

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 June 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

(State or other jurisdiction of  
incorporation or organization)

77-0160744

(I.R.S. Employer  
Identification No.)

10275 Science Center Drive  
San Diego, CA

(Address of principal executive offices)

92121-1117

(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 July 30, 2009, the registrant had 113,005,265 shares of common stock outstanding.

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[Table of Contents](#)

LIGAND PHARMACEUTICALS INCORPORATED  
QUARTERLY REPORT

FORM 10-Q

TABLE OF CONTENTS

**[PART I. FINANCIAL INFORMATION](#)**

<b>ITEM 1.</b>	<a href="#">Financial Statements (Unaudited)</a>	
	<a href="#">Condensed Consolidated Balance Sheets as of June 30, 2009 and December 31, 2008</a>	3
	<a href="#">Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2009 and 2008</a>	4
	<a href="#">Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2009 and 2008</a>	5
	<a href="#">Notes to Condensed Consolidated Financial Statements</a>	6
<b>ITEM 2.</b>	<a href="#">Management's Discussion and Analysis of Financial Condition and Results of Operations</a>	19
<b>ITEM 3.</b>	<a href="#">Quantitative and Qualitative Disclosures about Market Risk</a>	28
<b>ITEM 4.</b>	<a href="#">Controls and Procedures</a>	29

**[PART II. OTHER INFORMATION](#)**

<b>ITEM 1.</b>	<a href="#">Legal Proceedings</a>	30
<b>ITEM 1A.</b>	<a href="#">Risk Factors</a>	31
<b>ITEM 2.</b>	Unregistered Sales of Equity Securities and Use of Proceeds	*
<b>ITEM 3.</b>	Defaults Upon Senior Securities	*
<b>ITEM 4.</b>	<a href="#">Submission of Matters to a Vote of Security Holders</a>	41
<b>ITEM 5.</b>	Other Information	*
<b>ITEM 6.</b>	<a href="#">Exhibits</a>	42

**SIGNATURE**

\* No information provided due to inapplicability of item.

[Table of Contents](#)**PART I. FINANCIAL INFORMATION****ITEM 1. FINANCIAL STATEMENTS**

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

	June 30, 2009	December, 31 2008
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 3,549	\$ 28,753
Short-term investments	51,961	51,918
Accounts receivable, net	1,050	—
Other current assets	1,392	2,300
Current portion of co-promote termination payments receivable	11,518	10,958
Total current assets	69,470	93,929
Restricted investments	1,341	1,341
Property and equipment, net	10,459	12,903
Goodwill and other identifiable intangible assets	1,659	5,375
Long-term portion of co-promote termination payments receivable	46,146	47,524
Restricted indemnity account	—	10,232
Other assets	101	144
Total assets	<u>\$ 129,176</u>	<u>\$ 171,448</u>
<b>LIABILITIES AND STOCKHOLDERS' DEFICIT</b>		
Current liabilities:		
Accounts payable	\$ 14,844	\$ 14,627
Accrued liabilities	6,921	12,665
Allowances for loss on returns, rebates and chargebacks related to discontinued operations	1,275	9,590
Current portion of accrued litigation settlement costs	1,180	8,680
Current portion of deferred gain	1,964	1,964
Current portion of co-promote termination liability	11,518	10,958
Current portion of equipment financing obligations	241	1,829
Current portion of deferred revenue	10,259	10,301
Total current liabilities	48,202	70,614
Long-term portion of co-promote termination liability	46,146	47,524
Long-term portion of equipment financing obligations	25	2,178
Long-term portion of deferred revenue	8,421	16,819
Long-term portion of deferred gain	22,310	23,292
Other long-term liabilities	7,987	9,041
Total liabilities	<u>133,091</u>	<u>169,468</u>
Commitments and contingencies		
Common stock subject to conditional redemption; 665,230 and 997,568 shares issued and outstanding at June 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; 118,938,900 and 118,562,748 shares issued at June 30, 2009 and December 31, 2008, respectively	119	119
Additional paid-in capital	716,049	711,195
Accumulated other comprehensive income	94	81
Accumulated deficit	(686,387)	(679,626)
Treasury stock, at cost; 6,607,905 shares at June 30, 2009 and December 31, 2008, respectively	(42,134)	(42,134)
Total stockholders' deficit	<u>(12,259)</u>	<u>(10,365)</u>
	<u>\$ 129,176</u>	<u>\$ 171,448</u>

*See accompanying notes.*

[Table of Contents](#)

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

	<u>Three Months Ended June 30,</u>		<u>Six Months Ended June 30,</u>	
	<u>2009</u>	<u>2008</u>	<u>2009</u>	<u>2008</u>
Revenues:				
Royalties	\$ 2,006	\$ 4,804	\$ 4,736	\$ 9,678
Collaborative research and development and other revenues	5,588	—	12,328	—
Total revenues	<u>7,594</u>	<u>4,804</u>	<u>17,064</u>	<u>9,678</u>
Operating costs and expenses:				
Research and development	9,470	6,377	19,824	13,542
General and administrative	2,831	4,551	9,755	14,650
Write-off of acquired in-process research and development.	441	—	441	—
Total operating costs and expenses	<u>12,742</u>	<u>10,928</u>	<u>30,020</u>	<u>28,192</u>
Accretion of deferred gain on sale leaseback	(491)	(491)	(982)	(982)
Loss from operations	<u>(4,657)</u>	<u>(5,633)</u>	<u>(11,974)</u>	<u>(17,532)</u>
Other income (expense):				
Interest income	120	543	260	1,478
Interest expense	(42)	(39)	(236)	(91)
Other, net	103	(790)	(7)	(1,272)
Total other income (expense), net	<u>181</u>	<u>(286)</u>	<u>17</u>	<u>115</u>
Loss before income taxes	<u>(4,476)</u>	<u>(5,919)</u>	<u>(11,957)</u>	<u>(17,417)</u>
Income tax benefit	—	1,030	—	2,811
Loss from continuing operations	<u>(4,476)</u>	<u>(4,889)</u>	<u>(11,957)</u>	<u>(14,606)</u>
Discontinued operations:				
Gain (loss) on sale of AVINZA Product Line before income taxes	2,592	(1,156)	4,722	7,165
Gain (loss) on sale of Oncology Product Line before income taxes	216	(685)	451	230
Income tax benefit (expense) on discontinued operations	—	301	—	(3,151)
Discontinued operations	<u>2,808</u>	<u>(1,540)</u>	<u>5,173</u>	<u>4,244</u>
Net loss:	<u>\$ (1,668)</u>	<u>\$ (6,429)</u>	<u>\$ (6,784)</u>	<u>\$ (10,362)</u>
Basic and diluted per share amounts:				
Loss from continuing operations	\$ (0.04)	\$ (0.05)	\$ (0.11)	\$ (0.15)
Discontinued operations	0.03	(0.02)	0.05	0.04
Net income (loss)	<u>\$ (0.01)</u>	<u>\$ (0.07)</u>	<u>\$ (0.06)</u>	<u>\$ (0.11)</u>
Weighted average number of common shares	<u>113,147,714</u>	<u>95,055,718</u>	<u>113,132,893</u>	<u>95,051,672</u>

*See accompanying notes.*

[Table of Contents](#)

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

	<u>For the six months ended June 30,</u>	
	<u>2009</u>	<u>2008</u>
<b>Operating activities</b>		
Net loss	\$ (6,784)	\$ (10,362)
Less: gain from discontinued operations	<u>5,173</u>	<u>4,244</u>
Loss from continuing operations	(11,957)	(14,606)
Adjustments to reconcile net loss to net cash used in operating activities:		
Accretion of deferred gain on sale leaseback	(982)	(982)
Amortization of acquired intangible assets	324	—
Depreciation and amortization of property and equipment	1,589	548
Non-cash lease costs	501	4,148
Non-cash development milestone revenue	(915)	—
Write-off of acquired in-process research and development	441	—
Loss (gain) on asset write-offs	(3)	639
Realized loss on investment	43	1,270
Stock-based compensation	1,700	1,847
Other	(4)	(13)
Changes in operating assets and liabilities, net of acquisition:		
Accounts receivable, net	(1,050)	—
Other current assets	908	2,634
Other long term assets	10,063	(108)
Accounts payable and accrued liabilities	(13,020)	(5,714)
Other liabilities	(1,569)	118
Deferred revenue	<u>(4,106)</u>	<u>—</u>
Net cash used in operating activities of continuing operations	(18,037)	(10,219)
Net cash used in operating activities of discontinued operations	<u>(3,134)</u>	<u>(3,151)</u>
Net cash used in operating activities	(21,171)	(13,370)
<b>Investing activities</b>		
Purchases of property and equipment	(320)	(385)
Proceeds from sale of property and equipment and building	15	40
Purchases of short-term investments	(32,806)	(58,858)
Proceeds from sale of short-term investments	32,716	19,364
Other, net	<u>37</u>	<u>(6)</u>
Net cash provide by (used in) investing activities of continuing operations	(358)	(39,845)
Net cash provided by investing activities of discontinued operations	<u>—</u>	<u>8,058</u>
Net cash provided by (used in) investing activities	(358)	(31,787)
<b>Financing activities</b>		
Principal payments on equipment financing obligations	(298)	(911)
Repayment of debt	(3,443)	—
Net proceeds from issuance of common stock	66	46
Repurchase of common stock	<u>—</u>	<u>(1,613)</u>
Net cash used in financing activities	(3,675)	(2,478)
Net decrease in cash and cash equivalents	(25,204)	(47,635)
Cash and cash equivalents at beginning of period	<u>28,753</u>	<u>76,812</u>
Cash and cash equivalents at end of period	<u>\$ 3,549</u>	<u>\$ 29,177</u>

*See accompanying notes.*

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[Table of Contents](#)

**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 June 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 six months ended June 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 June 30, 2009, the Company’s accumulated deficit was \$686.4 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 Pharmacoepia 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*

Net income (loss) per share is computed using the weighted average number of common shares outstanding. Basic and diluted income (loss) per share amounts are equivalent for the periods presented as the inclusion of potential common shares in the number of shares used for the diluted computation would be anti-dilutive to loss per share from continuing operations. In accordance with Statement of Financial Accounting Standards (“SFAS”) No. 128, *Earnings Per Share*, 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 for all periods presented. Potential common shares, the shares

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## Table of Contents

that would be issued upon the exercise of outstanding stock options and warrants and the vesting of restricted shares, were 5.8 million and 4.0 million at June 30, 2009 and 2008, respectively, and have been excluded from the computation of loss per share.

### *Guarantees and Indemnifications*

The Company accounts for and discloses guarantees in accordance with FASB Interpretation No. 45 (“FIN 45”), *Guarantor’s Accounting and Disclosure Requirements for Guarantees Including Indirect Guarantees of Indebtedness of Others*, an interpretation of FASB Statements Nos. 5, 57 and 107 and rescission of FIN 34. The following is a summary of the Company’s agreements that management has determined are within the scope of FIN 45:

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 June 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.

Revenue earned related to up-front product and technology license fees is recognized in accordance with Staff Accounting Bulletin (SAB) 104 issued by the Securities and Exchange Commission (SEC) Emerging Issue Task Force (EITF) No. 00-21, “Revenue Arrangements with Multiple Deliverables” (EITF 00-21), EITF No. 07-1, “Accounting for Collaborative Arrangements” (EITF 07-1) and EITF No. 07-3, “Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities” (EITF 07-3) issued by the FASB. Accordingly, 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 in accordance with SFAS No. 109, *Accounting for Income Taxes* (SFAS 109). 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. SFAS 109 requires that a valuation allowance be 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. Management also applies the guidance of SFAS 109 to determine the amount of income tax expense or benefit to be allocated among continuing operations, discontinued operations, and items charged or credited directly to stockholders’ equity (deficit).

Due to the adoption of SFAS No. 123R, “Share-Based Payment” (SFAS 123R) beginning January 1, 2006, the Company recognizes windfall tax benefits associated with the exercise of stock options directly to stockholders’

## Table of Contents

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.

The Company applies the provisions of FASB Interpretation No. 48 (FIN 48), "Accounting for Uncertainty in Income Taxes." FIN 48 clarifies the accounting for income taxes by prescribing a minimum probability threshold that a tax position must meet before a financial statement benefit is recognized. The minimum threshold is defined in FIN 48 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*

The Company applies the fair value recognition provisions of SFAS 123(R) using the modified prospective transition method to account for stock-based compensation. Under that transition method, compensation cost recognized in the three and six months ended June 30, 2009 and 2008 includes: (a) compensation cost for all stock-based awards granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of SFAS No. 123, and (b) compensation cost for all stock-based awards granted subsequent to January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123(R).

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 \$0.9 million and \$1.7 million for the three and six months ended June 30, 2009, respectively, and \$0.9 million and \$1.8 million for the three and six months ended June 30, 2008, respectively, associated with option awards and restricted stock.

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2009	2008	2009	2008
Risk-free interest rate	2.6%	3.4%	2.1%	3.0%
Dividend yield	—	—	—	—
Expected volatility	73%	68%	74%	65%
Expected term	6.0 years	6.0 years	6.0 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.

## Table of Contents

### 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	1,588,850	2.65		
Exercised	—	—		
Forfeited	(258,600)	4.30		
Cancelled	(135,232)	7.83		
Balance at June 30, 2009	<u>4,225,094</u>	\$ 5.18	7.09	\$ 421
Exercisable at June 30, 2009	1,743,752	\$ 7.81	4.54	\$ 84
Options expected to vest as of June 30, 2009	3,988,093	\$ 5.28	6.97	\$ 392

The weighted-average grant-date fair value of all stock options granted during the six months ended June 30, 2009 was \$1.68 per share. There were no options exercised during the six months ended June 30, 2009. As of June 30, 2009, there was \$6.3 million of total unrecognized compensation cost related to nonvested stock options. That cost is expected to be recognized over a weighted-average period of 3.1 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 June 30, 2009, 8.2 million shares were available for future option grants or direct issuance under the Amended 2002 Plan.

### Restricted Stock Activity

Restricted stock activity for the six months ended June 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	(71,129)	3.64
Nonvested at June 30, 2009	<u>563,757</u>	\$ 3.37

The weighted-average grant-date fair value of restricted stock granted during the six months ended June 30, 2009 was \$2.72 per share. As of June 30, 2009, there was \$1.4 million of total unrecognized compensation cost related to nonvested restricted stock. That cost is expected to be recognized over a weighted-average period of 1.9 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

## Table of Contents

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 under SFAS 123(R). There were 35,802 shares of common stock issued under the Amended ESPP during the six months ended June 30, 2009, resulting in a compensation expense of \$23,000. There were 20,579 shares of common stock issued under the Amended ESPP during the six months ended June 30, 2008, resulting in a compensation expense of \$14,000. As of June 30, 2009, 811,589 shares were available for future purchases under the Amended ESPP.

### Warrants

As of June 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 Pharmacoepia, 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 June 30, 2009 and December 31, 2008 (in thousands):

	<u>Cost</u>	<u>Gross unrealized gains</u>	<u>Gross unrealized losses</u>	<u>Estimated fair value</u>
<b>June 30, 2009</b>				
U.S. government securities	\$32,468	\$ 64	\$ (3)	\$32,529
Certificates of deposit	7,370	—	(2)	7,368
Corporate obligations	11,998	88	(22)	12,064
	51,836	152	(27)	51,961
Certificates of deposit - restricted	1,341	—	—	1,341
	<u>\$53,177</u>	<u>\$ 152</u>	<u>\$ (27)</u>	<u>\$53,302</u>
<b>December 31, 2008</b>				
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
	<u>\$53,178</u>	<u>\$ 81</u>	<u>\$ —</u>	<u>\$53,259</u>

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

## [Table of Contents](#)

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 \$1.6 million and \$1.7 million of this investment as of June 30, 2009 and December 31, 2008, respectively. 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):

	June 30, 2009	December 31, 2008
Income taxes receivable	\$ —	\$ 817
Prepaid expenses	861	1,147
Other receivables	531	325
Other	—	11
	<u>\$1,392</u>	<u>\$ 2,300</u>

### *Property and Equipment*

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

	June 30, 2009	December 31, 2008
Equipment and leasehold improvements	\$ 54,358	\$ 54,664
Less accumulated depreciation and amortization	(43,899)	(41,761)
	<u>\$ 10,459</u>	<u>\$ 12,903</u>

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):

	June 30, 2009	December 31, 2008
Collaborative research and development with Schering-Plough	\$1,659	\$ 2,000
Goodwill	—	3,375
	<u>\$1,659</u>	<u>\$ 5,375</u>

The collaborative research and development with Schering-Plough is being amortized on a straight-line basis over a period of three years. During the three and six months ended June 30, 2009, the Company recorded \$0.2 million and \$0.3 million, respectively, of amortization expense. Additionally, during the three months ended March 31, 2009, the Company adjusted its preliminary purchase price allocation for Pharmacoepia, 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 Pharmacoepia, 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 \$17,000 and goodwill of \$0.3 million.

## [Table of Contents](#)

### *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. During the six months ended June 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 June 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):

	<u>June 30, 2009</u>	<u>December 31, 2008</u>
Warrant liability	\$ 655	\$ 670
Compensation	2,071	2,686
Legal	368	4,166
Restructuring costs	141	848
Other	3,686	4,295
	<u>\$6,921</u>	<u>\$ 12,665</u>

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

	<u>Charge-backs and Rebates</u>	<u>Returns</u>	<u>Total</u>
Balance at December 31, 2008	\$ 508	\$ 9,082	\$ 9,590
AVINZA Transaction Provision (1)	(35)	(4,730)	(4,765)
Oncology Transaction Provision (2)	(35)	(587)	(622)
Payments	(227)	—	(227)
Charges	—	(2,701)	(2,701)
Balance at June 30, 2009	<u>\$ 211</u>	<u>\$ 1,064</u>	<u>\$ 1,275</u>

(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):

	<u>Three Months Ended June 30,</u>		<u>Six Months Ended June 30,</u>	
	<u>2009</u>	<u>2008</u>	<u>2009</u>	<u>2008</u>
Net loss as reported	\$(1,668)	\$(6,429)	\$(6,784)	\$(10,362)
Unrealized net gain (loss) on available-for-sale securities	83	15	13	(37)
Comprehensive loss	<u>\$(1,585)</u>	<u>\$(6,414)</u>	<u>\$(6,771)</u>	<u>\$(10,399)</u>

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## Table of Contents

### *Recently Adopted Accounting Pronouncements*

In December 2007, the FASB issued SFAS No. 160, “Noncontrolling Interests in Consolidated Financial Statements — An Amendment of ARB No. 51,” which is effective for calendar-year companies beginning January 1, 2009. The standard establishes new accounting and reporting standards for the noncontrolling interest in a subsidiary and for the deconsolidation of a subsidiary. The adoption of this standard did not have a material impact on the Company’s condensed consolidated financial statements.

In March 2008, the FASB issued SFAS No. 161, “Disclosures about Derivative Instruments and Hedging Activities — An Amendment of FASB Statement No. 133,” which is effective for calendar-year companies beginning January 1, 2009. The standard enhances required disclosures regarding derivatives and hedging activities. The adoption of this standard did not have a material impact on the Company’s condensed consolidated financial statements.

In April 2008, the FASB issued Staff Position (FSP) No. FAS 142-3, “Determination of the Useful Life of Intangible Assets” (FSP 142-3). FSP 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, “Goodwill and Other Intangible Assets” (SFAS 142). FSP 142-3 is effective for calendar-year companies beginning January 1, 2009. The requirement for determining useful lives must be applied prospectively to intangible assets acquired after the effective date and the disclosure requirements must be applied prospectively to all intangible assets recognized as of, and subsequent to, the effective date. The adoption of this standard did not have a material impact on the Company’s condensed consolidated financial statements.

In April 2009, the FASB issued FSP No. FAS 141(R)-1, “Accounting for Assets Acquired and Liabilities Assumed in a Business Combination That Arise from Contingencies.” FSP FAS 141(R)-1 amends the provisions in Statement 141R for the initial recognition and measurement, subsequent measurement and accounting, and disclosures for assets and liabilities arising from contingencies in business combinations. The FSP is effective for contingent assets or contingent liabilities acquired in business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. The adoption of this standard did not have a material impact on the Company’s condensed consolidated financial statements.

## **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 six months ended June 30, 2009, the Company recorded pre-tax gains of \$0.2 million and \$0.5 million, respectively, due to subsequent changes in certain estimates of assets and liabilities recorded as of the sale date. For the three and six months ended June 30, 2008, the Company recorded a pre-tax loss of \$0.7 million and a pre-tax gain of \$0.2 million, respectively.

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 June 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. Oncology products sold by the Company may be returned through a specified period subsequent to the product expiration date, but no later than July 31, 2009. The Company’s reserve for Oncology returns is \$37,000 and \$0.9 million as of June 30, 2009 and December 31, 2008, respectively.

## [Table of Contents](#)

### *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”).

In connection with the sale, the Company 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 the Company’s representations, warranties or covenants contained in the asset purchase agreement. Under the Company’s agreement with King, \$15.0 million of the total upfront cash payment was deposited into an escrow account to secure the Company’s indemnification obligations to King following the closing of the Transaction. Of the escrowed amount, \$7.5 million was released to the Company in August 2007, and the remaining \$7.5 million, plus interest of \$0.6 million, was released to the Company in February 2008 and recorded as gain on sale of the AVINZA product line.

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 expire at various dates through June 30, 2009. The Company’s accruals for AVINZA rebates, chargebacks, and other discounts total \$23,000 and \$0.1 million as of June 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 \$0.9 million and \$8.2 million as of June 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 June 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)
<b>Assets:</b>				
Fixed income available-for-sale securities	\$51,961	\$ 50,341	\$ 1,620	\$ —
Total assets	<u>51,961</u>	<u>50,341</u>	<u>1,620</u>	<u>—</u>
<b>Liabilities:</b>				
Warrant liability	655	—	—	655
Total liabilities	<u>\$ 655</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 655</u>

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).

## [Table of Contents](#)

### 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 as required under SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*. 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 June 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 June 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 June 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	(4,647)
June 30, 2009 fair value adjustment of estimated future payments based on estimated future net AVINZA product sales	<u>3,829</u>
Total co-promote termination liability as of June 30, 2009	57,664
Less: current portion of co-promote termination liability as of June 30, 2009	<u>(11,518)</u>
Long-term portion of co-promote termination liability as of June 30, 2009	<u>\$ 46,146</u>

### 5. Property Leases

The Company leases an 82,500 square foot office and laboratory facility in San Diego, California through November 2021. Under the terms of the lease, the Company pays a basic annual rent of \$3.0 million (subject to an annual fixed percentage increase, as set forth in the agreement), plus a 1% annual management fee, property taxes and other normal and necessary expenses associated with the lease including, but not limited to, utilities and repairs and maintenance. The Company has the right to extend the lease for two five-year terms and will have the first right of refusal to lease, at market rates, any facilities built on the sold lots.

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## Table of Contents

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.

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 June 30, 2009, the Company expects to receive aggregate future minimum lease payments totaling \$5.3 million (nondiscounted) over the duration of the sublease agreement. In accordance with SFAS No. 146 (As Amended) "Accounting for Costs Associated with Exit or Disposal Activities," 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 June 30, 2009 and December 31, 2008, \$4.7 million and \$5.0 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 is 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 June 30, 2009, the Company has recorded a liability of \$2.0 million related to the settlement.

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 Pharmacoepia's stockholders, against Pharmacoepia, the members of its Board of Directors, Ligand and two of Ligand's wholly owned subsidiaries. The complaint generally alleges that Pharmacoepia's Board of Directors' decision to enter into the proposed transaction with Ligand on the terms contained in the proposed merger agreement constitutes a breach of fiduciary duty and gives rise to other unspecified state law claims. The complaint also alleges that Ligand and two of Ligand's wholly owned subsidiaries aided and abetted Pharmacoepia's Board of Directors' breach of fiduciary duty. In addition, the complaint alleges that the named plaintiff will seek "equitable relief," including among other things, an order preliminarily and permanently enjoining the proposed transaction. While management believes that neither Ligand nor Pharmacoepia engaged in any wrongful acts, in an effort to minimize the cost and expense of any litigation, the parties have entered into a stipulation of settlement, pursuant to which Pharmacoepia agreed to make certain additional disclosures in its SEC Form 14d-9 and not oppose a fee award to plaintiffs' attorneys of up to

## [Table of Contents](#)

\$180,000, which is included in current portion of accrued litigation settlement costs at June 30, 2009. That stipulation of settlement has been submitted to the court for preliminary approval. On July 29, 2009, the court preliminarily approved the settlement and set October 20, 2009 as the date for a hearing on final approval.

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 Pharmacoepia

On December 23, 2008, the Company completed the acquisition of Pharmacoepia, 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 Pharmacoepia 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 Pharmacoepia stockholders, or 0.5985 shares for each outstanding Pharmacoepia 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, Pharmacoepia 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 Pharmacoepia's DARA program (other than any agreement with Bristol-Myers 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 Pharmacoepia'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 Pharmacoepia, 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 Pharmacoepia, 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 Pharmacoepia are as follows:

<b>Purchase Consideration:</b>	
<b>(in thousands)</b>	
Fair value of common stock issued to Pharmacoepia shareholders	\$ 56,439
Cash paid to Pharmacoepia shareholders	9,337
Transaction costs	<u>4,558</u>
Total purchase consideration	<u>\$ 70,334</u>
<b>Allocation of Purchase Price:</b>	
<b>(in thousands)</b>	
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	<u>(33,709)</u>
	<u>\$ 70,334</u>

### 8. Warrant Liability

In connection with the acquisition of Pharmacoepia, 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. Under EITF 00-19, 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

## [Table of Contents](#)

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 Pharmacoepia'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 June 30, 2009 and December 31, 2008, the fair value of the warrants was approximately \$0.7 million 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 June 30, 2009 and December 31, 2008:

	June 30, 2009	December 31, 2008
Risk-free interest rate	1.6%	1.0%
Dividend yield	—	—
Expected volatility	83%	78%
Expected term	2.8 years	3.3 years

### **9. Note Payable**

In December 2006, Pharmacoepia 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 665,230 shares of stock it owns in Ligand.

### **11. Subsequent Event**

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.

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## [Table of Contents](#)

### **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. 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 Pharmacoepia 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 Pharmacoepia, Inc., or Pharmacoepia. As consideration, we issued 18.0 million shares of our common stock to Pharmacoepia stockholders, or 0.5985 shares for each outstanding Pharmacoepia share, as well as approximately \$9.3 million in cash. Security holders of Pharmacoepia also received contingent value rights, under which they could receive an aggregate cash payment of \$15.0 million under certain circumstances. Pharmacoepia was a clinical development stage biopharmaceutical company dedicated to discovering and developing novel small molecule therapeutics to address significant medical needs. Pharmacoepia’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. Pharmacoepia had a broad portfolio of clinical and preclinical candidates under development internally or by partners.

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.

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## Table of Contents

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.

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 665,230 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.

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 addition to the approval granted for GSK's PROMACTA for the treatment of thrombocytopenia in patients with chronic ITP, the compound is also being studied for thrombocytopenia associated with chronic hepatitis C virus, chronic liver disease and oncology-related thrombocytopenia. Two large Phase III studies in patients with hepatitis C and one Phase III study in patients with chronic liver disease are ongoing and the trial results are expected over the next two years. These are substantial near-term market opportunities for eltrombopag. 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.

Bazedoxifene is a product candidate that resulted from a 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 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 (EMA) 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. In April 2009, Wyeth received approval from the EC for CONBRIZA™ (bazedoxifene) 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.

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-

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## Table of Contents

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.

In December 2008, we entered into an exclusive, worldwide license agreement with SmithKline Beecham Corporation, doing business as GSK. Pursuant to the terms of the GSK agreement, we granted GSK the exclusive right to develop, manufacture and commercialize our LGD-4665 product candidate, as well as all other TPO-related molecules discovered by us. Under the terms of the GSK agreement, GSK paid us \$5.0 million as an upfront license fee and agreed to pay us up to \$158.0 million in development and commercial milestones and a royalty on net sales. In the first year of sales, royalties will be one-half of the regular royalty rate. GSK will direct all product development and commercialization and will be responsible for all costs going forward for development, patent maintenance and prosecution, and commercialization. The term of the license agreement expires ten years from the date of first commercial sale of the first licensed product in any country worldwide or until the expiration of the last licensed patent with a valid claim, whichever term is longer, although some obligations survive termination. Prior to the expiration of the license agreement, GSK has the right to terminate the agreement upon a specified number of days notice and we may not terminate the agreement unless GSK provides its prior written consent. Any such termination will not relieve the terminating party from obligations that have accrued prior to such termination or that expressly survive such termination. No termination will require us to refund to GSK any or all payments made to us by GSK under the agreement. In the event that a party is in breach of any of its material obligations under the license agreement, the other party will have the right to seek damages and such other remedies as may be available to it.

### **Results of Operations**

Total revenues for the three and six months ended June 30, 2009 were \$7.6 million and \$17.1 million, respectively, compared to \$4.8 million and \$9.7 million for the same 2008 periods. Our loss from continuing operations for the three and six months ended June 30, 2009 was \$4.5 million and \$12.0 million, respectively, compared to \$4.9 million and \$14.6 million for the same 2008 periods.

#### *Royalty Revenue*

Royalty revenues were \$2.0 million and \$4.7 million for the three and six months ended June 30, 2009, respectively, compared to \$4.8 million and \$9.7 million for the same periods in 2008. The decreases in royalty revenues of \$2.8 million and \$5.0 million, respectively, for the three and six months ended June 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 \$5.6 million and \$12.3 million for the three and six months ended June 30, 2009, respectively, compared to zero for the same periods in 2008. The increase of \$5.6 million for the three months ended June 30, 2009, compared to the same period in 2008, is primarily due to a \$0.9 million in license and milestone payments as well as \$4.7 million in collaboration revenues resulting from agreements acquired from Pharmacoepia. The increase of \$12.3 million for the six months ended June 30, 2009, compared to the same period in 2008, is primarily due to \$3.3 million of milestones earned from GlaxoSmithKline, Pfizer, Schering-Plough and Wyeth, a \$0.4 million license payment and \$8.6 million in collaboration revenues resulting from agreements acquired from Pharmacoepia.

## [Table of Contents](#)

### *Research and Development Expenses*

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

	Three Months Ended		Six Months Ended	
	June 30,	June 30,	June 30,	June 30,
	2009	2008	2009	2008
Internal research programs	\$ 3,457	\$ 4,164	\$ 6,784	\$ 7,852
Collaborative research	4,645	—	8,150	—
Development	1,368	2,213	4,890	5,690
Total research and development	<u>\$ 9,470</u>	<u>\$ 6,377</u>	<u>\$19,824</u>	<u>\$13,542</u>

Research and development expenses were \$9.5 million and \$19.8 million for the three and six months ended June 30, 2009, respectively, compared to \$6.4 million and \$13.5 million for the same 2008 periods. The increase of \$3.1 million for the three months ended June 30, 2009, compared to the same period in 2008, is primarily due to \$4.7 million of costs associated with servicing our collaboration agreements partially offset by a \$0.6 million reduction in clinical trial costs as we completed our ongoing LGD 4665 clinical trials and \$1.0 million in reduced consulting and outside service costs associated with internal research programs. The increase of \$6.3 million for the six months ended June 30, 2009, compared to the same period in 2008, is primarily due to \$8.2 million of costs associated with servicing our collaboration agreements partially offset by \$1.0 million in reduced consulting and outside service costs associated with internal research programs as well as \$0.9 million reduction in drug supply costs associated with clinical trials.

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

<u>Program</u>	<u>Disease/Indication</u>	<u>Development Phase</u>
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.

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## Table of Contents

### *General and Administrative Expenses*

General and administrative expenses were \$2.8 million and \$9.8 million for the three and six months ended June 30, 2009, respectively, compared to \$4.6 million and \$14.7 million for the same periods in 2008. The decrease of \$1.8 million for the three months ended June 30, 2009, compared to the same period in 2008, is primarily due to reduced legal expenses as settlements were reached with Rockefeller University and the Securities and Exchange Commission (SEC) in the first quarter of 2009. The decrease of \$4.9 million for the six months ended June 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 as well as reduced legal expenses.

### *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 Pharmacoepia, 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. In accordance with SFAS 13, *Accounting for Leases*, 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 is recognized on a straight-line basis over the 15 year term of the lease at a rate of approximately \$2.0 million per year. The amount of the deferred gain recognized for the three and six months ended June 30, 2009 and 2008 was \$0.5 million and \$1.0 million, respectively.

### *Interest Income*

Interest income was \$0.1 million and \$0.3 million for the three and six months ended June 30, 2009, respectively, compared to \$0.5 million and \$1.5 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 six months ended June 30, 2009 as we did not realize any taxable income from either continuing or discontinued operations.

We had losses from continuing operations and income from discontinued operations for the six months ended June 30, 2008. In accordance with SFAS No. 109, *Accounting for Income Taxes*, the income tax benefits generated by the loss from continuing operations for the three and six months ended June 30, 2008 of \$1.0 million and \$2.8 million, respectively, captures the deemed use of losses from continuing operations used to offset the income from our discontinued operations.

### *Discontinued Operations*

#### *Oncology Product Line*

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

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

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## Table of Contents

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 six months ended June 30, 2009, we recognized a \$0.2 million and a \$0.5 million pre-tax gain, respectively, due to subsequent changes in certain estimates and liabilities recorded as of the sale date. During the three and six months ended June 30, 2008, we recognized a \$0.7 million pre-tax loss and a \$0.2 million pre-tax gain, respectively, due to subsequent changes in certain estimates and liabilities recorded as of the sale date.

### *AVINZA Product Line*

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

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 six months ended June 30, 2009 and 2008, we recognized pre-tax gains of \$2.6 million and \$4.7 million, respectively due to subsequent changes in certain estimates and liabilities recorded as of the sale date. During the three and six months ended June 30, 2008, we recognized a pre-tax loss of \$1.2 million and a pre-tax gain of \$7.2 million, respectively. The loss for the three months ended June 30, 2008 primarily related to subsequent changes in certain estimates and liabilities recorded as of the sale date. The gain for the six months ended June 30, 2008 primarily related to 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 six months ended June 30, 2009 as we did not realize any taxable income from discontinued operations.

For the three months ended June 30, 2008, we recorded an income tax benefit of \$0.3 million generated from a taxable loss from discontinued operations, which offset previous taxable gains. For the six months ended June 30, 2008, we recorded income tax expense on discontinued operations of \$3.2 million, which reflected the anticipated net tax due on taxable income that was generated by the release of escrow funds from the sale of our AVINZA product line.

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## [Table of Contents](#)

### **Liquidity and Capital Resources**

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

Working capital was \$21.3 million at June 30, 2009 compared to \$23.3 million at December 31, 2008. Available cash, cash equivalents and short-term investments totaled \$55.5 million as of June 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 \$1.6 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.

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; and the efforts of our collaborative partners.

### *Operating Activities*

Operating activities of continuing operations used cash of \$18.0 million for the six months ended June 30, 2009, compared to \$10.2 million for the same period in 2008. The cash used in operating activities for the six months ended June 30, 2009 includes \$8.5 million of non-recurring litigation settlement payments to Rockefeller University and the Salk Institute.

The use of cash for the six months ended June 30, 2009 reflects a net loss of \$6.8 million, adjusted by \$5.2 million of gain from discontinued operations and \$2.7 million of non-cash items to reconcile the net loss to net cash used in operations. These reconciling items primarily reflect the recognition of \$1.7 million of stock-based compensation expense, depreciation of assets of \$1.6 million, realized loss on investment of \$0.1 million, non-cash lease costs of \$0.5 million, write-off of acquired in-process research and development of \$0.4 million and the amortization of acquired intangible assets of \$0.3 million, partially offset by the accretion of deferred gain on the sale leaseback of the building of \$1.0 million and non-cash development milestones of \$0.9 million. The use of cash during the six months ended June 30, 2009 is further impacted by changes in operating assets and liabilities due primarily to decreases in accounts payable and accrued liabilities of \$5.5 million, a decrease in accrued litigation settlement costs of \$7.5 million, an increase in accounts receivable, net of \$1.1 million and a decrease in deferred revenue of \$4.1 million partially offset by the release of our \$10.3 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 \$0.7 million. Net cash used in operating activities of discontinued operations was \$3.1 million for the six months ended June 30, 2009.

## Table of Contents

The use of cash for the six months ended June 30, 2008 reflects a net loss of \$10.4 million, adjusted by \$4.2 million of gain from discontinued operations and \$7.5 million of non-cash items to reconcile the net loss to net cash used in operations. These reconciling items primarily reflect the recognition of \$1.8 million of stock-based compensation expense, depreciation of assets of \$0.5 million, realized loss on investment of \$1.3 million, non-cash lease costs of \$4.1 million and the write-off of assets of \$0.6 million, partially offset by the accretion of deferred gain on the sale leaseback of the building of \$1.0 million. The use of cash during the six months ended June 30, 2008 is further impacted by changes in operating assets and liabilities due primarily to decreases in accounts payable and accrued liabilities of \$5.7 million partially offset by decreases in other current assets of \$2.6 million. Net cash used in operating activities of discontinued operations was \$3.2 million for the six months ended June 30, 2008.

### *Investing Activities*

Investing activities used cash of \$0.4 million for the six months ended June 30, 2009, compared to \$31.8 million for the same 2008 period.

Cash used in investing activities during the six months ended June 30, 2009 primarily reflects the net purchases of short-term investments of \$0.1 million and purchases of property and equipment of \$0.3 million. None of the cash used in investing activities for the six months ended June 30, 2009 related to discontinued operations.

Cash used in investing activities during the six months ended June 30, 2008 primarily reflects the net purchases of short-term investments of \$39.8 million and \$0.4 million of purchases of property and equipment. Net cash provided by investing activities of discontinued operations was \$8.1 million for the six months ended June 30, 2008.

### *Financing Activities*

Financing activities used cash of \$3.7 million for the six months ended June 30, 2009, compared to \$2.5 million for the same 2008 period.

Cash used for the six months ended June 30, 2009 primarily reflects payments under equipment financing obligations of \$0.3 million and the repayment of debt of \$3.4 million related to an equipment line of credit acquired from Pharmacoepia that was paid off in February 2009.

Cash used for the six months ended June 30, 2008 primarily reflects payments under equipment financing obligations of \$0.9 million and repurchases of our common stock of \$1.6 million.

None of the cash used in financing activities for the six months ended June 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 June 30, 2009:

<u>Collaborative Agreement</u>	<u>Expiration of Initial Research Term</u>	<u>Deferred Revenue</u>
2007 Schering-Plough Agreement	February 2012	\$ 3,032
BMS Discovery Collaboration Agreement	December 2010	6,619
GSK Agreement	March 2011	4,845
Wyeth Agreement	December 2009	1,151
Cephalon Agreement	May 2009	49
Trevena Agreement	January 2011	438

## Table of Contents

Certain of our property and equipment is pledged as collateral under various equipment financing arrangements. As of June 30, 2009, \$0.3 million was outstanding under such arrangements with \$0.2 million classified as current. During January 2009, we paid off the remaining \$3.4 million of financing obligations acquired from Pharmacoepia, Inc. in December 2008.

In connection with the acquisition of Pharmacoepia on December 23, 2008, Pharmacoepia 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 November 2021. 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 June 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)	\$ 278	\$ 253	\$ 25	\$ —	\$ —
Operating lease obligations (2)	78,586	7,891	16,253	16,912	37,530
Consulting agreements	353	353	—	—	—
Co-promote termination liability (3)	—	—	—	—	—
<b>Total contractual obligations</b>	<b>\$79,217</b>	<b>\$ 8,497</b>	<b>\$16,278</b>	<b>\$16,912</b>	<b>\$ 37,530</b>

- (1) Includes interest payments as follows: \$ 12 \$ 12 \$ — \$ — \$ —
- (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 June 30, 2009, we expect to receive aggregate future minimum lease payments totaling \$5.3 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, \$0.9 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 June 30, 2009, the total estimated amount of the obligation is \$57.6 million on an undiscounted basis.

As of June 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 \$4.7 million. We plan to spend approximately \$0.5 million on capital expenditures during the remainder of 2009.

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

At June 30, 2009, our investment portfolio included fixed-income securities of \$53.3 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 June 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.

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[Table of Contents](#)

**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.

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## [Table of Contents](#)

### **PART II. OTHER INFORMATION**

#### **ITEM 1. LEGAL PROCEEDINGS**

The SEC issued a formal order of private investigation dated September 7, 2005, to investigate the circumstances surrounding restatement of our 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 is not recommending enforcement action against the Company at this time 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 \$10.4 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.

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 June 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 Pharmacoepia's stockholders, against Pharmacoepia, the members of its Board of Directors, us and two of our wholly owned subsidiaries. The complaint generally alleges that Pharmacoepia's Board of Directors' decision to enter into the proposed transaction with us on the terms contained in the proposed merger agreement constitutes a breach of fiduciary duty and gives rise to other unspecified state law claims. The complaint also alleges that we and two of our wholly owned subsidiaries aided and abetted Pharmacoepia's Board of Directors' breach of fiduciary duty. In addition, the complaint alleges that the named plaintiff will seek "equitable relief," including among other things, an order preliminarily and permanently enjoining the proposed transaction. While we believe that neither Ligand nor Pharmacoepia engaged in any wrongful acts, in an effort to minimize the cost and expense of any litigation, the parties have entered into a stipulation of settlement, pursuant to which Pharmacoepia 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 June 30, 2009. That stipulation of settlement has been submitted to the court for preliminary approval. On July 29, 2009, the court preliminarily approved the settlement and set October 20, 2009 as the date for a hearing on final approval.

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.

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## [Table of Contents](#)

### 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

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## [Table of Contents](#)

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, beginning in 2009 we will 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. 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

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## [Table of Contents](#)

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 Pharmacoepia we distributed approximately \$9.3 million in cash to Pharmacoepia stockholders. Security holders of Pharmacoepia 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 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 January 2009, Wyeth, a collaborative partner of ours, and Pfizer announced that they have entered into a definitive merger agreement under which Pfizer will acquire 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 have 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.

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## Table of Contents

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 Pharmacoceia'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.

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## Table of Contents

### ***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 June 30, 2009, our accumulated deficit was \$686.4 million.

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

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

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## Table of Contents

***The past restatement of our consolidated financial statements increased the possibility of legal or administrative proceedings. 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.\****

We determined that our consolidated financial statements for the years ended December 31, 2002 and 2003, and for the first three quarters of 2004, as described in more detail in our 2004 Annual Report on Form 10-K, should be restated. As a result of the restatement, we became subject to a number of additional risks and uncertainties. While no material weaknesses were identified as of June 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.***

In connection with the sale of our AVINZA product line, we have agreed to indemnify King in certain cases for a period of 30 months after the closing of the sale of the AVINZA product line in February 2007, including any breach of certain representations, warranties or covenants contained in the asset purchase agreement. In addition, we have 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.

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## Table of Contents

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 certain circumstances, the asset purchase agreement for the AVINZA product line also allows King to set off indemnification claims against the royalty payments payable to us, including AVINZA royalty payments. Under the asset purchase agreements, our exposure for any indemnification claim brought by King or Eisai is limited to \$40.0 million and \$30.0 million, respectively. 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 \$57.7 million as of June 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 also exposes us 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.

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## **Table of Contents**

### ***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

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## [Table of Contents](#)

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 Pharmacoepia and realize the anticipated benefits of the merger.***

In December 2008, we completed our merger with Pharmacoepia. The success of the merger will depend, in part, on our ability to realize the anticipated synergies, growth opportunities and cost savings from integrating Pharmacoepia'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 Pharmacoepia. 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 Pharmacoepia's business operations, technology, development programs, products and personnel with those of ours. If we do not successfully integrate the business of Pharmacoepia, 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 Pharmacoepia 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 Pharmacoepia has been allocated to Pharmacoepia'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. 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

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## Table of Contents

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.

[Table of Contents](#)

**ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS**

We held an Annual Meeting of Stockholders on May 29, 2009. The following elections and proposals were approved at the Annual Meeting:

	Votes For	Votes Against	Votes Withheld	Votes Abstaining	Broker Non-Votes
1. Election of a Board of Directors. The total number of votes cast for, or withheld for each nominee was as follows:					
Jason M. Aryeh	70,784,049	—	23,818,111	—	—
Steven J. Burakoff	93,625,034	—	977,126	—	—
Todd C. Davis	90,404,351	—	4,197,809	—	—
John L. Higgins	94,027,069	—	575,091	—	—
David M. Knott	90,418,617	—	4,183,543	—	—
John W. Kozarich	94,077,293	—	524,867	—	—
Stephen L. Sabba	94,005,607	—	596,553	—	—
2. Approval of Amended and Restated Ligand Pharmaceuticals Incorporated 2002 Stock Incentive Plan	50,446,284	7,457,385	—	335,000	36,363,491
3. Approval of Amended and Restated Ligand Pharmaceuticals Incorporated Employee Stock Purchase Plan	56,822,180	1,088,732	—	327,757	36,363,491
4. Ratification of the appointment of Grant Thornton, LLP as the independent auditors for the fiscal year ending December 31, 2009.	94,338,448	178,779	—	84,936	—

## Table of Contents

### ITEM 6. EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
2.1(1)	Agreement and Plan of Merger, by and among the Company, Pharmacoopia, Inc., Margaux Acquisition Corp. and Latour Acquisition, LLC, dated as of September 24, 2008.
3.1(2)	Amended and Restated Certificate of Incorporation of the Company (Filed as Exhibit 3.1).
3.2(2)	Bylaws of the Company, as amended (Filed as Exhibit 3.3).
3.3(3)	Amended Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of the Company (Filed as Exhibit 3.3).
3.4(4)	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company dated June 14, 2000 (Filed as Exhibit 3.5).
3.5(5)	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company dated June 30, 2004 (Filed as Exhibit 3.6).
3.6(6)	Amendment of the Bylaws of the Company dated November 8, 2005 (Filed as Exhibit 3.1).
3.7(7)	Amendment of Bylaws of the Company dated December 4, 2007 (Filed as Exhibit 3.1).
4.1(8)	Specimen stock certificate for shares of Common Stock of the Company.
4.2(9)	Pledge Agreement dated November 26, 2002, between the Company and J.P. Morgan Trust Company, National Association (Filed as Exhibit 4.5).
4.3(9)	Control Agreement dated November 26, 2002, among the Company, J.P. Morgan Trust Company, National Association and JP Morgan Chase Bank (Filed as Exhibit 4.6).
4.4(10)	2006 Preferred Shares Rights Agreement, by and between the Company and Mellon Investor Services LLC, dated as of October 13, 2006 (Filed as Exhibit 4.1).
10.321 †	Exclusive Patent License Agreement, by and between Glycomed, Inc., a wholly owned subsidiary of the Company and ParinGenix Inc, dated as of June 18, 2009, filed herewith.
10.322	Amended and Restated Director Compensation and Stock Ownership Policy, effective as of April 16, 2009, 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.
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.

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## Table of Contents

- † Confidential treatment has been requested for portions of this exhibit. These portions have been omitted from this quarterly report and submitted separately to the Securities and Exchange Commission.
- (1) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on September 26, 2008.
  - (2) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Registration Statement on Form S-4 (No. 333-58823) filed on July 9, 1998.
  - (3) This exhibit was previously filed as part of and is hereby incorporated by reference to same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended March 31, 1999.
  - (4) This exhibit was previously filed as part of, and are hereby incorporated by reference to the numbered exhibit filed with the Company's Annual Report on Form 10-K for the year ended December 31, 2000.
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  - (7) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Current Report on Form 8-K filed on December 6, 2007.
  - (8) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Registration Statement on Form S-1 (No. 33-47257) filed on April 16, 1992 as amended.
  - (9) 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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[Table of Contents](#)

**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: August 3, 2009

By: /s/ John P. Sharp

John P. Sharp

Vice President , Finance and Chief Financial Officer

**INDEX TO EXHIBITS**

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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.

### EXCLUSIVE PATENT LICENSE AGREEMENT

This **EXCLUSIVE PATENT LICENSE AGREEMENT** (the "Agreement"), effective as of this 18<sup>th</sup> day of June, 2009 (the "Effective Date"), is entered into by and between Glycomed, Inc., a California corporation and a wholly owned subsidiary of Ligand Pharmaceuticals Incorporated ("Glycomed"), and ParinGenix, Inc., a Delaware corporation ("ParinGenix").

WHEREAS, Glycomed is the owner of the Patent Rights (as defined below) and desires that the Patent Rights be used for the clinical development and subsequent commercialization of Licensed Products (as defined below) for the treatment and/or prevention of human disease.

WHEREAS, ParinGenix desires to acquire an exclusive license to the Patent Rights in the Field (as defined below) for such purposes.

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

**1. Definitions.** Terms defined in this Section 1, and parenthetically defined elsewhere in this Agreement, will throughout this Agreement have the meaning here or there provided. Defined terms may be used in the singular or in the plural, as sense requires.

**1.1 "Affiliate"** means any corporation or other business entity that controls, is controlled by or is under common control with ParinGenix. "Controls," "control" or "controlled" as used in this paragraph means direct or indirect ownership of more than fifty percent (50%) of the voting stock of such corporation, or more than a fifty percent (50%) interest, direct or indirect, in the decision-making authority of such other business entity.

**1.2 "Calendar Quarter"** means each respective period of three (3) consecutive months ending on March 31, June 30, September 30 and December 31.

**1.3 "FDA"** means the United States Food and Drug Administration, or any successor agency thereto having the administrative authority to regulate the marketing of human pharmaceutical products or biological therapeutic products, delivery systems and devices in the Territory.

**1.4 "Field"** means the use of Licensed Products for the treatment and prevention of human disease.

**1.5 "First Commercial Sale"** means the initial sale or transfer by or on behalf of ParinGenix, its Affiliates, or Sublicensees of a Licensed Product to a third party.

**1.6 "Fiscal Year"** means the twelve consecutive months commencing on January 1 and ending December 31.

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**1.7 “Know-How”** means all inventions, discoveries, trade secrets, information, experience, data, formulas, procedures and results, including physical, chemical, biological, toxicological, pharmacological and clinical data, dosage regimens, control assays and product specifications, but excluding any Patent Rights, that (a) is possessed as of the Effective Date by Glycomed, (b) is owned or Controlled by Glycomed as of the Effective Date, and (c) is necessary or useful in the use, development, design, registration, or sale of a Licensed Product.

**1.8 “License”** means the licenses granted by Glycomed to ParinGenix pursuant to Section 2.1 below.

**1.9 “Licensed Product”** means any pharmaceutical product that, but for the License, would infringe the Patent Rights, including, without limitation, in each case all formulations and modes of administration thereof. The Parties agree, for purposes of this Agreement only, that PGX-100 and ODSH are Licensed Products.

**1.10 “NDA”** means a New Drug Application (as more fully defined in 21 C.F.R. 314.5 *et seq.*) and all amendments and supplements thereto filed with the FDA, or the equivalent application filed with any equivalent agency or governmental authority outside the United States of America (including any supra-national agency such as in the European Union), including all documents, data, and other information concerning a pharmaceutical product which are necessary for gaining regulatory approval to market and sell such pharmaceutical product.

**1.11 “Net Sales”** means the aggregate gross sales of Licensed Products to unaffiliated third parties in the Territory by ParinGenix and its Affiliates, less amounts attributable to the Licensed Products, ParinGenix or its Affiliates determined to deduct and recognized in their respective financial statements in accordance with GAAP (or comparable financial standards) and with ParinGenix’ and its Affiliates’ standard accounting principles consistent with GAAP (or comparable financial standards), including, but not limited to the following: (i) trade discounts, credits or allowances, including slotting allowances and retroactive price adjustment (i.e. shelf-stock adjustments); (ii) credits or allowances additionally granted upon returns, rejections or recalls; (iii) freight, shipping and insurance charges; (iv) taxes, duties or other governmental tariffs (other than income taxes); and (v) trade rebates, chargebacks, managed care rebates and government mandated rebates. In the case of a sale or a transfer to an Affiliate or Sublicensee, the Net Sales amount of such sale or transfer shall not be deemed a “sale of Licensed Product in the Territory” subject to the Net Sales computation unless such Affiliate or Sublicensee is the end user consumer of the Licensed Product in which case such sale would be deemed a “sale of Licensed Product in the Territory” subject to the Net Sales computation.

**1.12 “Patent Rights”** means the United States letters patent as indicated in Attachment A, including without limitation, any divisions, continuations, continuations-in-part, reissues, re-examinations, renewals, substitutions, extensions, provisionals, inventor’s certificates or supplementary protection certificates of such patent or patent applications and all foreign patents which are directed to the subject matter specifically described in the United States patents listed in Attachment A.

**1.13 “Royalty Term”** means, on a Licensed Product-by-Licensed Product and country-by-country located within the Territory basis, the period of time commencing on the First

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Commercial Sale in such country and ending upon the later of (a) five (5) years after the date of First Commercial Sale of such Licensed Product in such country, or (b) five (5) years after the expiration of the last to expire of an issued patent under the Patent Rights claiming the manufacture, use or sale of such Licensed Product in such country.

**1.14** “Sublicense” means the present, future or contingent transfer of any license, right, option, first right to negotiate or other right granted for PGX-100 or ODSH; or otherwise granted under the Patent Rights or Know-How, in whole or in part; *provided, however*, that Sublicensing shall not include any transfer or sale of all or substantially all of the assets of ParinGenix where as part of such transaction ParinGenix transfers the License to a third party and the third party agrees to assume and be bound by all of ParinGenix’ obligations under this Agreement.

**1.15** “Sublicensee” means a party that is granted a Sublicense.

**1.16** “Sublicensing Revenue” means the revenue ParinGenix or its Affiliates receives from Sublicensees as a royalty payment from the “net sales” (as defined in the Sublicense agreement) of a Licensed Product made in the Territory during the Royalty Term for such Licensed Product.

**1.17** “Territory” means the United States of America and each other country in which (a) Glycomed notifies ParinGenix in writing that Patent Rights have issued, and (b) ParinGenix, within thirty (30) days after its receipt of such notice, accepts in writing as an additional country in the “Territory.”

## **2. License Grant; Know-How.**

**2.1 License.** Subject to ParinGenix’ compliance with Articles 6 (License Issue Fee and Royalties) and 7 (Payments; Records; Audits), and subject to the other terms and conditions of this Agreement, Glycomed hereby grants to ParinGenix, and ParinGenix accepts, (a) an exclusive, royalty-bearing license, with the right to Sublicense, under the Patent Rights to import, make, have made, use, promote the use, and sell Licensed Products in the Field in the Territory, and (b) a non-exclusive, royalty-bearing license, with the right to Sublicense, under the Know-How to import, make, have made, use, promote the use, and sell Licensed Products in the Field and in the Territory. In the event Glycomed is the owner of other patents involving desulfated heparin that are not included in the Patent Rights, Glycomed hereby covenants to never sue ParinGenix for patent infringement or any related claim or cause of action arising out of or relating to such patents.

**2.2 Know-How And Other Documentation.** Upon the written request of ParinGenix, Glycomed shall use commercially reasonable efforts to assemble and transfer to ParinGenix such of the readily available Know-How as it is able without incurring undue expense or without undue effort. Glycomed shall also use commercially reasonable efforts to assemble and transfer to ParinGenix any lab notebooks and other documentation relating to the Patent Rights (collectively, “Documentation”) in its possession as it is able without incurring undue expense or without undue effort.

## **3. Sublicensing.**

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**3.1 Right to Grant Sublicenses.** During the term of this Agreement, ParinGenix will have the right to grant Sublicenses to Patent Rights and the Know-How in the Field and for the Territory.

**3.2 ParinGenix Remains Responsible.** ParinGenix is responsible for the actions or omissions of its Sublicensees and must not grant any rights that are inconsistent with the rights granted to and obligations of ParinGenix hereunder. Any act or omission of a Sublicensee that would be a breach of this Agreement if performed by ParinGenix will be deemed to be a breach by ParinGenix of this Agreement.

**3.3 Required Sections.** Each Sublicense granted by ParinGenix must provide that the obligations to Glycomed of Paragraphs 7.3 (Audits), and 18.5 (Insurance), and Articles 4 (Confidentiality Obligations), 11 (Patent Marking), 12 (Patent Matters), 14 (Indemnification), and 17 (Publicity) of this Agreement be binding upon the Sublicensee as if it were a party to this Agreement. ParinGenix will attach copies of these Paragraphs and Articles to all Sublicenses.

**3.4 Sublicensing Revenue.** ParinGenix shall ensure that all Sublicensing Revenue received by ParinGenix or its Affiliates shall only be in cash. ParinGenix shall provide Glycomed with a copy of each executed Sublicense within thirty (30) days of the date of execution of such Sublicense.

#### **4. Confidentiality.**

##### **4.1 Confidentiality Obligations.**

**(a)** Each party shall, at all times during the term of this Agreement and for a ten (10) year period following termination or expiration hereof, keep, and shall ensure that its officers, directors, employees, and agents keep, completely confidential and shall not publish or otherwise disclose and shall not use, directly or indirectly, for any purpose, any Confidential Information furnished to it by the other party, except to the extent such disclosure or use is expressly permitted by the terms of this Agreement or is reasonably necessary for the performance of this Agreement.

**(b)** Glycomed recognizes that by reason of ParinGenix' status as an exclusive licensee of the Patent Rights in the Field, ParinGenix has an interest in Glycomed's maintaining in confidence any information of Glycomed relating to the terms of this Agreement or the Licensed Product, except to the extent that disclosure or use is expressly permitted by the terms of this Agreement or is reasonably necessary for the performance of this Agreement.

##### **4.2 Permitted Disclosures.** Each party may disclose Confidential Information to the extent that such disclosure is:

**(a)** Made in response to a valid order of a court of competent jurisdiction or other governmental body of a country or any political subdivision thereof of competent jurisdiction; provided, however, that the receiving party, if not legally prohibited, shall first have given notice to the disclosing party and given the disclosing party a reasonable opportunity to quash such order and to obtain a protective order requiring that the Confidential Information and/or documents that are the subject of such order be held in confidence by such court or

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agency or, if disclosed, be used only for the purposes for which the order was issued; and provided further that if a disclosure order is not quashed or a protective order is not obtained, the Confidential Information disclosed in response to such court or governmental order shall be limited to that information which is legally required to be disclosed in such response to such court or governmental order;

(b) Otherwise required by law, in the opinion of legal counsel to the receiving party;

(c) Made by the receiving party to (i) the regulatory authorities as required in connection with applications for regulatory approvals for the Licensed Product; provided, however, that reasonable measures shall be taken to assure confidential treatment of such information or (ii) the United States Patent and Trademark Office or any equivalent agency or governmental authority outside the United States of America in connection with any filing, prosecution, divisions, continuations, continuations-in-part, reissues, re-examinations, renewals, substitutions, extensions or provisionals involving any patent application or issued patent;

(d) Made by the receiving party to third parties as may be necessary in connection with the development and commercialization of the Licensed Product as contemplated by this Agreement, including, without limitation, Sublicensing; provided, however, that the receiving party in question shall in each case obtain from the proposed third party recipient a written confidentiality undertaking containing confidentiality obligations no less onerous than those set forth in this Article 4; or

(e) Made by the receiving party to third parties regarding disclosure of the existence and terms of this Agreement under obligations of confidentiality (i) to agents, advisors, lenders and investors, and (ii) to potential agents, advisors, lenders, purchasers (in mergers and acquisitions and/or licensing transactions), investors and other business partners, in connection with such Party's activities hereunder, in connection with such Party's financing activities or if in the process of a mergers and acquisitions and/or licensing transaction, but only to the extent required for such activities.

#### **4.3 Definition; Exclusions; Return of Confidential Information.**

(a) "Confidential Information" means (i) where Glycomed is the receiving party, any information relating to the terms of this Agreement or the Licensed Product, and the business affairs and other activities of ParinGenix or its Affiliates, and (ii) where ParinGenix is the receiving party, any information relating to the terms of this Agreement or the Licensed Product, and the business affairs and other activities of Glycomed or its Affiliates.

(b) Notwithstanding the foregoing, Confidential Information shall not include any information that:

(i) at the time of disclosure is or later comes into public domain through no fault of receiving party;

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(ii) can be demonstrated by documentation or other competent proof to have been in the receiving party's possession prior to disclosure by the disclosing party;

(iii) is subsequently received by the receiving party from a third party who is not bound by any obligation of confidentiality with respect to said information; or

(iv) that is independently developed by or for the receiving party without reference to the disclosing party's Confidential Information.

(c) Upon termination of this Agreement, the parties, their Affiliates and Sublicensees shall return all Confidential Information transferred under this Agreement; provided, however, that each party shall be permitted to retain one complete set of the Confidential Information for archival purposes to monitor compliance with this Section.

## 5. Diligence.

**5.1 Commercially Reasonable Efforts.** ParinGenix, during the term of this Agreement, will utilize its Commercially Reasonable Efforts, in proceeding with the development, manufacture and sale of Licensed Products in the Territory. "Commercially Reasonable Efforts" for the purposes of this Article, means the efforts and resources which would be used (including without limitation the promptness in which such efforts and resources would be applied) by a party consistent with its normal business practices, which in no event shall be less than the level of efforts and resources standard in the pharmaceutical industry for a company similar in size and scope to such party, with respect to a product or potential product at a similar stage in its development or product life taking into account efficacy, safety, pre-clinical and clinical results or the lack thereof, commercial value, regulatory issues factors, standard product planning, the competitiveness of alternative products of third parties that are in the marketplace, and the patent and other proprietary position of such product, and other market factors. The efforts of a Sublicensee will be considered the efforts of ParinGenix for purposes of determining whether Commercially Reasonable Efforts have been met. In determining Commercially Reasonable Efforts with respect to a particular Licensed Product, ParinGenix or its sublicensees may in all circumstances exercise reasonable and prudent business judgment and sound fiscal management in meeting their diligence and other obligations hereunder.

**5.2 Additional Diligence Obligations.** In addition to the obligations set forth in Section 5.1 above, ParinGenix, or a Sublicensee, shall have a First Commercial Sale of a Licensed Product in the Territory no later than the earlier of: (a) June 30, 2015, or (b) two years after notification of approval from the FDA with respect to the first Licensed Product to be so approved.

**5.3 Termination for Failure to Comply with Diligence.** If ParinGenix fails to adhere to the diligence obligations set forth in this Article 5 (Diligence) Glycomed may terminate the Agreement; provided however, that ParinGenix may extend the date required for a First Commercial Sale for one year, and thereafter on a year-by-year basis, with the payment of fifty thousand dollars (\$50,000) for each annual extension period prior to the expiration of the then current diligence period.

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## 6. License Issue Fee and Royalties.

**6.1 License Issue Fee.** As partial consideration for the rights conveyed by Glycomed under this Agreement, ParinGenix shall pay to Glycomed a one-time, non-refundable, non-creditable license issue fee of Three Hundred Fifty Thousand Dollars (\$350,000), due and payable in full on the Effective Date.

**6.2 Royalties.** ParinGenix and its Affiliates shall pay Glycomed royalties on Net Sales of Licensed Products on a Licensed Product by Licensed Product and country by country located in the Territory basis at the rate of three percent (3.0%). The payments specified in this Section 6.2 (collectively, "Royalty Payments") shall be payable only for the period equal to the Royalty Term for such Licensed Product.

**6.3 Sublicensing Revenue.** ParinGenix and its Affiliates shall pay Glycomed one hundred percent (100%) of the Sublicensing Revenue received by ParinGenix and its Affiliates from a Sublicensee if the royalty received by ParinGenix or its Affiliates on "net sales" of any Licensed Product made by such Sublicensee is three percent (3%) or less. In the event the royalty received by ParinGenix or its Affiliates from a Sublicensee on "net sales" of any Licensed Product made by such Sublicensee is greater than three percent (3%), ParinGenix and its Affiliates shall pay Glycomed the amount of the Sublicensing Revenue representing three percent (3%) of "net sales" and ParinGenix or its affiliates shall retain the difference.

**6.4 Taxes.** The parties agree to cooperate with one another and use reasonable efforts to avoid or reduce obligations for any and all income or other taxes required by Applicable Law to be withheld or deducted from any of the royalty and other payments made by or on behalf of a party hereunder ("Withholding Taxes"). The applicable paying party under this Agreement (the "Paying Party") shall, if required by applicable law, deduct from any amounts that it is required to pay to the recipient party hereunder (the "Recipient Party") an amount equal to such Withholding Taxes, provided that the Paying Party shall give the Recipient Party reasonable notice prior to paying any such Withholding Taxes. Such Withholding Taxes shall be paid to the proper taxing authority for the Recipient Party's account and evidence of such payment shall be secured and sent to recipient within one (1) month of such payment. The Paying Party shall, at the Recipient Party's cost and expense, do all such lawful acts and things and sign all such lawful deeds and documents as the Recipient Party may reasonably request to enable the Paying Party to take advantage of any applicable legal provision or any double taxation treaties with the goal of paying the sums due to the Recipient Party hereunder without withholding or deducting any Withholding Taxes. For the sake of clarity, in no event shall the Paying Party be required to pay any additional amounts, whether in the nature of a "gross up" payment or otherwise, to the Recipient Party on account of such Withholding Taxes.

**6.5 No Multiple Royalties.** No multiple royalties will be payable to Glycomed because any Licensed Product or its manufacture, use, or sale are or will be covered by more than one patent application or issued patent included as part of Patent Rights.

**6.6 Patent Rights Invalidity.** Notwithstanding anything to the contrary contained herein, if any patent or any claim thereof included within the Patent Rights shall be found invalid by a court of competent jurisdiction, ParinGenix' obligation to pay Glycomed royalties based on

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such patent or claim or any claim patentably indistinct therefrom shall cease as of the date of such decision. ParinGenix shall not, however, be relieved from paying Glycomed any royalties, fees, expenses, or other liabilities that accrued prior to the date of such decision or that are based on any of Glycomed's Patent Rights not the subject of such decision. In the event that the patent office in the country or region where a specific patent application has been filed issues a final rejection, of any patent or patent application or claim thereof included within the Patent Rights, ParinGenix' obligation to pay Glycomed royalties based on such patent or claim or any claim patentably indistinct there from shall cease as of the date of such decision, unless and until after such rejection is rescinded or reversed and such patent or claims are allowed. ParinGenix shall not, however, be relieved from paying Glycomed any royalties, fees, expenses, or other liabilities that accrued prior to the date of such rejection or that are based on any of Glycomed's Patent Rights not the subject of such rejection.

## **7. Payment; Records; Audits.**

**7.1 Payment; Reports.** Royalty and Sublicensing Revenue payments shall be calculated and reported for each Calendar Quarter. Reports shall be provided for each Calendar Quarter whether or not a payment is due for such reporting period. All payments due to Glycomed as a result of Net Sales by ParinGenix or its Affiliates under this Agreement shall be paid within forty five (45) days of the end of each Calendar Quarter (other than the Calendar Quarter ended December 31, which shall be ninety (90) days), unless otherwise specifically provided herein. All payments due to Glycomed as a result of Sublicensing Revenue received by ParinGenix or its Affiliates under this Agreement shall be paid within sixty (60) days of the end of each Calendar Quarter (other than the Calendar Quarter ended December 31, which shall be ninety (90) days), unless otherwise specifically provided herein. Each payment shall be accompanied by a report of Net Sales of Licensed Products by ParinGenix and its Affiliates and Sublicensing Revenue received by ParinGenix and its Affiliates each in sufficient detail to permit confirmation of the accuracy of the payment made, including, without limitation and on a country-by-country basis, the number of Licensed Products sold, the gross sales and Net Sales of such Licensed Products, the amount of Sublicensing Revenue received, the royalty payments payable, the method used to calculate the royalty payments, and the exchange rates used. ParinGenix shall keep, and shall cause its Affiliates and Sublicensees to keep, complete and accurate records pertaining to the sale or other disposition of Licensed Products in sufficient detail to permit Glycomed to confirm the accuracy of all payments due hereunder.

**7.2 Manner and Place of Payment.** All payments hereunder shall be payable in U.S. dollars by wire transfer in immediately available funds to a bank and account designated in writing by Glycomed, unless otherwise specified in writing by Glycomed.

**7.3 Audits.** For two (2) years after the period of each report required by this Article, ParinGenix and its Affiliates shall keep (and shall use commercially reasonable efforts to cause its Sublicensees to keep) complete and accurate records pertaining to the sale or other disposition of Licensed Products and the receipt of Sublicensing Revenue in sufficient detail to permit Glycomed to confirm the accuracy of all payments due hereunder. Glycomed shall have the right to cause an independent, certified public accountant reasonably acceptable to ParinGenix to audit such records to confirm Net Sales, Sublicensing Revenue, royalties payments and other payments for any Fiscal Year ending not more than twenty-four (24) months prior to the date of

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such request. Such audits may be exercised during normal business hours upon a minimum of sixty (60) days prior written notice to ParinGenix, but no more than frequently than once per year. Prompt adjustments shall be made by the parties to reflect the results of such audit. Glycomed shall bear the full cost of such audit unless such audit discloses an underpayment by ParinGenix of more than five percent (5%) of the amount of royalty payments or other payments due under this Agreement, in which case, ParinGenix shall bear Glycomed's actual out-of-pocket cost of such audit and shall promptly remit to Glycomed the amount of any underpayment.

**7.4 Late Payments.** In the event that any payment due under this Agreement is not made when due, the payment shall accrue interest from the date due at the rate of one percent (1.0%) per month; provided, however, that in no event shall such rate exceed the maximum legal annual interest rate. The payment of such interest shall not limit Glycomed from exercising any other rights it may have as a consequence of the lateness of any payment. Glycomed shall be reimbursed for all of its actual out-of-pocket costs of collection, including reasonable attorney fees, to collect any unpaid amounts due to Glycomed.

## **8. Term and Termination of Agreement**

**8.1 Term.** The term of this Agreement (the "Term") shall commence on the Effective Date and continue on a Licensed Product by Licensed Product and country by country located within the Territory basis until the expiration of the last Royalty Term for any Licensed Product with respect to which ParinGenix has the License, unless otherwise terminated earlier as provided for under the terms of the Agreement.

**8.2 Mutual Termination for Breach.** Either party may terminate this Agreement effective upon thirty (30) days prior written notice of termination to the other party, if such other party materially breaches this Agreement and does not cure such breach within sixty (60) days after receiving a notice of breach of this Agreement.

**8.3 Other Mutual Termination Rights.** This Agreement and the license granted hereunder will terminate immediately in the event that: (a) a party seeks liquidation, reorganization, dissolution or winding-up of itself, is insolvent or evidence exists as to its insolvency, or such party makes any general assignment for the benefit of its creditors; (b) a petition is filed by or against a party, or any proceeding is initiated by or against such party, or any proceeding is initiated against such party as a debtor, under any bankruptcy or insolvency law, unless the laws then in effect void the effectiveness of this provision; (c) a receiver, trustee, or any similar officer is appointed to take possession, custody, or control of all or any part of a party's assets or property; or (d) a party adopts any resolution of its Board of Directors or stockholders for the purpose of effecting any of the foregoing.

**8.4 Rights in Bankruptcy.** All rights and licenses granted under or pursuant to this Agreement by Licensor are, and shall otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code, licenses of right to "intellectual property" as defined under Section 101 of the U.S. Bankruptcy Code. The parties agree that ParinGenix, as licensee of such rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code. The parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against Glycomed under the U.S. Bankruptcy Code, ParinGenix



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packaging pertaining thereto made and sold by ParinGenix (and/or by its Sublicensees) in the United States with an appropriate patent marking identifying the pendency of any U.S. patent application and/or any issued U.S. patent forming any part of Patent Rights.

## **12. Patent Matters.**

### **12.1 Prosecution Matters.**

(a) Glycomed shall use commercially reasonable efforts to prosecute and maintain the Patent Rights in the Territory. In the event that Glycomed determines it is no longer reasonable to continue the prosecution of one or more of the Patent Rights in the Territory, then Glycomed shall so notify ParinGenix promptly in writing. Upon receipt of any such notice by Glycomed, ParinGenix shall have the right, but not the obligation, to support the continued prosecution or maintenance, of such Patent Rights in the Territory, at ParinGenix' expense. If ParinGenix elects to continue such support, then ParinGenix shall notify Glycomed in writing within thirty (30) days of receipt of the initial Glycomed notice and Glycomed shall irrevocably, absolutely and unconditionally transfer to ParinGenix all of Glycomed's right title and interest in and to such Patent Right (in which case such transferred Patent Rights shall no longer be deemed to be "Patent Rights" under this Agreement). The cost of such support shall not be creditable against further royalties on account of Net Sales generated in the Territory. If ParinGenix elects not to continue such support then ParinGenix shall have no further rights or obligations under this Agreement with respect to such Patent Rights in the Territory and the license granted pursuant to Article 3 of this Agreement shall terminate with respect to such Patent Rights in the Territory.

(b) Glycomed shall regularly provide ParinGenix with copies of all documents filed hereunder for Patent Rights in the Territory and other material submissions and correspondence with the patent offices, as promptly as received, for review by ParinGenix. In addition, Glycomed shall provide ParinGenix and its patent counsel with an opportunity to consult with Glycomed regarding the filing and contents of any such documents, submission or response, and the timely advice and suggestions of ParinGenix and its patent counsel shall be taken into reasonable consideration by Glycomed and its legal counsel in connection with such filing.

### **12.2 Enforcement of Patents and Trademarks.**

(a) If either party considers that any Patent Rights in the Field and in the Territory are being infringed by a third party's activities, it shall notify the other party and provide it with any evidence of such infringement that is reasonably available. Upon written notice to Glycomed, ParinGenix shall have the first right, but not the obligation, at its own expense to attempt to remove such infringement by commercially appropriate steps, including filing an infringement suit or taking other similar action. If required by law in order for ParinGenix to prosecute such suit, Glycomed shall join such suit as a party, at ParinGenix' expense; and, in such instance, Glycomed shall be represented by counsel chosen by ParinGenix. In the event ParinGenix fails to take commercially appropriate steps with respect to an infringement that is likely to have a material adverse effect on the sale of a Licensed Product in the Territory within three (3) months following notice of such infringement, Glycomed shall

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have the right to do so at Glycomed's expense; provided, however, that if ParinGenix has commenced negotiations with an alleged infringer for discontinuance of such infringement within such three-month period, ParinGenix shall have an additional six (6) months to conclude its negotiations before Glycomed may bring suit for such. The party not enforcing the applicable Patent Rights shall provide reasonable assistance to the other party, including providing access to relevant documents and other evidence and making its employees available at reasonable business hours, subject to the enforcing party's reimbursement of any reasonable out-of-pocket expenses incurred by the non-enforcing party. To ensure that no rights of Glycomed are compromised in any such action, ParinGenix shall not settle any such claim, or enter into any settlement agreement that admits that any third party product does not infringe the Patent Rights or that any Patent Rights are invalid or unenforceable without Glycomed's prior written consent, which consent shall not be unreasonably withheld, delayed, denied or conditioned.

(b) Any amounts recovered by either party pursuant to Section 12.2(a), whether by settlement or judgment, shall be used to reimburse the parties for their reasonable out-of-pocket expenses in making such recovery (which amounts shall be allocated pro rata if insufficient to cover the totality of such expenses), with any remainder being retained by or paid to ParinGenix; provided, however, that ParinGenix shall pay to Glycomed an amount of monies or cash equivalents received from any alleged infringer (net of any amounts applied towards expense and cost reimbursement as set forth above) equivalent to royalties which Glycomed would have received on Net Sales.

### **12.3 Infringement of Third Party Rights.**

(a) In the event that a third party institutes a patent, trade secret, or other infringement suit against ParinGenix or its Affiliates or Sublicensees during the term of this Agreement, alleging that the research, development, manufacture, use, or sale of the Licensed Product in the Territory infringes one or more patent or other intellectual property rights held by such third party in the Territory, then ParinGenix shall have the sole right to assume direction and control of the defense of claims arising therefrom and Glycomed shall cooperate with ParinGenix in such defense as reasonably requested.

(b) Nothing in this Section 12.3 shall prevent either party, at its own expense, from obtaining any license or other rights from Third Parties it deems appropriate in order to permit the full and unhindered exercise of its rights under this Agreement.

(c) The provisions of this Section 12.3 set forth the parties' exclusive and sole remedies against each other in respect of the subject matter covered in Article 12.

### **12.4 Hatch-Waxman.**

(a) In the event either party receives notice pertaining to any patent included within Patent Rights pursuant to the Hatch-Waxman Amendments to the Federal Food Drug and Cosmetic Act, the Medicare Prescription Drug, Improvement and Modernization Act or any other provision of or amendment to the Federal Food Drug and Cosmetic Act (hereinafter, "the Act") including but not limited to notices from persons who have filed an Abbreviated New Drug Application ("ANDA") or a "paper" New Drug Application, ("paper NDA"), or in the case

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of an infringement of the Patent Rights as defined in Section 271(e) of Title 35 of the United States Code, such party shall notify the other party promptly but in no event later than five (5) days after receipt of such notice.

**(b)** In the event of an act of infringement by a third party under the Act, ParinGenix shall have the right, but not the obligation, to institute a patent infringement action as provided in the Act. If required by law in order for ParinGenix to prosecute such suit, Glycomed shall join such suit as a party, at ParinGenix' expense; and, in such instance, Glycomed shall be represented by counsel chosen by ParinGenix.

**(c)** Glycomed hereby authorizes ParinGenix to include in any NDA for a Licensed Product, a list of patents included within Glycomed's Patent Rights identifying Glycomed as patent owner, and further authorizes ParinGenix to cause such patents to be listed as appropriate in the FDA's list of "Approved Drug Products With Therapeutic Equivalence Evaluations" (commonly known as the "Orange Book").

### **13. Representations, Warranties, Covenants and Limitations.**

**13.1 Representations, Warranties and Covenants.** Each party hereby represents, warrants, and covenants to the other party as of the Effective Date as follows:

**(a)** such party is a corporation duly organized and in good standing under the laws of the state of its incorporation, and has full power and authority and the legal right to own and operate its property and assets and to carry on its business as it is now being conducted;

**(b)** such party (i) has the power and authority and the legal right to enter into the Agreement and perform its obligations hereunder, and (ii) has taken all necessary action on its part required to authorize the execution and delivery of the Agreement and the performance of its obligations hereunder. The Agreement has been duly executed and delivered on behalf of such party and constitutes a legal, valid, binding obligation of such party and is enforceable against it in accordance with its terms subject to the effects of bankruptcy, insolvency, or other laws of general application affecting the enforcement of creditor rights and judicial principles affecting the availability of specific performance and general principles of equity, whether enforceability is considered a proceeding at law or equity;

**(c)** such party is not aware of any pending or threatened litigation (and has not received any communication) that alleges that such party's activities related to this Agreement have violated, or that by conducting the activities as contemplated herein such party would violate, any of the intellectual property rights of any other person;

**(d)** all necessary consents, approvals and authorizations of all governmental authorities and other persons or entities required to be obtained by such party in connection with the Agreement have been obtained; and

**(e)** the execution and delivery of the Agreement and the performance of such party's obligations hereunder (i) do not conflict with or violate any requirement of applicable law or regulation or any provision of articles of incorporation, bylaws or limited

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partnership agreement of such party, as applicable, in any material way, and (ii) do not conflict with, violate, or breach or constitute a default or require any consent under, any contractual obligation or court or administrative order by which such party is bound.

**13.2 Glycomed's Representations and Warranties.** Glycomed represents and warrants to ParinGenix as of the Effective Date:

(a) it has the lawful right to grant the License and it possesses complete and unrestricted ownership rights in the Patent Rights;

(b) it has not received any claims or threatened claims that any of the Patent Rights, Know-How or Licensed Products violate the intellectual property rights of any third party; and

(c) to the best of its knowledge, the Patent Rights are valid, duly issued, and were not obtained as a result of fraud or inequitable conduct and all known prior art was disclosed to the United States Patent and Trademark Office during prosecution.

**13.3 No Other Representations, Warranties or Covenants.** Nothing in this Agreement will be construed as:

(a) A representation, warranty, or covenant by Glycomed as to the patentability, scope, or usefulness of the Patent Rights; or

(b) A representation, warranty, or covenant by Glycomed that anything made, used, sold, or otherwise disposed of under any license (or subsequent sublicense) granted in this Agreement is or will be free from infringement of third party patents, proprietary rights, or other intellectual property rights.

**13.4 DISCLAIMER.** EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, EACH PARTY DISCLAIMS ALL WARRANTIES WHATSOEVER, WITH RESPECT TO THE PATENT RIGHTS, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES AS TO THE MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF PATENT CLAIMS, ISSUED OR PENDING, OR THAT THE MANUFACTURE, USE OR SALE OF THE LICENSED PRODUCT WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER RIGHTS.

**14. Indemnification.**

**14.1 Indemnification by ParinGenix.** ParinGenix shall indemnify Glycomed, Glycomed's directors, officers, employees and agents (a "Glycomed Indemnified Party"), and defend and save each of them harmless, from and against any and all suits, investigations, claims, damages, liabilities, costs, and expenses (including, without limitation, reasonable attorneys' fees and expenses) (collectively, "Losses") arising from or occurring as a result of the development, clinical testing, manufacture, use, or sale of a Licensed Product by ParinGenix, its Affiliates or Sublicensees, except to the extent such Losses arise from or occur as a result of the misconduct of a Glycomed Indemnified Party or any breach by Glycomed under this Agreement.

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**14.2 Mutual Indemnification.** Additionally, each party shall indemnify the other party and its directors, officers, employees and agents, and defend and save each of them harmless, from and against any and all Losses arising from or occurring as a result of (a) a breach by such party of this Agreement or (b) any grossly negligent act or omission or the willful misconduct of such party.

**14.3 Procedures.** Each indemnified party agrees to give the indemnifying party prompt written notice of any Losses or discovery of fact upon which such indemnified party intends to base a request for indemnification under Section 14.1 or 14.2. Each party shall furnish promptly to the other party copies of all papers and official documents received in respect of any Losses. The indemnified party shall cooperate with the indemnifying party in providing witnesses and records necessary in the defense against any Losses. With respect to any Losses relating solely to the payment of money damages and that will not result in the indemnified party's becoming subject to injunctive or other relief or otherwise adversely affecting the business of the indemnified party in any manner, and as to which the indemnifying party shall have acknowledged in writing the obligation to indemnify the indemnified party hereunder, the indemnifying party shall have the sole right to defend, settle, or otherwise dispose of such claim, on such terms as the indemnifying party, in its sole discretion, shall deem appropriate. The indemnifying party shall obtain the written consent of the indemnified party, which shall not be unreasonably withheld, prior to ceasing to defend, settling, or otherwise disposing of any Losses if as a result thereof the indemnified party would become subject to injunctive or other equitable relief or any remedy other than the payment of money by the indemnifying party. The indemnifying party shall not be liable for any settlement or other disposition of a Loss by the indemnified party that is reached without the written consent of the indemnifying party. Except as provided in this Section 14.3, the costs and expenses, including fees and disbursements of counsel, incurred by any indemnified party in connection with any claim shall be reimbursed on a Calendar Quarter basis by the indemnifying party, without prejudice to the indemnifying party's right to contest the indemnified party's right to indemnification and subject to refund in the event the indemnifying party is ultimately held not to be obligated to indemnify the indemnified party.

**14.4 LIMITATION ON LIABILITY.** IN NO EVENT SHALL EITHER PARTY OR ANY OF THEIR AFFILIATES BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER IN CONTRACT, WARRANTY, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE, ARISING OUT OF (A) THE MANUFACTURE, USE OR SALE OF ANY LICENSED PRODUCT OR (B) ANY BREACH OF OR FAILURE TO PERFORM ANY OF THE PROVISIONS OF THIS AGREEMENT. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN THIS AGREEMENT, EXCEPT FOR A PARTY'S INDEMNIFICATIONS OBLIGATIONS OR A BREACH OF ITS CONFIDENTIALITY OBLIGATIONS AND EXCEPT FOR PARINGENIX' OBLIGATION TO MAKE THE PAYMENTS SET FORTH IN SECTION 6 HEREOF, A PARTY'S TOTAL LIABILITY TO THE OTHER PARTY FOR ANY MATTER ARISING FROM OR RELATED TO THIS AGREEMENT SHALL BE LIMITED TO THE TOTAL AMOUNT OF FEES OWED TO GLYCOMED UNDER SECTION 6 OF THIS AGREEMENT.

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**15. Applicable Laws.**

**15.1** ParinGenix will abide by all applicable federal, state, and local laws and regulations pertaining to the development and commercialization of Licensed Products under this Agreement.

**15.2** This Agreement will be construed in accordance with, and its performance will be governed by, the laws of the State of California, without giving effect to the principles of conflict of laws of California.

**16. Dispute Resolution.** In the event of any controversy or claim arising out of, relating to or in connection with any provision of this Agreement, the parties shall try to settle their differences amicably between themselves first, by referring the disputed matter to the Chief Executive Officer of Glycomed and the Chief Executive Officer of ParinGenix. Either party may initiate such informal dispute resolution by sending written notice of the dispute to the other party, and, within thirty (30) days after such notice, such representatives of the parties shall meet for attempted resolution by good faith negotiations. If the representatives of the parties have not been able to resolve the dispute within thirty (30) days after such negotiations, then any and all claims, disputes or controversies arising under, out of, or in connection with this Agreement, may be resolved by litigation in court.

**17. Publicity.** The parties may decide to issue press releases announcing the execution of this Agreement and agree that each party may desire or be required to issue subsequent press releases relating to the Agreement or activities thereunder. ParinGenix hereby expressly agrees not to use the name of Glycomed without Glycomed's prior written approval (except as required by applicable law, stock exchange rules or for any purpose described in Section 4.2). Following the initial press releases announcing this Agreement, either party shall be free to disclose, without the other party's prior written consent, the existence of this Agreement, the identity of the other party and those terms of the Agreement which have already been publicly disclosed in accordance herewith.

**18. General.**

**18.1 Validity of Provisions.** If any provision of this Agreement will be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions will not be in any way affected or impaired thereby.

**18.2 Waiver.** No omission or delay of either party hereto in requiring due and punctual fulfillment of the obligations of any other party hereto will be deemed to constitute a waiver by such party of its rights to require such due and punctual fulfillment, or of any other of its remedies hereunder.

**18.3 Amendment.** No amendment or modification hereof will be valid or binding upon the parties unless it is made in writing, cites this Agreement, and signed by duly authorized representatives of Glycomed and ParinGenix.

**18.4 Assignment.** This Agreement, and any rights or obligations hereunder, may not be assigned, transferred or delegated in whole or in part by either party, whether except with the

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other party's express written approval, provided, however, that either party may, without such consent, assign this Agreement and its rights and obligations hereunder to an Affiliate (but only for so long as such person remains an Affiliate of the assignor and the assignor remains liable with regard to such assignment), to the purchaser of all or substantially all of its assets related to the Licensed Product or the business, or to its successor entity or acquirer in the event of a merger, consolidation or change in control of Glycomed or ParinGenix, as the case may be. Any attempted assignment, transfer or delegation in breach of this provision will be deemed to be void and no effect. Except as otherwise provided, this Agreement will be binding upon and inure to the benefit of the parties' successors and lawful assigns.

**18.5 Insurance.** ParinGenix shall have and maintain such type and amounts of liability insurance covering the development, clinical trial, manufacture, supply, use and sale of Licensed Product as is normal and customary in the pharmaceutical industry generally for parties similarly situated, and will upon request provide Glycomed with a copy of its policies of insurance in this regard, along with amendments and revisions thereto.

**18.6 Headings.** The headings of the several sections of this Agreement are inserted for convenience and reference only, and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

**18.7 Glycomed's Disclaimers.** Neither Glycomed, nor any of its scientists, researchers, employees, officers, trustees or agents, assume any responsibility for the manufacture, product specifications, sale or use of the Licensed Products that are manufactured by or sold by ParinGenix.

**18.8 No Endorsement.** By entering into this Agreement, Glycomed neither directly nor indirectly endorses any product or service provided, or to be provided, by ParinGenix, whether directly or indirectly related to this Agreement. ParinGenix will not state or imply that this Agreement is an endorsement by Glycomed or its employees.

**18.9 Independent Contractors.** The parties hereby acknowledge and agree that each is an independent contractor and that neither party will be considered to be the agent, representative, master or servant of the other party for any purpose whatsoever, and that neither party has any authority to enter into a contract, to assume any obligation or to give warranties or representations on behalf of the other party. Nothing in this relationship will be construed to create a relationship of joint venture, partnership, fiduciary or other similar relationship between the parties.

**18.10 Reformation.** The parties hereby agree that neither party intends to violate any public policy, statutory or common law, rule, regulation, treaty or decision of any government agency or executive body thereof of any country or community or association of countries, and that if any word, sentence, paragraph or clause or combination thereof of this Agreement is found, by a court or executive body with judicial powers having jurisdiction over this Agreement or any of the parties hereto, in a final, unappealable order to be in violation of any such provision in any country or community or association of countries, such words, sentences, paragraphs or clauses or combination will be inoperative in such country or community or association of countries, and the remainder of this Agreement will remain binding upon the parties hereto.

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**18.11 Force Majeure.** No liability hereunder will result to a party by reason of delay in performance caused by force majeure, that is due to circumstances beyond the reasonable control of the party, including, without limitation, acts of God, fire, flood, earthquake, war, terrorism, civil unrest, labor unrest, or shortage of or inability to obtain material or equipment; however, the payment of royalties or other amounts due hereunder shall not be subject to this force majeure provision.

**18.12 Survival.** Paragraphs 8.4, 8.5, 8.6 and 8.7 (Term and Termination of Agreement) and 13.4; and Articles 4 (Confidentiality), 7 (Payments; Records; Audits), 14 (Indemnification), 15 (Applicable Laws), 16 (Dispute Resolution), 17 (Publicity), 18 (General) and other provisions that by their context would survive, will survive the termination of this Agreement.

**18.13 Entire Agreement.** This Agreement embodies the entire understanding of the parties and supersedes all previous communications, representations, or understandings, either oral or written, between the parties relating to the subject matter hereof.

Intending to be legally bound, Glycomed and ParinGenix have executed this Agreement, in duplicate originals but collectively evidencing only a single contract, by their respective duly authorized officers, on the dates hereinafter written.

Glycomed, Inc.

ParinGenix, Inc.

By: /s/ Charles Berkman  
Name: Charles Berkman  
Title: Secretary  
Date: June 16, 2009

By: /s/ Stephen Marcus  
Name: Stephen Marcus  
Title: President & CEO  
Date: June 17, 2009

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**ATTACHMENT A**  
**Patent Rights as of the Effective Date**

<u>Country</u>	<u>Patent Number</u>	<u>Title</u>
***	***	***
***	***	***
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\*\*\*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.

**LIGAND PHARMACEUTICALS INCORPORATED**  
**DIRECTOR COMPENSATION AND STOCK OWNERSHIP POLICY**  
**(Amended and Restated Effective April 16, 2009)**

**I. DIRECTOR COMPENSATION**

Non-employee members of the board of directors (the “*Board*”) of Ligand Pharmaceuticals Incorporated (the “*Company*”) shall be eligible to receive cash and equity compensation effective as of April 16, 2009, as set forth in this Director Compensation Policy. The cash compensation and stock awards described in this Director Compensation Policy shall be paid or be made, as applicable, automatically and without further action of the Board, to each member of the Board who is not an employee of the Company or any parent or subsidiary of the Company (each, an “*Independent Director*”) who may be eligible to receive such cash compensation or stock awards, unless such Independent Director declines the receipt of such cash compensation or stock awards by written notice to the Chairman of the Board. This Director Compensation Policy shall remain in effect until it is revised or rescinded by further action of the Board. The terms and conditions of this Director Compensation Policy shall supersede any prior cash or equity compensation arrangements between the Company and its directors.

1. Cash Compensation.

(a) Annual Retainer. Each Independent Director shall be eligible to receive an annual retainer of \$30,000 for service on the Board. In addition, an Independent Director serving as:

(i) chairman of the Board shall be eligible to receive an additional annual retainer of \$20,000 for such service;

(ii) chairman of the Audit Committee shall be eligible to receive an additional annual retainer of \$12,000 for such service;

(iii) members (other than the chairman) of the Audit Committee shall be eligible to receive an additional annual retainer of \$10,000 for such service;

(iv) chairman of the Compensation Committee shall be eligible to receive an additional annual retainer of \$12,000 for such service;

(v) members (other than the chairman) of the Compensation Committee shall be eligible to receive an additional annual retainer of \$6,000 for such service;

(vi) chairman of the Nominating and Corporate Governance Committee shall be eligible to receive an additional annual retainer of \$8,000 for such service; and

(vii) members (other than the chairman) of the Nominating and Corporate Governance Committee shall be eligible to receive an additional annual retainer of \$4,000 for such service.

(b) Payment of Cash Compensation. Annual retainer fees shall be paid after each annual meeting of the Company’s stockholders in advance for the upcoming year of service and shall be prorated for the period of the year served for Independent Directors who are elected or appointed to the Board at a time other than the date of the annual meeting of the Company’s stockholders. Committee fees

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shall be paid quarterly and shall be prorated for any partial quarters served for Independent Directors who serve on a committee for less than a full quarter (and such fees shall be retroactive to the date on which the Independent Director joins the applicable committee).

2. Equity Compensation. The Independent Directors shall be granted the following stock awards. The stock awards described below shall be granted under and shall be subject to the terms and provisions of the Company's 2002 Stock Incentive Plan (the "**2002 Plan**") and shall be granted subject to the execution and delivery of award agreements, including attached exhibits, in substantially the same forms previously approved by the Board.

(a) Initial Stock Awards. A person who was initially elected or appointed to the Board on or after April 16, 2009, and who was or is an Independent Director at the time of such initial election or appointment, shall be eligible to receive the following stock awards on the date of such initial election or appointment (each, an "**Initial Stock Award**"):

- (i) a restricted stock grant of 10,000 shares of common stock (subject to adjustment as provided in the 2002 Plan); and
- (ii) a stock option to purchase 30,000 shares of common stock (subject to adjustment as provided in the 2002 Plan).

(b) Subsequent Stock Awards. A person who is an Independent Director automatically shall be eligible to receive the following stock awards on the date of each annual meeting of the Company's stockholders on or after April 16, 2009 (each, a "**Subsequent Stock Award**"):

- (i) a restricted stock grant of 5,000 shares of common stock (subject to adjustment as provided in the 2002 Plan); and
- (ii) a stock option to purchase 15,000 shares of common stock (subject to adjustment as provided in the 2002 Plan).

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

(c) Termination of Employment of Employee Directors. Members of the Board who are employees of the Company or any parent or subsidiary of the Company who subsequently terminate their employment with the Company and any parent or subsidiary of the Company and remain on the Board will not receive any Initial Stock Awards pursuant to clause 2(a) above, but to the extent that they are otherwise eligible, will be eligible to receive, after termination from employment with the Company and any parent or subsidiary of the Company, Subsequent Stock Awards as described in clause 2(b) above.

(d) Vesting of Stock Awards Granted to Independent Directors

(i) Initial Stock Awards granted hereunder shall vest in thirty-six (36) equal monthly installments over the three year period following the date of grant, subject to the director's continuing service on the Board through each such vesting date.

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(ii) Subsequent Stock Awards granted hereunder shall vest in twelve (12) equal monthly installments over the first year following the date of grant, subject to the director's continuing service on the Board through each such vesting date.

(iii) Any stock awards granted hereunder shall vest in full in the event of a Change in Control or a Hostile Take-Over (each as defined in the 2002 Plan) to the extent the director is serving on the Board at the time of such transaction or in the event a director ceases to serve on the Board by reason of death or Permanent Disability as defined in the 2002 Plan.

(iv) Any unvested stock awards will be forfeited to the Company in the event a director ceases to serve on the Board prior to the vesting of such shares.

(e) Effect of Termination of Board Service on Stock Options. A director shall be able to exercise his or her stock options that were vested at the time of his or her cessation of Board service until the first to occur of (A) the third anniversary of the date of his or her cessation of Board service, or (B) the original expiration date of the term of such stock options.

(f) Term of Stock Options. Each stock option granted hereunder shall have a term of ten (10) years measured from the date of grant.

(g) Exercise Price of Stock Options. The exercise price per share of any stock options granted hereunder shall be equal to one hundred percent (100%) of the Fair Market Value (as defined in the 2002 Plan) of the common stock on the date of grant.

## II. DIRECTOR STOCK OWNERSHIP GUIDELINES

Independent Directors are expected to own and hold a specified number of shares of the Company's common stock. The ownership guideline is 10,000 shares of the Company's common stock. The stock ownership level should be achieved by each Independent Director on or before December 31, 2012 or, if later, within three years after the Independent Director's first appointment to the Board.

Stock that counts toward satisfaction of these guidelines include: shares of common stock owned outright by the Independent Director and his or her immediate family members who share the same household, whether held individually or jointly; restricted stock where the restrictions have lapsed; shares acquired upon stock option exercise; shares purchased in the open market; and shares held in trust for the benefit of the Independent Director or his or her family. Restricted stock units, which represent the right to receive shares, do not count towards satisfaction of these guidelines. Shares held in trust may be included. Due to the complexities of trust accounts, requests to include shares held in trust should be submitted to the Secretary of the Company and the Chairman of the Board will make the final decision as to whether to include those shares.

The guidelines may be waived for Independent Directors, at the discretion of the Board, if compliance would create severe hardship or prevent an Independent Director from complying with a court order, as in the case of a divorce settlement. It is expected that these instances will be rare.

**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: August 3, 2009

/s/ John L. Higgins

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

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

I, John P. Sharp, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying 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: August 3, 2009

/s/ John P. Sharp

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

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

In connection with the accompanying Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated (the "Company") for the quarter ended June 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 June 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 June 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 June 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: August 3, 2009

/s/ John L. Higgins

John L. Higgins

*President, Chief Executive Officer and Director  
(Principal Executive Officer)*

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

In connection with the accompanying Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated (the "Company") for the quarter ended June 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 June 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 June 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 June 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: August 3, 2009

/s/ John P. Sharp

John P. Sharp

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