases, 36 months and, in other cases, until the expiration of the applicable statute of limitations. In a few instances, our obligation to indemnify Eisai survives in perpetuity.

Under the asset purchase agreements, our exposure for any indemnification claim brought by Eisai is limited to $30.0 million. However, in certain matters, our indemnification obligation is not subject to the foregoing limits on

liability. For example, we are obligated to indemnify King, without limitation, for all liabilities arising under certain agreements with Catalent Pharma Solutions related to the manufacture of AVINZA. Similarly, we are obligated to indemnify Eisai, without limitation, for all liabilities related to certain claims regarding promotional materials for the ONTAK and Targretin drug products. 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.

As previously disclosed, in connection with the AVINZA sale transaction, King assumed our obligation to make payments to Organon based on net sales of AVINZA (the fair value of which was $57.3 million as of September 30, 2009). As Organon did not consent to the legal assignment of the co-promote termination obligation from us to King, 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 commercial product lines does not relieve us of exposure to product liability risks on products we sold prior to divesting these product lines. For example, such products may need to be recalled to address regulatory issues. A successful product liability claim or series of claims brought against us could result in payment of significant amounts of money and divert management's attention from running our business.

We believe that we carry reasonably adequate insurance for product liability claims. However, we may not be able to maintain our insurance on commercially reasonable terms, or our insurance may not provide adequate protection in the case of a product liability claim. To the extent that product liability insurance, if available, does not cover potential claims, we will be required to self-insure the risks associated with such claims.

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

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

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

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

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

Our shareholder rights plan and provisions contained in our certificate of incorporation and bylaws may discourage transactions involving an actual or potential change in our ownership. In addition, our Board of Directors may issue shares of preferred stock without any further action by the stockholders. Such restrictions and issuances may have the effect of delaying or preventing a change in our ownership. If changes in our ownership are discouraged, delayed or prevented, it would be more difficult for our current Board of Directors to be removed and replaced, even if you or our other stockholders believe that such actions are in the best interests of us and our stockholders.

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

We engage one or more third parties to manage some of our cash consistent with an investment policy that allows a range of investments and maturities. The investments are intended to maintain safety of principal while providing liquidity adequate to meet projected cash requirements. Risks of principal loss are to be minimized through diversified short and medium term investments of high quality, but the investments are not in every case guaranteed or fully insured. As a result of changes in the credit market, one of our short-term investments in commercial paper is in default. We intend to pursue collection efforts, but we might not recoup some or all of our

investment in the commercial paper. In addition, from time to time we may suffer other losses on our short-term investment portfolio.

***We may require additional money to run our business and may be required to raise this money on terms which are not favorable to us or which reduce our stock price.***

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 drug development programs will require substantial additional future funding which could hurt our operational and financial condition.***

Our drug development programs 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.

Our future operating and capital needs will depend on many factors, including: the pace of scientific progress in our research and development programs and the magnitude of these programs; the scope and results of preclinical testing and human studies; the time and costs involved in obtaining regulatory approvals; the time and costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims; competing technological and market developments; our ability to establish additional collaborations; changes in our existing collaborations; the cost of manufacturing scale-up; and the effectiveness of our commercialization activities.

We expect our research and development expenditures over the next three years to continue to be significant. However, we base our outlook regarding the need for funds on many uncertain variables. Such uncertainties include regulatory approvals, the timing of events outside our direct control such as product launches by partners and the success of such product launches, negotiations with potential strategic partners, possible sale of assets or other transactions and other factors. Any of these uncertain events can significantly change our cash requirements.

While we expect to fund our research and development activities from cash generated from AVINZA and PROMACTA royalties and 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.

***Significant returns of products we sold prior to selling our commercial businesses could harm our operating results.***

Under our agreements to sell our commercial businesses, we remain financially responsible for returns of our products sold before those businesses were transferred to their respective buyers. Consequently, if returns of those products are higher than expected, we could incur substantial expenses for processing and issuing refunds for those returns which, in turn, could negatively impact our financial results. The amount of returns could be affected by a number of factors including, but not limited to, ongoing product demand, product rotation at distributors and wholesalers, and product stability issues.

***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, the U.S. mortgage market and a declining residential real estate market in the U.S. have contributed to increased volatility and diminished expectations for the economy and the markets going forward. These factors, combined with volatile oil prices, declining business and consumer confidence and increased unemployment, have precipitated an economic recession and fears of a possible depression. Domestic and international equity markets continue to experience heightened volatility and turmoil. These events and the continuing market upheavals may have an adverse effect on us. In the event of a continuing market downturn, our results of operations could be adversely affected by those factors in many ways, including making it more difficult for us to raise funds if necessary, and our stock price may further decline.

Our investment securities consist primarily of money market funds, corporate debt obligations and U.S. government agency securities. We do not have any auction rate securities. Recently, there has been concern in the credit markets regarding the value of a variety of mortgage-backed securities and the resultant effects on various securities markets. We cannot provide assurance that our investments are not subject to adverse changes in market value. If our investments experience adverse changes in market value, we may have less capital to fund our operations.

***We may be unable to successfully integrate the business of Pharmacopeia and realize the anticipated benefits of the merger.***

In December 2008, we completed our merger with Pharmacopeia. The success of the merger will depend, in part, on our ability to realize the anticipated synergies, growth opportunities and cost savings from integrating Pharmacopeia's business with our business. Our success in realizing these benefits and the timing of this realization depend upon the successful integration of the operations of Pharmacopeia. The integration of two independent companies is a complex, costly and time-consuming process. It is possible that the integration process could result in the loss of key employees, diversion of each company's management's attention, the disruption or interruption of, or the loss of momentum in, each company's ongoing business or inconsistencies in standards, controls, procedures and policies, any of which could adversely affect either company's ability to maintain relationships with licensors, collaborators, partners, suppliers and employees or our ability to achieve the anticipated benefits of the merger, or could reduce our earnings or otherwise adversely affect the business and financial results of the combined company and, as a result, adversely affect the market price of our common stock.

We expect to incur significant costs and commit significant management time integrating Pharmacopeia's business operations, technology, development programs, products and personnel with those of ours. If we do not successfully integrate the business of Pharmacopeia, the expenditure of these costs will reduce our cash position

***Impairment charges pertaining to goodwill, identifiable intangible assets or other long-lived assets from the merger with Pharmacopeia 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 merger with Pharmacopeia has been allocated to Pharmacopeia's 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.

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

As part of our efforts to acquire companies, business or product candidates or to enter into other significant transactions, we conduct business, legal and financial due diligence with the goal of identifying and evaluating material risks involved in the transaction. Despite our efforts, we ultimately may be unsuccessful in ascertaining or

evaluating all such risks and, as a result, might not realize the intended advantages of the transaction. If we fail to realize the expected benefits from acquisitions we may consummate in the future, whether as a result of unidentified risks, integration difficulties, regulatory setbacks and other events, our business, results of operations and financial condition could be adversely affected. If we acquire product candidates, we will also need to make certain assumptions about, among other things, development costs, the likelihood of receiving regulatory approval and the market for such product candidates. Our assumptions may prove to be incorrect, which could cause us to fail to realize the anticipated benefits of these transactions.

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

***The drug research and development industry is highly competitive and subject to technological change, and we may not have the resources necessary to compete successfully.***

Many of our competitors have access to greater financial, technical, research, marketing, sales, distribution, service and other resources than we do. Moreover, the pharmaceutical and biotechnology industries are characterized by continuous technological innovation. We anticipate that we will face increased competition in the future as new companies enter the market and our competitors make advanced technologies available. Technological advances or entirely different approaches that we or one or more of our competitors develop may render our products, services and expertise obsolete or uneconomical. Additionally, the existing approaches of our competitors or new approaches or technologies that our competitors develop may be more effective than those we develop. We may not be able to compete successfully with existing or future competitors.

***We have excess space available for sublease at our facilities and we may not be able to find qualified sublease tenants.***

We have entered into long-term, non-cancellable real estate arrangements for space which, as a result of reductions in our workforce and our acquisition of Pharmacopeia, are considered to be in excess of our current requirements. We currently have a tenant who is subleasing one of our facilities and we are actively looking for additional sublease tenants to sublease up to approximately 80,000 square feet of vacant space or space that could be made available through changes in the current layout of our operations. We will continue to be responsible for all carrying costs of these facilities until such time as we can sublease these facilities or terminate the applicable leases based on the contractual terms of the lease agreements. However, the commercial real estate market conditions in the United States have resulted in a surplus of business facilities making it difficult to sublease properties. If we are unable to find additional sublease tenants we may not meet our expected estimated levels of sublease income or we may be required to terminate these leases at a substantial cost, and, accordingly, our results of operations could be materially and adversely affected.

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## ITEM 6. EXHIBITS

| Exhibit Number | Description |
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| 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. |
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| 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. |
| 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. |
| 3.1(4) | Amended and Restated Certificate of Incorporation of the Company (Filed as Exhibit 3.1). |
| 3.2(4) | Bylaws of the Company, as amended (Filed as Exhibit 3.3). |
| 3.3(5) | Amended Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of the Company (Filed as Exhibit 3.3). |
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| 10.323 † | Research Collaboration Termination Agreement, between the Company and N.V. Organon, dated as of July 29, 2009, filed herewith. |
| 10.324(13) | Lease, between the Company and HCP TPSP, LLC, dated August 7, 2009. |
| 10.325(13) | Lease Termination Agreement, between the Company and TPSC IX, LLC, dated August 7, 2009. |
| 10.326(2) | Form of Aplindore Contingent Value Rights Agreement. |
| 10.327(2) | Form of H3 Contingent Value Rights Agreement. |
| 10.328(2) | Form of Merck Contingent Value Rights Agreement. |
| 10.329(2) | Form of Real Estate Contingent Value Rights Agreement. |
| 10.330(2) | Form of Voting Agreement, entered into with the Company by each of Warburg Pincus Private Equity VIII, L.P., Stephen R. Davis, Julian C. Baker, Baker/Tisch Investments, L.P., Baker Bros. Investments, L.P., Baker Bros. Investments II, L.P., Baker Biotech Fund I, L.P., Baker Brothers Life Sciences, L.P. and FBB Associates, dated August 23, 2009 (as to first two persons) or August 22, 2009 (as to last seven persons). |
| 10.331 † | Amendment No. 2 to Product Development and Commercialization Agreement, by and among SmithKline Beecham Corporation, doing business as GlaxoSmithKline, Glaxo Group Limited, and Pharmacopeia, LLC, a wholly owned subsidiary of the Company, filed herewith. |
| 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. |
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(11) 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-3 (No. 333-102483) filed on January 13, 2003, as amended.

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**LIGAND PHARMACEUTICALS INCORPORATED**

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

Date: November 9, 2009

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

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**EXHIBIT 10.323**

**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.**

# RESEARCH COLLABORATION TERMINATION AGREEMENT

This Research Collaboration Termination Agreement (this "Termination Agreement"), effective as of June 22, 2009 (the "Effective Date"), is made by and between N. V. Organon, a company organized under the laws of The Netherlands, having a principal place of business at Kloosterstraat 6, 5342 AB Oss, The Netherlands (hereinafter referred to as "Organon"); and Ligand Pharmaceuticals Incorporated, a Delaware corporation, having a principal place of business at 10275 Science Center Drive, San Diego, California 92121 (hereinafter referred to as "Ligand").

## RECITALS:

WHEREAS, Pharmacopeia Drug Discovery, Inc., now Pharmacopeia LLC, a wholly owned subsidiary of Ligand, and Organon entered into a Collaboration and License Agreement effective February 25, 2002, as modified on December 22, 2003; December 1, 2004; February 8, 2007 and December 13, 2007 (hereinafter the "Collaboration and License Agreement");

WHEREAS, Organon and Ligand desire to terminate the Research Collaboration under the Collaboration and License Agreement and to wind down the research activities thereunder under the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants contained herein, Organon and Ligand hereby agree as follows:

1. Unless otherwise defined herein, each of the capitalized terms used in this Termination Agreement shall have the meaning given to them in the Collaboration and License Agreement.

2. Organon and Ligand agree that the Second Research Term of the Collaboration and License Agreement and, therefore, the Research Collaboration thereunder, shall terminate effective December 31, 2009 (the "Mutual Termination Date").

3. During the period of time between the Effective Date and the Mutual Termination Date (the "Wind Down Period"), (i) the Parties shall continue their Research Collaboration activities on those Targets currently under investigation under the Collaboration and License Agreement, as may be modified by the JRC, and (ii) Organon shall continue its funding of such activities under the terms of the Collaboration and License Agreement.

4. During the Wind Down Period, Ligand will endeavor to identify Pharmacopeia Compounds as per Section 2.4 of the Collaboration and License Agreement. Any Lead Compounds delivered for any program shall be handled as set forth in the Collaboration and License Agreement. Programs that have not produced a Lead Compound at the end of the Wind Down Period shall be handled as follows (for the avoidance of doubt, the terms and conditions of

this Paragraph 4 shall not apply to the **[***] program, which is handled separately in Paragraph 5 herein):**

(a) For the Targets **[***]**, **[***]** and **[***]**, Organon shall have the option to acquire one or more of these programs as a Transferred Program by paying Ligand a one-time transfer fee of **[***]** Dollars ($**[***]**) for each such Target. The rights to any compounds identified by Ligand as having the level of potency and/or selectivity against such Target, as set forth in Section 2.4 of the Collaboration and License Agreement, shall be deemed part of the Transferred Program and for the avoidance of doubt, the provisions of Section 2.2(d) of the Collaboration and License Agreement shall apply to such compounds.

(b) For the Targets **[***]**, **[***]**, **[***]**, **[***]**, **[***]** and **[***]**, Organon shall have the option to acquire one or more of these programs as a Transferred Program by paying Ligand a one-time transfer fee of **[***]** Dollars ($**[***]**) per Target or acquiring all such programs as Transferred Programs by paying a one-time transfer fee of **[***]** Dollars ($**[***]**). The rights to any compounds identified by Ligand as being confirmed hits against the Target or any compounds identified during hit-to-lead efforts, but with activity against such Target, shall be included as part of the Transferred Program and for the avoidance of doubt the provisions of Section 2.2(d) of the Collaboration and License Agreement as amended herein shall apply to such compounds.

(c) For each program under consideration as a Transferred Program (the "Candidate Transferred Programs") in Paragraphs 4(a) or 4(b) above, Ligand shall provide copies of reasonably available data and results for such programs, including chemical structures, necessary to enable Organon to conduct a review of the programs prior to Organon making its decision on whether to exercise any of its options to acquire such programs. Ligand shall disclose such information to two individuals (the "Reviewers") if each of the Reviewers first executes a confidentiality agreement with Ligand in the form of the agreement attached hereto as Exhibit 1 with the names of the two individuals to be filled-in prior to execution of each confidentiality agreement. Organon shall not provide such information relating to the Targets **[***]**, **[***]** and **[***]** to more than two individuals in total and Organon shall not provide such information relating to the Targets **[***]**, **[***]**, **[***]**, **[***]**, **[***]** and **[***]** to more than two individuals in total.

(i) Ligand shall provide to the Reviewers by January 15, 2010 the relevant data and results related to Candidate Transferred Programs for the **[***]**, **[***]**, **[***]**, **[***]**, **[***]** and **[***]** Targets for the Reviewers' review, provided that for any such Target one or more Lead Compounds have not already been delivered and provided that Organon has executed a confidentiality agreement with Ligand in the form of the agreement attached hereto as Exhibit 1. Organon shall have until February 19, 2010 to determine which of these programs it will acquire as one or more Transferred Programs. Should Organon decide that the two Reviewers for the set of targets under this provision 4(c)(i) will be the same as the Reviewers under 4(c)(ii), the Parties agree that the first confidentiality agreement executed will apply to both sets of targets.

*** Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

(ii) For the Targets [***], [***] and [***], Ligand shall provide the relevant data and results to the Reviewers by November 2, 2009, provided that for any such Target one or more Lead Compounds have not already been delivered and provided that Organon has executed a confidentiality agreement with Ligand in the form of the agreement attached hereto as Exhibit 1. Organon shall have until November 15, 2009 to determine which of these programs it will acquire as one or more Transferred Programs.

(iii) Organon shall make payment on the Transferred Programs that it selects within forty-five (45) days after receipt of: (i) all materials required thereunder as set forth in Section 2.2(d)(iv) of the Collaboration and License Agreement, (ii) updated non-disputed Exhibits B and F as per Section 2.2(d)(v) and 2.2(d)(vi), and (iii) an invoice from Ligand for such payment. Provided that Organon has received from Ligand all of the items specified in this subsection by November 15, 2009, Organon shall make payment before the end of the 2009 calendar year for any Transferred Programs selected on or before November 15, 2009.

5. The **[***]** program is a Lead Optimization Program under the Collaboration and License Agreement. During the Wind Down Period, if that program produces a compound that meets the Development Candidate criteria, then such compound will be treated as an Optionable Development Candidate under the Collaboration and License Agreement. However, if such program does not produce a compound that meets the Development Candidate criteria during the Wind Down Period, Organon shall have the right to continue to pursue the research activities for such program on its own and the program will be treated as a Lead Compound program under the Collaboration and License Agreement, with the following changes to the milestone payments:

(a) Organon will pay Ligand **[***]** Dollars ($**[***]**) for the milestone payment for the designation of a Lead Compound.

(b) The remaining milestone and royalty payments for Second Research Term Lead Compounds set forth in the Collaboration and License Agreement will be applicable to such program, except that the milestone payment under Section 7.1.1 (a) for the initiation of GLP Toxicity Studies will be increased to **[***]** Dollars ($**[***]**).

(c) For the avoidance of doubt, if the **[***]** program does not produce a compound that meets the Development Candidate criteria during the Wind Down Period, it shall not be considered an Optionable Development Candidate and the Pharmacopeia Co-Development/Co-Promotion Option under Section 2.9 of the Collaboration and License Agreement shall not apply to such program.

*** Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

6. Delete Section 2.2(d) of the Collaboration and License Agreement in its entirety and replace it with the following new section:

"(d) Transferred Programs. Effective as of the Amendment Date for programs considered Transferred Programs prior to the Effective Date and effective as of the Effective Date for programs considered Transferred Programs after the Effective Date, Pharmacopeia hereby waives its right to receive further compensation with respect to Transferred Programs or any compounds derived therefrom made by Organon based on a Transferred Program, subject to the following terms:

(i) Pharmacopeia shall have no further obligation to make any further expenditures with respect to the Transferred Programs.

(ii) Pharmacopeia agrees that it shall have no further rights to use the Transferred Programs or to file any patent applications with respect thereto.

(iii) All such programs are hereby transferred to Organon and Organon shall be relieved of any obligation to Pharmacopeia, other than as set forth in paragraph 4(b) of this Termination Agreement, with respect to Transferred Programs under this or any other previous agreement.

(iv) Pharmacopeia shall provide Organon with any information, materials or data that are reasonably available to Pharmacopeia and reasonably necessary for Organon to continue the development or commercialization of the Transferred Programs.

(v) Organon's licenses to the Transferred Programs under the Collaboration and License Agreement and the agreements listed in Exhibit B are hereby replaced by the following: Subject to Section 2.2(d)(vii), Pharmacopeia hereby grants to Organon a **[***].**

(vi) Pharmacopeia further agrees **[***]**.

(vii) The only license granted to Organon with respect to the Transferred Programs is that set forth in Section 2.2(d)(v), above. The only **[***]** is that set forth in Section 2.2(d)(vi), above. Nothing in this Section 2.2(d) shall be construed to grant **[***]**.

7. Delete Section 12.1.10 of the Collaboration and License Agreement in its entirety and replace it with the following new section:

"12.1.10 Patent Rights Applicable to Transferred Programs. To the best of Pharmacopeia's knowledge, as of February 25, 2007 for any Transferred Program acquired by Organon before the Effective Date and as of December 31, 2009 for any Transferred Program acquired by Organon after the Effective Date, the Patent Rights identified in Exhibit F constitute all the Patent Rights Controlled by Pharmacopeia relating to the Transferred Programs."

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8. Organon and Ligand agree that (a) notwithstanding the terms of the Collaboration and License Agreement, the terms of this Termination Agreement shall govern the disposition of the research programs for the Targets during the Wind Down Period, (b) this Termination Agreement shall supersede the Collaboration and License Agreement with respect to the amendments set forth herein and the remaining terms and conditions of the Collaboration and License Agreement shall remain in full force and effect, and (c) this Termination Agreement represents and contains the full, complete, final and exclusive understanding and agreement of Organon and Ligand with respect to the subject matter hereof.

IN WITNESS WHEREOF, Organon and Ligand have caused this Termination Agreement to be executed by their duly authorized representatives as of the Effective Date.

**N. V. ORGANON**

By: /s/ A. Rijnders
Name: A. Rijnders
Title: V.P. Discovery
28 July 2009

By: /s/ K.S. Schouten
Name: K.S. Schouten
Title: Managing Director

**LIGAND PHARMACEUTICALS INCORPORATED**

By: /s/ Charles Berkman
Name: Charles Berkman
Title: V.P., General Counsel and Secretary
July 29, 2009

**Exhibit 1**

[Form of Confidentiality Agreement to be inserted here]

**EXHIBIT 10.331**

**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.**

# AMENDMENT NO. 2 TO PRODUCT DEVELOPMENT AND COMMERCIALIZATION AGREEMENT

**THIS AMENDMENT NO. 2 TO PRODUCT DEVELOPMENT AND COMMERCIALIZATION AGREEMENT** (this "**Amendment**") amends the Product Development and Commercialization Agreement dated as of March 24, 2006, as the same may have been amended from time to time (the **"Agreement"**), by and among SmithKline Beecham Corporation, doing business as GlaxoSmithKline, a Pennsylvania corporation (**"SB Corp"**), Glaxo Group Limited, a company existing under the laws of England and Wales (**"GGL"**, and collectively with SB Corp referred to hereinafter as **"GSK"**) and Pharmacopeia, LLC, as successor to Pharmacopeia Drug Discovery, Inc., a Delaware limited liability company (**"Pharmacopeia"**), effective as of the date set forth on the signature page below.

## RECITALS

**WHEREAS,** the Parties have agreed to amend the Agreement to clarify certain matters related to certain of the Programs contemplated under the Agreement.

**NOW THEREFORE**, in consideration of the foregoing premises and the mutual covenants contained herein, the Parties, intending to be legally bound, agree as follows:

1. **Capitalized Terms.** The capitalized terms used herein and not otherwise defined shall have the same definitions as provided in the Agreement.

2. **Amendments.**

(a) **Termination of Exclusivity Obligations for Certain Programs.** Notwithstanding Section 3.3 of the Agreement and such other applicable provisions of the Agreement (except for Section 3.4 and any provisions related thereto, which shall continue to apply in full force, except as stated below for GSK) which restrict the activities of the Parties as to Targets being pursued in a Program, the Parties acknowledge and agree that, from and after the date of this Amendment, there shall be no limitations or restrictions on the activities of either Party, acting either alone or with a Third Party, with respect to either of the **[***]** or the **[***]** or their respective associated Targets. The Parties acknowledge and agree that, from and after the date of this Amendment, Section 3.3 shall no longer apply to, and the last sentence of Section 3.4 of the Agreement shall no longer limit or restrict the activities of GSK with respect to either of the **[***]** or the **[***]** or their respective associated Targets. The restrictions set forth in Article 9 of the Agreement shall remain in full force and effect with respect to both Parties. For clarity, GSK shall remain responsible as set forth in the Agreement and this Amendment for all payments

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due with respect to the progression of the **[***]** or the **[***]** resulting from this Agreement through development and commercialization by or on behalf of GSK.

(b) **[***] and Program Payment.** GSK shall make the accelerated payment set forth in Paragraph 3 below with respect to the **[***]**.

(c) **Discontinued Programs/Reversion Program.** The Parties acknowledge and agree that, from and after the date of this Amendment, three (3) Programs shall be terminated (the **"Discontinued Programs"**). The Parties shall mutually agree in writing which three (3) Programs shall be Discontinued Programs within sixty (60) days of the date of this Amendment and the Discontinued Programs and all activities relating thereto shall for all purposes under the Agreement be deemed to be mutually terminated by the Parties as of the date of such agreement, and all rights granted to GSK to the Targets being pursued in such Discontinued Programs shall thereafter, immediately and without any further action required, revert to Pharmacopeia. The Parties further acknowledge and agree that in the event that GSK decides not to exercise its option by making a milestone payment set forth in Sections 6.2.1(b) or 6.2 (solely with respect to the **[***]** or **[***]**), which non-payment is not cured within forty five (45) days after written notice thereof is provided to GSK by Pharmacopeia, effective upon the lapse of such forty five (45)-day period without cure, all rights granted to GSK to the respective Target and Program shall thereafter, immediately and without any further action required, revert to Pharmacopeia (**"Reversion Program"**).

(d) **Rights Upon Discontinuation/Reversion.** Notwithstanding Sections 3.3, 3.4, 12.4 and such other applicable provisions of the Agreement which restrict the activities of Pharmacopeia as to the Targets being pursued in such Discontinued Programs or as to the Target being pursued in the Reversion Program upon the reversion of rights with respect to such Target and Program, the following shall apply with respect to a Discontinued Program or Reversion Program, as the case may be: (i) Pharmacopeia shall be able to directly or indirectly pursue any research, development and/or commercialization of such Reversion Program and such Discontinued Programs and associated Targets without restriction; (ii) the GSK Options and such other rights and obligations as provided in Section 4 of the Agreement shall terminate immediately; (iii) any licenses granted to Pharmacopeia by GSK pursuant to Section 5.1.1(b) of the Agreement shall remain in full force and effect as to the GSK Development Compounds and any corresponding Back-Up Compounds developed pursuant to such Reversion Program or such Discontinued Programs; (iv) any licenses granted by Pharmacopeia to GSK pursuant to Section 5.1.2 of the Agreement shall terminate immediately; (v) Pharmacopeia shall have no obligation to make the applicable milestone and royalty payments to GSK provided for in Section 6.5 of the Agreement; and (vi) notwithstanding Section 12.5(b) of the Agreement, the following shall no longer apply to the Discontinued Programs or the Reversion Program: Articles 2, 4, 6, 10 and 12. In addition, with respect to any Discontinued Program, Sections 3.3, 3.4 and 3.5 and any remaining obligations of exclusivity thereunder shall apply with respect to GSK only until the date which is two (2) years after the date of attainment of the Tractable Hit Criteria for such Target, as such Tractable Hit Criteria attainment dates are listed in Exhibit A, which is attached hereto and is hereby incorporated by reference. Sections 3.3, 3.4 and 3.5 and the obligations thereunder shall not apply in any manner to GSK for any Discontinued Program beyond the date that is two (2) years after the attainment date listed in Exhibit A for the relevant Discontinued

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Program, regardless of the date that such Program becomes a Discontinued Program. With respect to any Reversion Program, none of the obligations under Sections 3.3, 3.4 or 3.5 shall apply to GSK from the date of this Amendment, in accordance with the provisions of Paragraph 2(a) above. For clarity, Articles 1, 11 (with respect to Pharmacopeia) and 14 shall remain in full force and effect with respect to the Discontinued Programs and the Reversion Program, and there shall be no exclusivity obligations of any kind upon GSK under Article 3 or otherwise under the Agreement in relation to any of the Reversion Programs or any of the Discontinued Programs, or any of the Targets associated therewith, except as expressly stated above in this paragraph (d) for the Discontinued Programs.

(e) **Information.** GSK shall promptly share with Pharmacopeia any Information, materials and data resulting from the Reversion Program or any Discontinued Program that is reasonably necessary or important for Pharmacopeia to continue the development or commercialization of the applicable compound, and GSK shall reasonably cooperate with Pharmacopeia to provide a smooth transfer of such Information, materials and data as soon as reasonably practicable and at Pharmacopeia's sole cost and expense, provided that GSK has provided a cost estimate in advance and Pharmacopeia has provided prior written approval before such Third Party expenses have been incurred.

(f) **Designation of Programs as On-Hold/Parked Programs Only.** The Parties acknowledge and agree that **[***]** (**[***]**) Programs shall serve as On-Hold/Parked Programs to the four (4) Programs currently being progressed. The Parties shall mutually agree in writing within sixty (60) days of the date of this Amendment which **[***]** (**[***]**) Programs shall be designated On-Hold/Parked. The JSC may by mutual agreement subsequently determine that On-Hold/Parked Programs should be progressed or that the Programs currently being progressed should be put On-Hold and/or Parked. For example, and not by way of limitation, when an active Program is terminated, the JSC shall have the authority, on mutual agreement, to replace such Program with an On-Hold or Parked Program.

3. **Payment.** GSK has agreed to accelerate the timing of the payment required under Section 6.2.1(a)(i) of the Agreement solely with respect to the **[***]** such that GSK shall pay to Pharmacopeia within two (2) business days of the date of this Amendment Five Hundred Thousand Dollars ($500,000) in full satisfaction of the payment otherwise due under Section 6.2.1(a)(i) of the Agreement with respect to the **[***]**. For clarity, upon the achievement of the Lead Declaration Criteria by each of up to two (2) additional compounds designated by the JSC for advancement into a Lead Optimization Program as Back-up Compounds by Pharmacopeia with respect to the **[***]**, an additional Five Hundred Thousand Dollars ($500,000) shall be payable by GSK pursuant to Section 6.2.1(a)(ii).

4. **No other Amendment.** Except as provided herein, the Agreement shall continue in full force and effect.

5. **Governing Law.** This Amendment and any dispute arising from the performance or breach hereof shall be governed by and construed and enforced in accordance with the laws of the State of Delaware, U.S.A., without reference to conflicts of laws principles.

6. **Counterparts**. This Amendment may be signed in counterparts, each and every one of which shall be deemed an original, notwithstanding variations in format or file designation which may result from electronic transmission, storage and printing of copies of this Amendment from

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separate computers or printers. Facsimile signatures shall be treated as original signatures.

[Remainder of Page Intentionally Left Blank]

**IN WITNESS WHEREOF**, the Parties have executed this Amendment No. 2 to Product Development and Commercialization Agreement through their duly authorized representatives to be effective as of _____, 2009.

**PHARMACOPEIA, LLC**

By: /s/ Syed Kazmi
Title: V.P., Business Development
Date: September 23, 2009

**SMITHKLINE BEECHAM CORPORATION, d/b/a GLAXOSMITHKLINE**

By: /s/ Michelle Dipp, M.D., Ph.D.
Title: V.P. and Head of U.S. C.E.E.D.D.
Date September 25, 2009

**GLAXO GROUP LIMITED**

By: /s/ Paul Williamson
Title: Corporate Director
Date September 25, 2009

## Exhibit A

| Program Name | Date JSC Declared Attainment of Tractable Hit Criteria |
|---|---|
| [***] | [***] |
| [***] | [***] |
| [***] | [***] |
| [***] | [***] |
| [***] | [***] |
| [***] | [***] |

*** Certain information on this page has been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to the omitted portions.

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

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

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

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

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

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

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

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

Date: November 9, 2009

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

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

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

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

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

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

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

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

Date: November 9, 2009

/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 September 30, 2009, 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 September 30, 2009, 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 September 30, 2009, 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 September 30, 2009, pursuant to 18 U.S.C. § 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: November 9, 2009

/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 September 30, 2009, 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 September 30, 2009, 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 September 30, 2009, 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 September 30, 2009, pursuant to 18 U.S.C. § 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: November 9, 2009

/s/ John P. Sharp

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