LIGAND PHARMACEUTICALS INC
Form S-4
October 20, 2008

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As Filed with the Securities and Exchange Commission on October 20, 2008

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-4

REGISTRATION STATEMENT
Under
The Securities Act of 1933

LIGAND PHARMACEUTICALS INCORPORATED

(Exact name of Registrant as specified in its charter)

Delaware	**2834**	**77-0160744**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

10275 Science Center Drive
San Diego, California 92121-1117
(858) 550-7500

(Address including zip code, and telephone number, including area code, of Registrant's principal executive offices)

John L. Higgins
President and Chief Executive Officer
Ligand Pharmaceuticals Incorporated
10275 Science Center Drive
San Diego, California 92121-1117
(858) 550-7500

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Scott N. Wolfe, Esq.	**Stephen C. Costalas, Esq.**	**James J. Marino, Esq.**
Latham & Watkins LLP	**Executive Vice President, Corporate Development,**	**Dechert LLP**
12636 High Bluff Drive, Suite 400	**General Counsel and Secretary**	**Suite 500, 902 Carnegie Center**
San Diego, California 92130	**Pharmacopeia, Inc.**	**Princeton, New Jersey 08540**
(858) 523-5400	**P.O. Box 5350**	**(609) 955-3211**
	Princeton, New Jersey 08543-5350	
	Telephone: (609) 452-3600	

Approximate date of commencement of proposed sale to the public:
As soon as practicable after the effectiveness of this registration statement and the satisfaction or waiver of all other conditions under the merger agreement described herein.

If the securities being registered on this Form are being offered in connection with the formation of a holding company and there is compliance with General Instruction G, please check the following box. o

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

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

Large accelerated filer o	Accelerated filer ý	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

CALCULATION OF REGISTRATION FEE

Title of Each Class of Security Being Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee(3)
Common stock, $0.001 par value per share	**18,976,461**	N/A	$31,773,572	$1,249

(1) Relates to common stock, $0.001 par value per share, of Ligand Pharmaceuticals Incorporated, a Delaware corporation ("Ligand"), issuable to holders of common stock, $0.01 par value per share, and warrants, restricted stock units and options to acquire shares of common stock of Pharmacopeia, Inc., a Delaware corporation ("Pharmacopeia"), in the proposed merger of Margaux Acquisition Corp., a Delaware corporation and wholly-owned subsidiary of Ligand, with and into Pharmacopeia. The amount of Ligand common stock to be registered is based on the estimated maximum number of shares of Ligand common stock issuable upon the closing of the above-referenced merger.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and (f) under the Securities Act of 1933, as amended, based upon the product of (1) $0.89, the average of the high and low sale prices of Pharmacopeia common stock as reported on The Nasdaq Global Market on October 16, 2008 and (2) 35,700,642, the estimated maximum number of shares of Pharmacopeia common stock to be exchanged pursuant to the proposed merger (which is equal to the sum of (a) 29,834,494 shares of Pharmacopeia common stock outstanding on October 16, 2008, (b) 4,043,085 shares of Pharmacopeia common stock issuable upon the exercise of options outstanding on October 16, 2008, (c) 197,000 shares of Pharmacopeia common stock issuable pursuant to restricted stock units outstanding on October 16, 2008, and (d) 1,626,063 shares of Pharmacopeia common stock issuable pursuant to warrants outstanding on October 16, 2008).

(3) This fee has been calculated pursuant to Section 6(b) of the Securities Act of 1933, as amended.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this proxy statement/prospectus is not complete and may be changed. Ligand Pharmaceuticals Incorporated may not sell these securities until the registration statement filed with the Securities and Exchange Commission, of which this proxy statement/prospectus is a part, is effective. This proxy statement/prospectus does not constitute an offer to sell, or a solicitation of an offer to purchase, the securities described in this proxy statement/prospectus, or the solicitation of a proxy, in any jurisdiction to or from any person to whom or from whom it is unlawful to make such offer, solicitation of an offer or proxy solicitation in such jurisdiction.

Subject to completion, dated October 20, 2008

PROXY STATEMENT/PROSPECTUS

A MERGER IS PROPOSED YOUR VOTE IS VERY IMPORTANT

Dear Pharmacopeia stockholder, , 2008

You are cordially invited to attend a special meeting of Pharmacopeia, Inc. stockholders to be held on , 2008, starting at , local time, at Pharmacopeia's offices located at 1002 Eastpark Boulevard, Cranbury, New Jersey 08512.

At the special meeting, you will be asked to consider and vote upon a proposal to adopt an agreement and plan of merger, dated as of September 24, 2008, which provides for the acquisition of Pharmacopeia by Ligand Pharmaceuticals Incorporated, or Ligand. If the merger agreement is adopted, and the other conditions in the merger agreement are satisfied or waived, Margaux Acquisition Corp., a wholly-owned subsidiary of Ligand, or Margaux, will merge with and into Pharmacopeia, immediately followed by the merger of Pharmacopeia, the surviving corporation of merger 1, with and into Latour Acquisition, LLC, a wholly-owned subsidiary of Ligand, or Latour, with Latour continuing after merger 2 as the surviving entity. Merger 1 and merger 2 are collectively referred to in this proxy statement/prospectus as the mergers. Upon completion of merger 1, Ligand would issue approximately 0.58 of a share for each share of Pharmacopeia common stock outstanding immediately prior to the effective time of merger 1, subject to certain adjustments for cancelled stock options. However, this exchange ratio is fixed only if the volume weighted average of the closing prices of Ligand common stock during the 20 trading days ending on the fifth trading day prior to the date of the special meeting of Pharmacopeia stockholders, which is referred to in this proxy statement/prospectus as the Ligand Common Stock Value, falls in the range of $3.00 and $3.75. Otherwise, the following will apply:

- if the Ligand Common Stock Value is greater than $3.75 but not greater than $4.50, the overall transaction value will be fixed at $66 million, and the exchange ratio will decrease as prices increase within the range;

- if the Ligand Common Stock Value is greater than $4.50, then the exchange ratio will be approximately 0.49;

- if the Ligand Common Stock Value is equal to or greater than $2.38 but less than $3.00, then the exchange ratio will increase as prices decrease within the range (provided that if the Ligand Common Stock Value is less than $2.93, the exchange ratio will not exceed approximately 0.60), subject to specified limitations in the merger agreement. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive cash consideration for an overall transaction value fixed at $52.8 million; or

- if the Ligand Common Stock Value is less than $2.38, then the exchange ratio will be approximately 0.60. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive a proportionate share of $10 million in cash.

Based on Ligand's closing price on October 17, 2008 of $1.99, the exchange ratio set forth above implies a purchase price of $1.53 per common share of Pharmacopeia, or an equity value of approximately $46 million and a premium over the closing price of Pharmacopeia on September 24, 2008 (the last full trading day prior to the public announcement of the merger agreement) of 29%.

These values exclude a potential for approximately $0.50 per share or an aggregate of $15 million related to the contingent value rights, or CVRs. The CVRs provide each holder the right to receive a proportionate share of an aggregate of $15 million if Ligand enters into a license, sale, development, marketing or option agreement with respect to any product candidate from Pharmacopeia's dual angiotensin and endothelin receptor antagonist, or DARA, program (other than any agreement with Bristol-Myers Squibb Company or any of its affiliates) on or prior to December 31, 2011.

Pharmacopeia's board of directors has carefully reviewed and considered the terms and conditions of the merger agreement. Based on its review, Pharmacopeia's board of directors has unanimously determined that the merger agreement and the mergers are fair to, advisable for, and in the best interests of, Pharmacopeia and its stockholders and declared the mergers to be advisable. Pharmacopeia's board of directors unanimously recommends that you vote "FOR" the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers. In reaching its determination, Pharmacopeia's board of directors considered a number of factors described more fully in the accompanying proxy statement/prospectus.

You are also being asked to approve the possible adjournment or postponement of the special meeting to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers.

Your vote is very important, regardless of the number of shares of common stock you own. The mergers cannot be consummated unless the merger agreement is adopted by the affirmative vote of the holders of a majority of the shares of Pharmacopeia common stock outstanding at the close of business on , 2008, the record date for the purpose of determining the stockholders who are entitled to receive notice of, and to vote at, the special meeting.

Whether or not you plan to attend the special meeting, please complete, date, sign and return, as promptly as possible, the enclosed proxy card in the accompanying reply envelope, or, if you have Internet or telephone access, you are encouraged to submit your proxy via the Internet or telephone. If you fail to vote your shares, it will have the same effect as a vote against the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers. If your shares are held in "street name" by your broker, you should instruct your broker to vote your shares, following the procedure provided by your broker. If you attend the special meeting, you may revoke your proxy and vote in person if you wish, even if you have previously returned your proxy card.

If you have any questions or need assistance voting your shares, please call Morrow & Co., LLC, Pharmacopeia's proxy solicitor, toll-free at (800) 278-2141; banks and brokers may call (800) 662-5200.

The attached proxy statement/prospectus provides you with detailed information about the special meeting, the merger agreement and the transactions contemplated by the merger agreement, including the mergers. A copy of the merger agreement is attached as *Annex A* and the form of CVR agreement is attached as *Annex B* to the accompanying proxy statement/prospectus. You are encouraged to read the proxy statement/prospectus (including the information incorporated by reference therein), the merger agreement, the CVR agreement and the other annexes carefully and in their entirety. **In particular, you should carefully consider the discussion in the section entitled "Risk Factors" beginning on page 23 of the proxy statement/prospectus.**

Thank you for your continued support and your consideration of this matter.

Sincerely,

Joseph A. Mollica, Ph.D.
Chairman of the Board and
Interim President and Chief Executive Officer

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THE SECURITIES TO BE ISSUED IN CONNECTION WITH THE MERGERS, OR DETERMINED WHETHER THIS PROXY STATEMENT/PROSPECTUS IS ACCURATE OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Ligand common stock is listed on The Nasdaq Global Market, or Nasdaq, under the symbol "LGND." On , 2008, the last full trading day prior to the date of this proxy statement/prospectus, the last reported sale price per share of Ligand common stock on Nasdaq was $.

This proxy statement/prospectus is dated , 2008, and is first being mailed to Pharmacopeia stockholders on or about that date.

PHARMACOPEIA, INC.

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

To Be Held on , 2008

To the Stockholders of Pharmacopeia, Inc.:

A special meeting of stockholders of Pharmacopeia, Inc., a Delaware corporation, or Pharmacopeia, will be held on , 2008, starting at , local time, at Pharmacopeia's offices located at 1002 Eastpark Boulevard, Cranbury, New Jersey 08512 for the following purposes:

1. To consider and vote on a proposal to adopt the Agreement and Plan of Merger, dated as of September 24, 2008, by and among Pharmacopeia, Ligand Pharmaceuticals Incorporated, a Delaware corporation, or Ligand, Margaux Acquisition Corp., a Delaware corporation and wholly-owned subsidiary of Ligand, or Margaux, and Latour Acquisition, LLC, a Delaware corporation and wholly-owned subsidiary of Ligand, or Latour, as it may be amended from time to time, and the transactions contemplated by the merger agreement, including the mergers. A copy of the merger agreement is attached as *Annex A* to the accompanying proxy statement/prospectus.

2. To consider and vote on a proposal to adjourn or postpone the special meeting to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers.

No other business will be conducted at the special meeting. These proposals are more fully described in the accompanying proxy statement/prospectus, which you are urged to read very carefully.

Only stockholders of record at the close of business on , 2008 are entitled to notice of, and to vote at, the special meeting or any adjournment or postponement of the special meeting. At the close of business on the record date, there were shares of Pharmacopeia common stock outstanding and entitled to vote. Each stockholder is entitled to one vote for each share of Pharmacopeia common stock held on the record date. A complete list of Pharmacopeia stockholders of record entitled to vote at the special meeting will be available for inspection at Pharmacopeia's principal executive offices at least 10 days prior to the date of the special meeting and continuing through the special meeting for any purpose germane to the meeting. The list will also be available at the meeting for inspection by any stockholder present at the meeting.

Pharmacopeia's board of directors unanimously recommends that you vote "FOR" the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and "FOR" the proposal to adjourn or postpone the special meeting to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers.

Under Delaware law, Pharmacopeia stockholders are entitled to appraisal rights in connection with the mergers. Failure to take any of the steps required under Delaware law on a timely basis may result in the loss of these appraisal rights, as more fully described in "The Mergers Appraisal Rights of Dissenting Pharmacopeia Stockholders" beginning on page 87 of the accompanying proxy statement/prospectus.

All Pharmacopeia stockholders are cordially invited to attend the special meeting in person. Regardless of whether you plan to attend the special meeting in person, please complete, sign, date and return the enclosed proxy card or, if you have Internet or telephone access, you are encouraged to submit your proxy via the Internet or telephone, prior to the special meeting to ensure that your shares will be represented at the special meeting. Properly executed proxy cards with no instructions indicated on the proxy card will be voted "**FOR**" the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and "**FOR**" the adjournment or

postponement of the special meeting to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers. If you fail to return your proxy card or if you mark the "abstain" box on the proxy card or voting instruction card, the effect will be a vote "**AGAINST**" adopting the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and if you fail to return your proxy card your shares will not be counted for purposes of determining whether a quorum is present at the special meeting. If you attend the special meeting, you may revoke your proxy and vote in person if you wish, even if you have previously returned your proxy card.

If you hold your shares through a bank, broker or other custodian, you must obtain a legal proxy from such custodian in order to vote in person at the special meeting. In that case, please bring to the special meeting a statement evidencing your beneficial ownership of Pharmacopeia common stock and photo identification.

By Order of the Board of Directors,

Sincerely,

Joseph A. Mollica, Ph.D.
Chairman of the Board and
Interim President and Chief
Executive Officer

Cranbury, New Jersey
, 2008

THIS PROXY STATEMENT/PROSPECTUS INCORPORATES ADDITIONAL INFORMATION

This proxy statement/prospectus "incorporates by reference" important business and financial information about Ligand and Pharmacopeia from documents that are not included in or delivered with this proxy statement/prospectus. This information is available to you without charge upon request. For a more detailed description of the information incorporated by reference into this proxy statement/prospectus and how you may obtain it, see "Where You Can Find More Information" beginning on page 130 of this proxy statement/prospectus.

Ligand will provide you with copies of this information relating to Ligand (excluding all exhibits unless Ligand has specifically incorporated by reference an exhibit in this proxy statement/prospectus), without charge, upon written or oral request to:

Ligand Pharmaceuticals Incorporated
10275 Science Center Drive
San Diego, California 92121
Attn: Investor Relations
(858) 550-7500

Pharmacopeia will provide you with copies of this information relating to Pharmacopeia (excluding all exhibits unless Pharmacopeia has specifically incorporated by reference an exhibit in this proxy statement/prospectus), without charge, upon written or oral request to:

Pharmacopeia, Inc.
P.O. Box 5350
Princeton, New Jersey 08543-5350
Attn: Corporate Secretary
(609) 452-3600

In order to receive timely delivery of the documents before the special meeting, you must make your requests no later than , 2008.

ABOUT THIS PROXY STATEMENT/PROSPECTUS

This proxy statement/prospectus, which forms a part of a registration statement on Form S-4 filed with the Securities and Exchange Commission, or SEC, by Ligand, constitutes a prospectus of Ligand under Section 5 of the Securities Act of 1933, as amended, or the Securities Act, with respect to the shares of Ligand common stock to be issued to Pharmacopeia stockholders in connection with the mergers. This document also constitutes a proxy statement under Section 14(a) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and the rules thereunder, and a notice of meeting with respect to the special meeting of Pharmacopeia stockholders to consider and vote upon the proposal to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers.

Except as otherwise provided herein, all descriptions of and calculations with respect to the terms of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, assume that no Pharmacopeia stockholders exercise their appraisal rights under Delaware law.

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QUESTIONS AND ANSWERS ABOUT THE MERGERS

Q:

Why am I receiving this proxy statement/prospectus?

A:

Ligand Pharmaceuticals Incorporated, or Ligand, has agreed to acquire Pharmacopeia, Inc., or Pharmacopeia, under the terms of an Agreement and Plan of Merger, dated September 24, 2008, or the merger agreement, that is described in this proxy statement/prospectus. Please see the sections entitled "The Mergers" and "Certain Terms of the Merger Agreement" beginning on pages 60 and 91, respectively, of this proxy statement/prospectus. A copy of the merger agreement is attached to this proxy statement/prospectus as *Annex A*.

In order to complete the transactions contemplated by the merger agreement, including Ligand's acquisition of Pharmacopeia, Pharmacopeia stockholders must adopt the merger agreement by the affirmative vote of the holders of a majority of the shares of Pharmacopeia common stock outstanding on the record date for the special meeting and all other conditions to the mergers must be satisfied or waived. You are receiving this proxy statement/prospectus because you have been identified as a Pharmacopeia stockholder as of , 2008, the record date for the special meeting, and thus you are entitled to vote at the special meeting. This document serves as both a proxy statement of Pharmacopeia, used to solicit proxies for the special meeting, and as a prospectus of Ligand, used to offer shares of Ligand common stock in exchange for shares of Pharmacopeia common stock pursuant to the terms of the merger agreement. This document contains important information about the mergers and the special meeting, and you should read it carefully.

Q:

When and where is the special meeting of Pharmacopeia stockholders?

A:

The special meeting of Pharmacopeia stockholders will be held on , 2008, starting at , local time, at Pharmacopeia's offices located at 1002 Eastpark Boulevard, Cranbury, New Jersey 08512.

Q:

On what matters am I being asked to vote on?

A:

Pharmacopeia stockholders are being asked to consider and vote on the following items:

- the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers; and
- a proposal to adjourn or postpone the special meeting to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers.

Q:

What are the mergers?

A:

Under the terms of the merger agreement, Margaux Acquisition Corp., a wholly-owned subsidiary of Ligand, or Margaux, will merge with and into Pharmacopeia, immediately followed by the merger of Pharmacopeia, the surviving corporation of merger 1, with and into Latour Acquisition, LLC, a wholly-owned subsidiary of Ligand, or Latour, with Latour continuing after merger 2 as the surviving entity. The merger of Margaux with and into Pharmacopeia is referred to as merger 1 and the merger of Pharmacopeia with and into Latour is referred to as merger 2. Merger 1 and merger 2 are collectively referred to in this proxy statement/prospectus as the mergers. Upon completion of merger 1, each outstanding share of Pharmacopeia common stock will be converted into the right to receive a combination of cash, if any, shares of Ligand common stock and a contingent value right as described below. For a more complete description of the mergers, please see the section entitled "The Mergers" beginning on page 60 of this proxy statement/prospectus.

Q:

As a Pharmacopeia stockholder, what will I receive in the mergers?

A:

If the merger agreement is adopted by Pharmacopeia's stockholders and the other conditions to the mergers are satisfied or waived, upon completion of merger 1, Ligand would issue approximately 0.58 of a share for each share of Pharmacopeia common stock outstanding immediately prior to the effective time of merger 1, subject to certain adjustments for cancelled stock options. However, this exchange ratio is fixed only if the volume weighted average of the closing prices of Ligand common stock, during the 20 trading days ending on the fifth trading day prior to the date of the special meeting of Pharmacopeia stockholders, which is referred to in this proxy statement/prospectus as the Ligand Common Stock Value, falls in the range of $3.00 and $3.75. Otherwise, the following will apply:

- if the Ligand Common Stock Value is greater than $3.75 but not greater than $4.50, the overall transaction value will be fixed at $66 million, and the exchange ratio will decrease as prices increase within the range;

- if the Ligand Common Stock Value is greater than $4.50, then the exchange ratio will be approximately 0.49;

- if the Ligand Common Stock Value is equal to or greater than $2.38 but less than $3.00, then the exchange ratio will increase as prices decrease within the range (provided that if the Ligand Common Stock Value is less than $2.93, the exchange ratio will not exceed approximately 0.60), subject to specified limitations in the merger agreement. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive cash consideration for an overall transaction value fixed at $52.8 million; or

- if the Ligand Common Stock Value is less than $2.38, then the exchange ratio will be approximately 0.60. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive a proportionate share of $10 million in cash.

Based on Ligand's closing price on October 17, 2008 of $1.99, the exchange ratio set forth above implies a purchase price of $1.53 per common share of Pharmacopeia, or an equity value of approximately $46 million and a premium over the closing price of Pharmacopeia on September 24, 2008 (the last full trading day prior to the public announcement of the merger agreement) of 29%.

These values exclude a potential for approximately $0.50 per share or an aggregate of $15 million related to the CVRs. The CVRs provide each holder the right to receive a proportionate share of an aggregate of $15 million if Ligand enters into a license, sale, development, marketing or option agreement with respect to any product candidate from Pharmacopeia's dual angiotensin and endothelin receptor antagonist, or DARA, program, of which the lead clinical product candidate is PS433540 (other than any agreement with Bristol-Myers Squibb Company, or Bristol-Myers Squibb, or any of its affiliates), on or prior to December 31, 2011.

Each share of Ligand common stock that is issued in connection with merger 1 will be accompanied by a right under Ligand's rights agreement.

Q:

What is required to consummate the mergers?

A:

To consummate the mergers, Pharmacopeia stockholders must adopt the merger agreement, which requires the affirmative vote of the holders of a majority of the voting power of the shares of Pharmacopeia common stock outstanding on the record date for the special meeting. In addition to obtaining Pharmacopeia stockholder approval, each of the other closing conditions set forth in the merger agreement must be satisfied or waived. For a more complete description of the closing conditions under the merger agreement, please see the section entitled "Certain Terms of the

Merger Agreement Conditions to the Merger" beginning on page 106 of this proxy statement/prospectus.

Q:

How does Pharmacopeia's board of directors recommend that I vote?

A:

After careful consideration, Pharmacopeia's board of directors approved the merger agreement and the mergers and unanimously determined that the mergers are fair to, and in the best interests of, Pharmacopeia and its stockholders and declared the mergers to be advisable. Accordingly, Pharmacopeia's board of directors unanimously recommends that you vote **"FOR"** the proposal to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and **"FOR"** the proposal to adjourn or postpone the special meeting to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers. To review the background of the mergers and Pharmacopeia's board of directors' reasons for recommending the mergers in greater detail, see the sections entitled "The Mergers Background of the Mergers" and "The Mergers Pharmacopeia's Reasons for the Mergers; Recommendation of Pharmacopeia's Board of Directors" beginning on pages 62 and 67, respectively, of this proxy statement/prospectus.

Q:

What risks should I consider in deciding whether to vote in favor of the mergers?

A:

You should carefully review the section of this proxy statement/prospectus entitled "Risk Factors" beginning on page 23 of this proxy statement/prospectus, which sets forth certain risks and uncertainties related to the mergers, risks and uncertainties to which the combined company's business will be subject and risks and uncertainties to which each of Ligand and Pharmacopeia, as an independent company, is subject.

Q:

When do the parties expect to complete the mergers?

A:

The parties are working towards completing the mergers as quickly as possible. The mergers are expected to close during the fourth calendar quarter of 2008. However, because completion of the mergers is subject to various conditions, Ligand and Pharmacopeia cannot predict the exact timing of the mergers or whether the mergers will occur at all.

Q:

Am I entitled to appraisal rights?

A:

Under Delaware law, holders of Pharmacopeia common stock are entitled to appraisal rights in connection with the mergers pursuant to Section 262(d) of the Delaware General Corporation Law. Failure to take any of the steps required under Section 262(d) of the Delaware General Corporation Law on a timely basis may result in a loss of those appraisal rights. The provisions of the Delaware General Corporation Law that grant appraisal rights and govern such procedures are attached as *Annex D* to this proxy statement/prospectus. For a more complete description of your appraisal rights, see the section entitled "The Mergers Rights of Dissenting Pharmacopeia Stockholders."

Q:

What will happen to any options, restricted stock units or warrants to acquire Pharmacopeia common stock in merger 1?

A:

Pharmacopeia has agreed to offer to cancel, effective immediately prior to the effective time of merger 1, any stock options granted under Pharmacopeia's existing equity compensation plans in exchange for the payment of up to $0.20 per share for each share of Pharmacopeia common stock subject to such options, but in no event will the option cancellation payments exceed $1,000,000 in the aggregate. At the effective time of merger 1, each option granted under the Amended and Restated 1994 Incentive Stock Plan of Pharmacopeia and the 1995 Director Option Plan of Pharmacopeia that is outstanding and unexercised immediately prior to the effective time of merger 1 and that is not subject to an effective option cancellation agreement will be cancelled

without any payment being made in respect of those options. At the effective time of merger 1, each option that is not cancelled pursuant to the foregoing will be assumed by Ligand. Each assumed option will continue to have, and be subject to, the same terms and conditions set forth in the applicable option agreement, except that such assumed option will be exercisable (or will become exercisable in accordance with its terms) for the applicable merger consideration instead of shares of Pharmacopeia common stock. On October 16, 2008, there were 4,043,085 shares of Pharmacopeia common stock issuable upon the exercise of stock options. Each member of Pharmacopeia's board of directors, including Dr. Mollica, has agreed to forego the above cash consideration payable for each share of Pharmacopeia common stock subject to the stock options that such member holds, and at the effective time of merger 1, all such stock options will be cancelled without any payment being made in respect of those options. As of October 8, 2008, the members of Pharmacopeia's board of directors held 582,215 stock options in the aggregate.

Effective immediately prior to the effective time of merger 1, each then unvested Pharmacopeia restricted stock unit will become fully vested and all restrictions will lapse and each share of Pharmacopeia common stock issuable pursuant to Pharmacopeia restricted stock units will be converted into the right to receive the merger consideration. On October 16, 2008, there were 197,000 shares of Pharmacopeia common stock issuable pursuant to Pharmacopeia restricted stock units.

Effective as of immediately prior to the effective time of merger 1, each existing warrant to acquire shares of Pharmacopeia capital stock will be converted into a new warrant entitling its holder to receive, at a total price not to exceed that payable upon the exercise or conversion of the existing warrant, and in lieu of the shares of Pharmacopeia capital stock otherwise issuable upon exercise or conversion of the existing warrant, the applicable merger consideration that would have been receivable upon merger 1 by the holder of the existing warrant if the existing warrant had been exercised immediately prior to the effective time of merger 1. On October 16, 2008, there were 1,626,063 shares of Pharmacopeia capital stock issuable upon the exercise of existing warrants.

See the section entitled "Certain Terms of the Merger Agreement Pharmacopeia Stock Options, Restricted Stock Units and Warrants" beginning on page 93 of this proxy statement/prospectus.

Q:

Will my rights as a Pharmacopeia stockholder change as a result of the mergers?

A:

Yes. You will become a Ligand stockholder as a result of the mergers and will have rights after the completion of the mergers that are governed by Delaware law and Ligand's amended and restated certificate of incorporation and amended and restated bylaws. For further information regarding your rights as a Ligand stockholder following the mergers, please see "Comparative Rights of Ligand Stockholders and Pharmacopeia Stockholders" beginning on page 127 of this proxy statement/prospectus.

Q:

As a Pharmacopeia stockholder, will I be able to trade the Ligand common stock that I receive in connection with the mergers?

A:

The shares of Ligand common stock issued in connection with the mergers will be freely tradable, unless you are an "affiliate" (as defined in the Securities Act of 1933, as amended, or the Securities Act) of Ligand upon completion of the mergers. If you are deemed an affiliate of Ligand you will be required to comply with the applicable restrictions of Rule 144 under the Securities Act in order to resell shares of Ligand common stock you receive in connection with the mergers.

Q:

What are the United States federal income tax consequences of the mergers?

A:

The mergers, taken together, are intended to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, or the Internal Revenue Code.

A United States holder will recognize gain, but not loss, with respect to the receipt of cash and CVRs and will recognize no gain or loss with respect to the Ligand common stock received in exchange for Pharmacopeia common stock. Qualification as a reorganization is dependent on various requirements, including the requirement that the value of Ligand securities received by United States holders constitute a certain percentage of the total consideration, including cash and the CVRs, received by United States holders. If the mergers, taken together, do not qualify as a reorganization, the receipt of the merger consideration by a United States holder in exchange for shares of Pharmacopeia common stock will be a taxable transaction for United States federal income tax purposes. For a more complete description of the tax consequences of the mergers, see the section entitled "The Mergers Material United States Federal Income Tax Consequences of the Mergers" beginning on page 83 of this proxy statement/prospectus.

Tax matters are very complicated, and the tax consequences of the mergers to a particular stockholder will depend in part on such stockholder's circumstances. Accordingly, you are urged to consult your own tax advisor for a full understanding of the tax consequences of the mergers to you, including the applicability and effect of federal, state, local and foreign income and other tax laws.

Q:

What should I do now?

A:

You should carefully read this proxy statement/prospectus, including its annexes and the documents incorporated by reference, and consider how the mergers will affect you. Ligand and Pharmacopeia urge you to then respond by voting your shares through one of the following means:

by mail, by completing, signing, dating and mailing each proxy card (if you are a registered stockholder, meaning that you hold your stock in your name) or voting instruction card (if your shares are held in "street name," meaning that your shares are held in the name of a broker, bank or other nominee) and returning it in the envelope provided;

via the Internet, at the address provided on each proxy card or voting instruction card (if your bank, broker or nominee makes Internet voting available);

via telephone, using the toll-free number listed on each proxy card or voting instruction card (if your bank, broker or nominee makes telephone voting available); or

in person, by attending the special meeting and submitting your vote in person.

Q:

What happens if I do not return a proxy card or otherwise vote?

A:

The failure to return your proxy card, vote using the telephone or via the Internet or vote in person at the special meeting will have the same effect as voting "**AGAINST**" adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and will have no effect on the proposal for possible adjournment or postponement of the special meeting.

Q:

What happens if I return a signed and dated proxy card but do not indicate how to vote my proxy?

A:

If you do not include instructions on how to vote your properly signed and dated proxy, your shares will be voted "**FOR**" adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and "**FOR**" approval of possible adjournment or postponement, if any, of the special meeting.

Q:

May I vote in person at the special meeting?

A:

If your shares of Pharmacopeia common stock are registered directly in your name with Pharmacopeia's transfer agent, you are considered, with respect to those shares, the stockholder of record, and the proxy materials and proxy card are being sent directly to you by Pharmacopeia. If

you are a Pharmacopeia stockholder of record, you may attend the special meeting and vote your shares in person, rather than signing and returning your proxy card or otherwise voting by Internet or telephone.

If your shares of Pharmacopeia common stock are held in a brokerage account or by another nominee, you are considered the beneficial owner of shares held in "street name," and the proxy materials are being forwarded to you together with a voting instruction card. As the beneficial owner, you are also invited to attend the special meeting. Since a beneficial owner is not the stockholder of record, you may not vote these shares in person at the special meeting unless you obtain a "legal proxy" from the broker, trustee or nominee that holds your shares, giving you the right to vote the shares at the special meeting.

Q:

May I change my vote after I have mailed my signed and dated proxy card or otherwise voted?

A:

Yes. If you have submitted a proxy, you may change your vote at any time before your proxy is voted at the Pharmacopeia special meeting of stockholders. You can do this one of four ways. First, you can send a written, dated notice to the Corporate Secretary of Pharmacopeia stating that you would like to revoke your proxy. Second, you can complete, sign, date and submit a new later-dated proxy card. Third, you can submit another proxy via the Internet or telephone. Fourth, you can attend the special meeting and vote in person. Your attendance at the special meeting alone will not revoke your proxy.

If you have instructed a broker to vote your shares, you must follow the directions received from your broker to change those instructions.

Q:

If my shares are held in "street name" by my broker, will my broker automatically vote my shares for me?

A:

No. Your broker will not be able to vote your shares without instructions from you. Therefore, you should provide your broker with instructions on how to vote your shares, following the procedure provided by your broker. The failure to provide such voting instructions to your broker will have the same effect as voting "**AGAINST**" adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and will have no effect on the proposal for possible adjournment or postponement of the special meeting.

Q:

Should I send in my Pharmacopeia stock certificates now?

A:

No. If you are a Pharmacopeia stockholder, after the mergers are completed, a letter of transmittal will be sent to you informing you where to deliver your Pharmacopeia stock certificates in order to receive the merger consideration. You should not send in your Pharmacopeia common stock certificates prior to receiving the letter of transmittal.

Q:

Who is soliciting this proxy?

A:

Pharmacopeia is conducting this proxy solicitation and will bear the cost of soliciting proxies. Pursuant to the merger agreement, Pharmacopeia and Ligand each agreed to pay one-half of all fees and expenses (other than attorneys' and accountants' fees and expenses) incurred in connection with the printing, mailing and filing of this proxy statement/prospectus. Pharmacopeia has retained Morrow & Co., LLC, a professional proxy solicitation firm, to assist in the solicitation of proxies for the special meeting for a fee of approximately $7,500, plus reimbursement of out-of-pocket expenses. In addition, Pharmacopeia may reimburse brokers, banks and other custodians, nominees and fiduciaries representing beneficial owners of shares for their expenses in forwarding soliciting materials to such beneficial owners. Pharmacopeia's directors, officers and employees may also solicit proxies by personal interview, mail, e-mail, telephone, facsimile or other means of communication. These persons will not be paid additional remuneration for their efforts.

Q:

Who can help answer my additional questions?

A:

Pharmacopeia stockholders who would like additional copies, without charge, of this proxy statement/prospectus or have additional questions about the mergers, including the procedures for voting their shares of Pharmacopeia common stock, should contact:

Pharmacopeia, Inc.
P.O. Box 5350
Princeton, New Jersey 08543-5350
Attn: Corporate Secretary
(609) 452-3600

or Pharmacopeia's solicitation agent:

Morrow & Co., LLC
470 West Avenue
Stamford, Connecticut 06902
For stockholders: (800) 278-2141
For banks and brokers: (800) 662-5200

SUMMARY

This summary highlights selected information contained or incorporated by reference in this proxy statement/prospectus. You should read carefully this entire proxy statement/prospectus and the documents referred to in this proxy statement/prospectus for a more complete description of the terms of the mergers and related transactions. The merger agreement is attached as Annex A, and the form of CVR agreement is attached as Annex B, to this proxy statement/prospectus. Additional documents and information, including important business and financial information about Ligand and Pharmacopeia, are incorporated by reference into this proxy statement/prospectus. You are encouraged to read the merger agreement as it is the legal document that governs the mergers, as well as these additional documents incorporated by reference. In this proxy statement/prospectus, unless the context otherwise requires, "Ligand" refers to Ligand Pharmaceuticals Incorporated and its subsidiaries, "Pharmacopeia" refers to Pharmacopeia, Inc. and its subsidiary, "Margaux" refers to Margaux Acquisition Corp., a wholly-owned subsidiary of Ligand, and "Latour" refers to Latour Acquisition, LLC, a wholly-owned subsidiary of Ligand.

The Companies

Ligand Pharmaceuticals Incorporated

Ligand Pharmaceuticals Incorporated (NASDAQ: LGND), a Delaware corporation, is a biotechnology company that focuses on discovering and developing new drugs that address critical unmet medical needs in the areas of thrombocytopenia, anemia, cancer, hormone related diseases, osteoporosis and inflammatory diseases. Ligand aims to develop drugs that are more effective and/or safer than existing therapies, that are more convenient to administer and that are cost effective. Ligand plans to build a profitable company by generating income from research, milestone and royalty and co-promotion revenues resulting from its collaborations with pharmaceutical partners.

Ligand was incorporated in Delaware in 1987. Ligand's principal executive offices are located at 10275 Science Center Drive, San Diego, California, 92121. Ligand's telephone number is (858) 550-7500.

Margaux Acquisition Corp.

Margaux Acquisition Corp., or Margaux, is a Delaware corporation and a wholly-owned subsidiary of Ligand organized on September 18, 2008. Margaux does not engage in any operations and exists solely to facilitate the mergers. Its principal executive offices have the same address and telephone number as Ligand.

Latour Acquisition, LLC

Latour Acquisition, LLC, or Latour, is a Delaware limited liability company and a wholly-owned subsidiary of Ligand organized on September 18, 2008. Latour does not engage in any operations and exists solely to facilitate the mergers. Its principal executive offices have the same address and telephone number as Ligand.

Pharmacopeia, Inc.

Pharmacopeia, Inc. (NASDAQ: PCOP) is a clinical development stage biopharmaceutical company dedicated to discovering and developing novel small molecule therapeutics to address significant medical needs. Pharmacopeia's strategy has been to retain the rights to product candidates at least to clinical validation, and to continue development on its own to New Drug Application (NDA) filing and commercialization for selected indications. Pharmacopeia has a broad portfolio of clinical and preclinical candidates under development internally or by partners.

Pharmacopeia is a Delaware corporation. Pharmacopeia was incorporated in February 2002 as a wholly-owned subsidiary of Accelrys, Inc. (Accelrys), formerly Pharmacopeia, Inc. On April 30, 2004, Accelrys completed the spin-off of Pharmacopeia into an independent, separately traded and publicly held company through the distribution to its stockholders of a dividend of one share of Pharmacopeia common stock for every two shares of Accelrys common stock held. The mailing address of Pharmacopeia's principal executive offices is P.O. Box 5350, Princeton, New Jersey 08543-5350, and its telephone number is (609) 452-3600.

Special Meeting of Pharmacopeia Stockholders

Date, Time and Place. The special meeting of Pharmacopeia stockholders will be held on , 2008, at , local time, at Pharmacopeia's offices located at 1002 Eastpark Boulevard, Cranbury, New Jersey 08512. At the special meeting, Pharmacopeia stockholders will be asked to consider the proposal to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and the adjournment and postponement of the special meeting to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement. No other business will be conducted at the special meeting.

Record Date. Only Pharmacopeia stockholders of record at the close of business on , 2008, will be entitled to vote at the special meeting. Each share of Pharmacopeia common stock is entitled to one vote. As of the record date, there were shares of Pharmacopeia common stock outstanding and entitled to vote at the special meeting.

Vote Required for Approval. To adopt the merger agreement, the holders of a majority of the outstanding shares of Pharmacopeia common stock entitled to vote must vote in favor of adopting the merger agreement and the transactions contemplated by the merger agreement, including the mergers. Because adoption of the merger agreement requires the affirmative vote of a majority of shares outstanding, a Pharmacopeia stockholder's failure to vote or abstention from voting will have the same effect as a vote against adoption of the merger agreement.

To approve the proposal to adjourn or postpone the special meeting, if necessary or appropriate, a majority of the shares of Pharmacopeia common stock present in person or represented by proxy at the special meeting and entitled to vote must vote in favor of such proposal. A Pharmacopeia stockholder's failure to vote or abstention from voting will have no effect on the proposal for possible adjournment or postponement of the special meeting.

Share Ownership by Management and Ligand. As of the record date, (i) the directors and executive officers of Pharmacopeia beneficially owned in the aggregate approximately % of the outstanding shares of Pharmacopeia common stock entitled to vote at the special meeting and (ii) Ligand and its affiliates beneficially owned approximately % of the outstanding shares of Pharmacopeia common stock entitled to vote at the special meeting.

Risk Factors

You should carefully review the section of this proxy statement/prospectus entitled "Risk Factors" beginning on page 23 of this proxy statement/prospectus, which sets forth certain risks and uncertainties related to the mergers, risks and uncertainties to which the combined company's business will be subject and risks and uncertainties to which each of Ligand and Pharmacopeia, as an independent company, is subject. These risk factors should be considered along with any additional risk factors in the reports of Ligand or Pharmacopeia filed with the Securities and Exchange Commission, or SEC, and any other information included in or incorporated by reference into this proxy statement/prospectus.

Recommendation to Pharmacopeia's Stockholders

Pharmacopeia's board of directors has unanimously approved and adopted the merger agreement and approved the mergers. The board of directors of Pharmacopeia recommends that Pharmacopeia stockholders vote "**FOR**" the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and "**FOR**" the approval of the proposal to adjourn or postpone the special meeting, if necessary or appropriate, to solicit additional proxies if there are not sufficient votes in favor of the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, at the time of the special meeting.

Merger Structure; Merger Consideration

If the merger is completed, Margaux will merge with and into Pharmacopeia, immediately followed by a merger of Pharmacopeia, the surviving corporation of merger 1, with and into Latour, with Latour continuing after merger 2 as the surviving entity. Upon completion of merger 1, Ligand would issue approximately 0.58 of a share for each share of Pharmacopeia common stock outstanding immediately prior to the effective time of merger 1, subject to certain adjustments for cancelled stock options. However, this exchange ratio is fixed only if the volume weighted average of the closing prices of Ligand common stock, during the 20 trading days ending on the fifth trading day prior to the date of the special meeting of Pharmacopeia stockholders, which is referred to in this proxy statement/prospectus as the Ligand Common Stock Value, falls in the range of $3.00 and $3.75. Otherwise, the following will apply:

- if the Ligand Common Stock Value is greater than $3.75 but not greater than $4.50, the overall transaction value will be fixed at $66 million, and the exchange ratio will decrease as prices increase within the range;

- if the Ligand Common Stock Value is greater than $4.50, then the exchange ratio will be approximately 0.49;

- if the Ligand Common Stock Value is equal to or greater than $2.38 but less than $3.00, then the exchange ratio will increase as prices decrease within the range (provided that if the Ligand Common Stock Value is less than $2.93, the exchange ratio will not exceed approximately 0.60), subject to specified limitations in the merger agreement. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive cash consideration for an overall transaction value fixed at $52.8 million; or

- if the Ligand Common Stock Value is less than $2.38, then the exchange ratio will be approximately 0.60. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive a proportionate share of $10 million in cash.

Based on Ligand's closing price on October 17, 2008 of $1.99, the exchange ratio set forth above implies a purchase price of $1.53 per common share of Pharmacopeia, or an equity value of approximately $46 million and a premium over the closing price of Pharmacopeia on September 24, 2008 (the last full trading day prior to the public announcement of the merger agreement) of 29%.

These values exclude a potential for approximately $0.50 per share or an aggregate of $15 million related to the CVRs. The CVRs provide each holder the right to receive a proportionate share of an aggregate of $15 million if Ligand enters into a license, sale, development, marketing or option agreement with respect to any product candidate from Pharmacopeia's DARA program (other than any agreement with Bristol-Myers Squibb or any of its affiliates) on or prior to December 31, 2011. The CVRs are governed by the terms of the CVR agreement, which provide that Ligand has sole discretion and decision making authority over whether to continue to invest in the DARA program, how much to invest in the DARA program and whether and on what terms, if any, to enter into any license, sale,

development, marketing or option agreement with respect to the DARA program. For a description of the CVR agreement, see "Certain Terms of the Merger Agreement CVR Agreement" beginning on page 113 of this proxy statement/prospectus.

Each share of Ligand common stock that is issued in connection with the mergers will be accompanied by a right under Ligand's rights agreement.

Treatment of Stock Options, Restricted Stock Units and Warrants

Pharmacopeia has agreed to offer to cancel, effective immediately prior to the effective time of merger 1, any options granted under Pharmacopeia's existing equity compensation plans in exchange for the payment of an amount to be determined by Pharmacopeia of up to $0.20 per share of Pharmacopeia common stock subject to such options, but in no event will the option cancellation payments exceed $1,000,000 in the aggregate. At the effective time of merger 1, each option granted under the Amended and Restated 1994 Incentive Stock Plan of Pharmacopeia and the 1995 Director Option Plan of Pharmacopeia that is outstanding and unexercised immediately prior to the effective time of merger 1 and that is not the subject of an effective option cancellation agreement will be cancelled without any payment being made in respect of those options. At the effective time of merger 1, each option that is not cancelled pursuant to the foregoing will be assumed by Ligand. Each assumed option will continue to have, and be subject to, the same terms and conditions set forth in the applicable assumed option, except that such assumed option will be exercisable (or will become exercisable in accordance with its terms) for the applicable merger consideration that would have been receivable upon merger 1 by the holder of shares of Pharmacopeia common stock underlying the option, instead of shares of Pharmacopeia common stock. On October 16, 2008, there were 4,043,085 shares of Pharmacopeia common stock issuable upon the exercise of stock options. Each member of Pharmacopeia's board of directors, including Dr. Mollica, has agreed to forego the above cash consideration payable for each share of Pharmacopeia common stock subject to the stock options that such member holds, and at the effective time of merger 1, all such stock options will be cancelled without any payment being made in respect of those options. As of October 8, 2008, the members of Pharmacopeia's board of directors held 582,215 stock options in the aggregate.

Effective immediately prior to the effective time of merger 1, each then unvested Pharmacopeia restricted stock unit will become fully vested and all restrictions will lapse and each share of Pharmacopeia common stock issuable pursuant to those Pharmacopeia restricted stock units will be converted into the right to receive the merger consideration. On October 16, 2008, there were 197,000 shares of Pharmacopeia common stock issuable pursuant to Pharmacopeia restricted stock units.

Effective as of immediately prior to the effective time of merger 1, each existing warrant to acquire shares of Pharmacopeia capital stock will be converted into a new warrant entitling its holder to receive, at a total price not to exceed that payable upon the exercise or conversion of the existing warrant, the applicable merger consideration that would have been receivable upon merger 1 by the holder of the existing warrant if the existing warrant had been exercised immediately prior to the effective time of merger 1, instead of shares of Pharmacopeia common stock. On October 16, 2008, there were 1,626,063 shares of Pharmacopeia capital stock issuable upon the exercise of existing warrants.

See the section entitled "Certain Terms of the Merger Agreement Pharmacopeia Stock Options, Restricted Stock Units and Warrants" beginning on page 93 of this proxy statement/prospectus.

Ownership of Ligand After the Mergers

Ligand will issue between approximately 14,000,000 and 18,976,461 shares of common stock to Pharmacopeia stockholders in merger 1, depending on the market price of Ligand's common stock

during the period prior to the mergers. See the section entitled "Certain Terms of the Merger Agreement Manner and Basis of Converting Shares" beginning on page 92 of this proxy statement/prospectus. Pharmacopeia stockholders will own between approximately % and % of the outstanding Ligand common stock after merger 1. The above calculations are based on the number of shares of Ligand common stock and Pharmacopeia common stock outstanding on the record date, and assume that no Pharmacopeia stock options or warrants will be exercised on a cashless basis, but does not take into account stock options or warrants of Ligand.

Pharmacopeia's Reasons for the Mergers

Pharmacopeia's board of directors has determined that the terms of the mergers and the merger agreement are fair to, advisable for, and in the best interests of, Pharmacopeia and its stockholders. Pharmacopeia's board of directors consulted with Pharmacopeia's senior management, as well as its financial advisor and legal counsel in reaching its decision to approve the mergers. Pharmacopeia's board of directors considered a number of factors in its deliberations, including, among others, the following:

- the possible alternatives to a sale of Pharmacopeia and the risks and uncertainties related to not selling the company, including risks involved in Pharmacopeia's product development pipeline and the fact that Pharmacopeia would need to raise significant additional capital to support its business operations;

- the risk that Pharmacopeia would be unable to partner the DARA program on financial and strategic terms that would be acceptable to Pharmacopeia, or at all;

- Pharmacopeia's inability to secure appropriate financing during the period from November 2007 through August 2008;

- the upfront merger consideration represents an approximate 29% premium over the closing price ($1.19) of Pharmacopeia common stock on Nasdaq on September 24, 2008, the last trading day before the announcement of the merger agreement;

- the total potential merger consideration, including the CVR payments, represents an approximate 71% premium over the closing price ($1.19) of Pharmacopeia common stock on September 24, 2008, the last full trading day before the announcement of the merger agreement;

- a significant portion of the merger consideration consists of shares of Ligand common stock, which allows Pharmacopeia stockholders to benefit from any future growth of the combined company, and Pharmacopeia's business would benefit from the greater resources of Ligand; and

- the CVRs represent further potential upside to the upfront merger consideration that, if paid, would add approximately $0.50 per share in cash value for Pharmacopeia stockholders.

Pharmacopeia's board of directors recommends that you vote **"FOR"** the adoption of the merger agreement, and **"FOR"** the adjournment or postponement of the special meeting, if necessary or appropriate, to solicit additional proxies. Please see the section entitled "The Mergers Pharmacopeia's Reasons for the Mergers; Recommendations of Pharmacopeia Board of Directors" beginning on page 67 of this proxy statement/prospectus for a full discussion of the items that Pharmacopeia's board of directors considered in reaching its decision to approve the mergers.

Opinion of Pharmacopeia's Financial Advisor

On September 23, 2008, Cowen and Company, LLC, or Cowen, delivered its written opinion to Pharmacopeia's board of directors that, as of that date, and based upon and subject to the assumptions, qualifications and limitations set forth therein, the merger consideration to be received by the holders

of Pharmacopeia common stock in merger 1 was fair, from a financial point of view, to such stockholders.

The full text of the written opinion of Cowen, dated September 23, 2008, is attached as *Annex C* and is incorporated by reference in its entirety. Holders of Pharmacopeia common stock are urged to read the opinion in its entirety for the assumptions made, procedures followed, other matters considered and limits of the review by Cowen. Cowen's analyses and opinion were prepared for and addressed to the Pharmacopeia board of directors and are directed only to the fairness, from a financial point of view, of the consideration to be received by the holders of Pharmacopeia common stock in merger 1, and do not constitute an opinion as to the merits of the transactions contemplated by the merger agreement or a recommendation to any stockholder as to how to vote with respect to the proposed transactions or take any other action in connection with the proposed transactions or otherwise.

Ligand's Reasons for the Mergers

Ligand believes that the mergers will enable Ligand to enhance its portfolio of royalty partnerships, pipeline assets and drug discovery resources, allowing the combined company to accelerate drug discovery efforts, increase the potential revenue earned from partnerships, cut costs and build long-term stockholder value. There were several important factors that contributed to the Ligand board of directors' approval, including the following:

Numerous Royalty Partnerships. Historically, Pharmacopeia's success was in early-stage drug research and Pharmacopeia has a strong record of entering drug discovery partnerships with well established pharmaceutical companies. At the current time, Pharmacopeia has multiple agreements with various drug companies that are developing numerous different molecules at various stages of development. If these programs are successful and advance in development and are commercialized, Ligand will be entitled to receive substantial milestone payments and royalties from these partners with little additional funding requirement by Ligand.

Promising Drug Discovery Platform. The drug discovery platform and proprietary technologies of the combined company are highly complementary and are capable of potentially generating unique and valuable drug candidates.

Pipeline. Pharmacopeia's product candidate pipeline may provide Ligand's stockholders with additional development opportunities to advance with the goal of entering into new license agreements.

Financial Implications. The combination of the two companies should allow the combined company to operate with a strong cash position, cut costs by eliminating redundant public company expenses and further reduce expenses by setting funding priorities on the programs considered to possess the highest potential financial return.

However, there can be no assurance that the benefits of the potential growth, synergies or opportunities considered by Ligand's board of directors will be achieved through completion of the mergers. Achieving Ligand's objectives is subject to particular risks which are discussed in the section entitled "Risk Factors" beginning on page 23 of this proxy statement/prospectus.

Interests of Pharmacopeia's Officers and Directors in the Mergers

In considering the recommendation of Pharmacopeia's board of directors that you vote to adopt the merger agreement, you should be aware that some of Pharmacopeia's executive officers and directors may have economic interests in the mergers that are different from, or in addition to, those of Pharmacopeia's stockholders generally. See "The Mergers Interests of Pharmacopeia's Executive Officers and Directors in the Mergers" beginning on page 78 of this proxy statement/prospectus.

Pharmacopeia's board of directors was aware of and considered these interests, among other matters, in approving the merger agreement and the transactions contemplated thereby, including the mergers, and in making its recommendation that Pharmacopeia's stockholders vote to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers.

Conditions to the Mergers

The obligations of Ligand, Margaux and Pharmacopeia to consummate and effect merger 1 are subject to the satisfaction, at or prior to the effective time of merger 1, of a number of conditions, including, among others, the following:

- the merger agreement shall have been adopted by Pharmacopeia's stockholders;
- no court or governmental or regulatory authority shall have enacted or issued any statute, rule, regulation or other order which is in effect and has the effect of making merger 1 illegal or otherwise prohibiting consummation of merger 1;
- the registration statement on Form S-4 (of which this proxy statement/prospectus forms a part) shall have been declared effective by the SEC;
- all waiting periods under the HSR Act shall have expired or been terminated early; and
- the shares of Ligand common stock issuable pursuant to merger 1 shall have been authorized for listing on The Nasdaq Global Market, or Nasdaq.

In addition to the conditions above, the merger agreement provides that the obligations of Ligand and Margaux to consummate and effect merger 1 are subject to the satisfaction, at or prior to the effective time of merger 1, of the following conditions, among others:

- subject to certain exceptions, as of the date of the merger agreement and the closing date, the representations and warranties of Pharmacopeia set forth in the merger agreement shall be true and correct, without regard to any materiality or material adverse effect qualifications contained therein, except as does not constitute a material adverse effect on Pharmacopeia;
- Pharmacopeia shall have performed or complied in all material respects with all agreements and covenants required to be performed by it under the merger agreement;
- there shall not have occurred any change, circumstance, event or effect that has or is reasonably likely to have a material adverse effect on Pharmacopeia;
- there shall not be any pending suit, action or proceeding asserted by any court or governmental or regulatory authority (i) challenging or seeking to restrain or prohibit the consummation of merger 1 or (ii) seeking to require Ligand or Pharmacopeia or any subsidiary or affiliate to effect or agree to take any action that is reasonably likely to have a material adverse effect on Ligand, Pharmacopeia, or any of their respective affiliates;
- Ligand shall have received an opinion from its tax counsel that the mergers, taken together, constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code; and
- Ligand shall have received from Pharmacopeia (i) a certification dated as of the closing date and signed by a responsible corporate officer of Pharmacopeia, that Pharmacopeia is not, and has not been at any time during the applicable period, a United States real property holding corporation, as defined in Section 897(c)(2) of the Internal Revenue Code, and (ii) proof reasonably satisfactory to Ligand that Pharmacopeia has provided notice of such certification to the Internal Revenue Service.

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The merger agreement also provides that the obligation of Pharmacopeia to consummate and effect merger 1 is subject to the satisfaction, at or prior to the effective time of merger 1, of the following conditions, among others:

- subject to certain exceptions, as of the date of the merger agreement and the closing date, the representations and warranties of Ligand and Margaux set forth in the merger agreement shall be true and correct, without regard to any materiality or material adverse effect qualifications contained therein, except as does not constitute a material adverse effect on Ligand;

- Ligand and Margaux shall have performed or complied in all material respects with all agreements and covenants required to be performed by Ligand or Margaux under the merger agreement;

- there shall not have occurred any change, circumstance, event or effect that has or is reasonably likely to have a material adverse effect on Ligand; and

- Pharmacopeia shall have received an opinion from its tax counsel that the mergers, taken together, constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code.

Either Ligand or Pharmacopeia may choose to waive the conditions to its obligation to complete merger 1, provided that any such waiver is in compliance with applicable law, subject to specified exceptions.

In addition to the foregoing, the obligations of Ligand, Pharmacopeia (as the surviving corporation of merger 1) and Latour to consummate and effect merger 2 are subject to the condition that merger 1 shall have been consummated.

Termination of the Merger Agreement

Each of Ligand and Pharmacopeia is entitled to terminate the merger agreement under certain circumstances including, among others:

- by mutual consent;

- if merger 1 has not been consummated by February 2, 2009 (subject to an automatic extension in certain situations), except that this right to terminate shall not be available to a party (i) whose action or failure to act has been a principal cause of or primarily resulted in the failure of merger 1 to occur on or before such date and such action or failure to act constitutes a breach of the merger agreement or (ii) that is in material breach of the merger agreement;

- if a court or governmental or regulatory authority of competent jurisdiction shall have issued any order, decree or ruling or taken any other action (including the failure to have taken an action), in any case having the effect of permanently restraining, enjoining or otherwise prohibiting merger 1, which order, decree, ruling or other action is final and nonappealable; or

- if the approval of a majority of the stockholders of Pharmacopeia to adopt the merger agreement is not obtained at a special meeting of Pharmacopeia stockholders duly convened to consider adoption of the merger agreement.

In addition, the merger agreement provides that, if authorized by its board of directors, Ligand may terminate the merger agreement, at any time prior to the effective time of merger 1, if any of the following events occurs:

- a triggering event (as described under "Certain Terms of the Merger Agreement Termination of the Merger Agreement" beginning on page 109 of this proxy statement/prospectus) with respect to Pharmacopeia has occurred prior to the adoption of the merger agreement by Pharmacopeia's stockholders; or

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(i) any representation or warranty of Pharmacopeia set forth in the merger agreement shall have been breached or become untrue or Pharmacopeia shall have breached any covenant or agreement, (ii) such breach or misrepresentation is not cured within thirty days after receipt of written notice, and (iii) such breach or misrepresentation would cause the closing conditions relating to accuracy of its representations and warranties or compliance with covenants and agreements incapable of being satisfied; provided that Ligand is not then in breach of its respective warranties, covenants or agreements such that the closing conditions relating to accuracy of its representations and warranties or compliance with covenants and agreements would not be satisfied.

In addition, the merger agreement provides that if authorized by its board of directors, Pharmacopeia may terminate the merger agreement, at any time prior to the effective time of merger 1, if any of the following events occurs:

(i) any representation or warranty of Ligand or Margaux set forth in the merger agreement shall have been breached or become untrue or Ligand or Margaux shall have breached any covenant or agreement, (ii) such breach or misrepresentation is not cured within thirty days after receipt of written notice, and (iii) such breach or misrepresentation would cause the closing conditions relating to accuracy of their respective representations and warranties or compliance with covenants and agreements incapable of being satisfied; provided that Pharmacopeia is not then in breach of its respective warranties, covenants or agreements such that the closing conditions relating to accuracy of its representations and warranties or compliance with covenants and agreements would not be satisfied;

within five business days of the date of termination, the closing price of Ligand common stock, as reported on Nasdaq, is less than or equal to $1.65 per share; or

all conditions to the superior offer termination are met (as described under "Certain Terms of the Merger Agreement Termination of the Merger Agreement" beginning on page 109 of this proxy statement/prospectus).

Limitation on Pharmacopeia's Ability to Consider Other Acquisition Proposals

Pharmacopeia has agreed that it will not, and that it will not authorize or permit any of its affiliates or representatives to, directly or indirectly, subject to specified exceptions:

solicit or initiate, or knowingly facilitate, encourage or induce, any inquiry with respect to, or the making, submission or announcement of, any acquisition proposal (as defined in the section entitled "Certain Terms of the Merger Agreement Limitation on Pharmacopeia's Ability to Consider Other Acquisition Proposals" beginning on page 103 of this proxy statement/prospectus);

participate in any discussions or negotiations with, or furnish any nonpublic information with respect to (i) an acquisition proposal or (ii) any inquiry or proposal that would be reasonably expected to result in an acquisition proposal;

approve, endorse or recommend any acquisition proposal;

withdraw or modify the recommendation of the board of directors of Pharmacopeia that Pharmacopeia stockholders vote to adopt the merger agreement in a manner adverse to Ligand; or

enter into any letter of intent or similar document or any contract, agreement or commitment contemplating or otherwise relating to any acquisition proposal or transaction contemplated thereby.

Fees and Expenses

The merger agreement provides that, regardless of whether merger 1 is consummated, each party will pay its own costs and expenses incurred in connection with the merger agreement and the transactions contemplated by the merger agreement, except that Ligand and Pharmacopeia shall share equally all fees and expenses, other than attorneys' and accountants' fees and expenses, incurred in relation to the printing, mailing and filing of the registration statement and this proxy statement/prospectus.

Termination Fee

Pharmacopeia must pay, subject to certain exceptions, a termination fee of $3,375,000 to Ligand if the merger agreement is terminated after the occurrence of any of the following events:

Ligand terminates the merger agreement as a result of a triggering event (as described under "Certain Terms of the Merger Agreement Termination of the Merger Agreement" beginning on page 109 of this proxy statement/prospectus) with respect to Pharmacopeia having occurred;

(i) Ligand or Pharmacopeia terminates the merger agreement as a result of merger 1 not being consummated by February 2, 2009 (as it may be extended), (ii) an acquisition proposal had been made after the date of the merger agreement and not withdrawn prior to the date of such termination and (iii) within 12 months of such termination, Pharmacopeia enters into a definitive agreement for, or consummates, any acquisition (as defined in the section entitled "Certain Terms of the Merger Agreement Termination Fee" beginning on page 112 of this proxy statement/prospectus);

(i) Ligand terminates the merger agreement as a result of a willful and knowing breach by Pharmacopeia of any of its representations, warranties, covenants or agreements under the merger agreement, (ii) an acquisition proposal had been made prior to the occurrence of the breach giving rise to the right to terminate and not withdrawn prior to the date of such termination and (iii) within 12 months of such termination, Pharmacopeia enters into a definitive agreement for, or consummates, any acquisition; or

Pharmacopeia terminates the merger agreement as a result of the superior offer termination.

In the event that (i) the merger agreement is terminated by Ligand because of the failure of Pharmacopeia's stockholders to adopt the merger agreement, (ii) an acquisition proposal is made within 12 months of such termination, and (iii) Pharmacopeia, within 12 months of such termination enters into a definitive agreement for and within 18 months of such termination consummates an acquisition resulting from such acquisition proposal, then Pharmacopeia will pay Ligand concurrently upon consummation of such acquisition, an amount equal to Ligand's actual documented reasonable out-of-pocket expenses in connection with the transactions contemplated under the merger agreement, up to a maximum of $1.4 million.

Tax Matters

Each of Pharmacopeia and Ligand intends for the mergers, taken together, to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code and have agreed to take no action that would prevent the mergers from qualifying as a reorganization. One of the conditions to consummation of the mergers requires that Pharmacopeia and Ligand receive opinions of their respective counsel that the mergers, taken together, will constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. A United States holder will recognize gain, but not loss, with respect to the receipt of cash and CVRs and will recognize no gain or loss with respect to the Ligand common stock received in exchange for Pharmacopeia common stock. Qualification as a reorganization is dependent on various requirements, including the requirement that the value of Ligand securities received by United States holders constitute a certain percentage of the

total consideration, including cash and the CVRs, received by United States holders. If the mergers, taken together, do not qualify as a reorganization, the receipt of the merger consideration by a United States holder in exchange for shares of Pharmacopeia common stock will be a taxable transaction for United States federal income tax purposes. Please see the section entitled "The Mergers Material United States Federal Income Tax Consequences of the Mergers" beginning on page 83 of this proxy statement/prospectus for a more detailed discussion.

Tax matters are very complicated, and the tax consequences of the mergers to a particular stockholder will depend in part on such stockholder's circumstances. Accordingly, you are urged to consult your own tax advisor for a full understanding of the tax consequences of the mergers to you, including the applicability and effect of federal, state, local and foreign income and other tax laws.

Anticipated Accounting Treatment

Ligand will account for merger 1 under the purchase method of accounting in accordance with Statement of Financial Accounting Standards No. 141, "Business Combinations." See "The Mergers Anticipated Accounting Treatment" beginning on page 87 of this proxy statement/prospectus.

Regulatory Filings and Approvals

Ligand and Pharmacopeia are required to make filings under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, or the HSR Act, with the Antitrust Division of the United States Department of Justice, or the DOJ, and the United States Federal Trade Commission, or the FTC. Ligand and Pharmacopeia filed the required notification and report forms on October 8, 2008 and requested early termination of the required waiting period.

Ligand Will List Shares of Ligand Common Stock issued in Merger 1 on Nasdaq

If the mergers are completed, Pharmacopeia stockholders will be able to trade the shares of Ligand common stock they receive in merger 1 on Nasdaq, subject to restrictions on affiliates of Ligand as of the effective time of merger 1 as described in the section entitled "The Mergers Sales of Shares of Ligand Common Stock Received in Merger 1" beginning on page 83 of this proxy statement/prospectus.

If Ligand and Pharmacopeia complete the mergers, Pharmacopeia stock will no longer be listed for trading on Nasdaq or any other market or exchange. On September 30, 2008, Pharmacopeia received a notice from The Nasdaq Stock Market indicating that Pharmacopeia is not in compliance with the continued listing requirements under Nasdaq Marketplace Rule 4450(b)(1)(A). Pharmacopeia received this notice because the market value of its listed securities was below $50 million for 10 consecutive trading days. See "The Mergers Delisting and Deregistration of Pharmacopeia Common Stock" beginning on page 82 of this proxy statement/prospectus.

Appraisal Rights

Holders of Pharmacopeia common stock are entitled to appraisal rights under Delaware law. See the section entitled "The Mergers Appraisal Rights of Dissenting Pharmacopeia Stockholders" beginning on page 87 of this proxy statement/prospectus.

Material Differences in Rights of Pharmacopeia Stockholders and Ligand Stockholders

When the mergers are completed, Pharmacopeia stockholders will automatically become Ligand stockholders. The rights of Ligand stockholders differ from the rights of Pharmacopeia stockholders in certain important ways. See the section entitled "Comparative Rights of Ligand Stockholders and Pharmacopeia Stockholders" beginning on page 127 of this proxy statement/prospectus.

COMPARATIVE PER SHARE MARKET PRICE AND DIVIDEND DATA

Ligand common stock is listed on Nasdaq under the symbol "LGND." Pharmacopeia common stock is listed on Nasdaq under the symbol "PCOP."

The table below sets forth, for the periods indicated, the high and low closing sale prices per share of Ligand common stock as reported on Nasdaq and the high and low closing sale prices per share of Pharmacopeia common stock as reported on Nasdaq.

	Ligand Common Stock		Pharmacopeia Common Stock	
	High	**Low**	**High**	**Low**
Year ended December 31, 2005				
First Quarter	$ 8.40	$ 3.73	$ 6.06	$ 4.72
Second Quarter	$ 5.25	$ 3.56	$ 5.45	$ 4.00
Third Quarter	$ 7.60	$ 5.14	$ 4.15	$ 3.46
Fourth Quarter	$ 8.73	$ 5.96	$ 4.08	$ 3.03
Year ended December 31, 2006				
First Quarter	$ 10.08	$ 8.62	$ 5.93	$ 3.60
Second Quarter	$ 10.35	$ 6.34	$ 6.47	$ 3.67
Third Quarter	$ 7.92	$ 5.96	$ 4.91	$ 3.70
Fourth Quarter	$ 8.88	$ 7.27	$ 4.57	$ 3.71
Year ended December 31, 2007				
First Quarter	$ 9.74	$ 7.49	$ 5.69	$ 4.02
Second Quarter(1)	$ 7.56	$ 6.43	$ 6.59	$ 5.05
Third Quarter	$ 7.24	$ 5.19	$ 5.99	$ 4.32
Fourth Quarter	$ 5.98	$ 3.90	$ 6.03	$ 4.21
Year ending December 31, 2008				
First Quarter	$ 4.86	$ 3.39	$ 5.46	$ 3.44
Second Quarter	$ 4.52	$ 2.30	$ 4.44	$ 3.08
Third Quarter	$ 3.73	$ 2.65	$ 3.90	$ 1.19
Fourth Quarter (through , 2008)				

(1) In March 2007, Ligand declared a cash dividend on its common stock of $2.50 per share, and, in April 2007, paid an aggregate amount of $252.7 million to stockholders of record as of April 5, 2007 in connection with such special dividend.

As of the record date, there were approximately record holders of Pharmacopeia common stock. Pharmacopeia has never declared or paid any cash dividends on its common stock. Other than the cash dividend referenced above, Ligand has never declared or paid any cash dividends on its capital stock. Ligand does not intend to pay any additional cash dividends in the foreseeable future and currently intends to retain future earnings, if any, to finance future growth. Following completion of the mergers, Ligand common stock will continue to be listed on Nasdaq, and there will be no further market for Pharmacopeia common stock.

The following table sets forth the per share closing sale price of Ligand common stock as reported on Nasdaq, the per share closing sale price of Pharmacopeia common stock as reported on Nasdaq, and the estimated equivalent per share price, as explained below, of Pharmacopeia common stock if the mergers occurred on September 24, 2008, the last full trading day before the public announcement of the proposed mergers and if the mergers occurred on , 2008, the latest practicable date before the date of this proxy statement/prospectus.

The estimated equivalent Pharmacopeia per share price does not give effect to any CVR payment.

	Ligand Common Stock	Pharmacopeia Common Stock	Estimated Equivalent Pharmacopeia Per Share Price
September 24, 2008	$ 3.12	$ 1.19	$ 1.81(a)
, 2008	$	$	$ (b)

(a) The estimated equivalent price per share reflects the value of Ligand common stock that Pharmacopeia stockholders would receive in exchange for each share of Pharmacopeia common stock if the mergers were completed on September 24, 2008, the last full trading day prior to the public announcement of the merger agreement. Based upon the closing price per share of Ligand common stock on such date, each share of Pharmacopeia common stock would be exchanged for 0.58 of a share of Ligand common stock.

(b)

LIGAND PHARMACEUTICALS INCORPORATED

SELECTED HISTORICAL CONSOLIDATED FINANCIAL INFORMATION

The following selected historical consolidated financial and other data are qualified by reference to, and should be read in conjunction with, Ligand's consolidated financial statements and the related notes thereto and the sections entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" from Ligand's annual report on Form 10-K and quarterly reports on Form 10-Q, which are incorporated by reference in this proxy statement/prospectus. Ligand's selected statement of operations data set forth below for each of the five years ended December 31, 2007, 2006, 2005, 2004, and 2003 and the balance sheet data as of December 31, 2007, 2006, 2005, 2004, and 2003 are derived from Ligand's consolidated financial statements, and for the six-month period ended June 30, 2008 and 2007 as derived from Ligand's unaudited interim consolidated financial statements.

The unaudited interim consolidated financial statements include, in Ligand's opinion, all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of the results of the unaudited periods. You should not rely on these interim results as being indicative of results Ligand may expect for the full year or any other interim period. Historical results are not necessarily indicative of the results to be obtained in the future.

	Years Ended December 31,				
	2007	2006 (3)	2005	2004	2003
	(in thousands, except share data)				
Consolidated Statement of Operations Data:					
Royalties	$ 11,409	$	$	$	$
Sale of royalty rights, net				31,342	11,786
Collaborative research and development and other revenues	1,485	3,977	10,217	11,300	13,698
Research and development expenses	44,623	41,546	30,710	30,742	28,302
General and administrative expenses	30,410	43,908	23,134	12,580	12,059
Gain on sale leaseback	1,964	3,397			
Loss from operations	(60,175)	(78,080)	(43,627)	(680)	(14,877)
Income (loss) from continuing operations	(34,759)	(56,590)	(36,035)	2,684	(24,566)
Discontinued operations(1)	316,447	24,847	(364)	(47,825)	(69,900)
Cumulative effect of changing method of accounting for variable interest entity(2)					(2,005)
Net income (loss)	281,688	(31,743)	(36,399)	(45,141)	(96,471)
Basic per share amounts:					
Income (loss) from continuing operations	$ (0.35)	$ (0.70)	$ (0.49)	$ 0.04	$ (0.35)
Discontinued operations(1)	3.22	0.31		(0.65)	(0.98)
Cumulative effect of changing method of accounting for variable interest entity(2)					(0.03)
Net income (loss)	$ 2.87	$ (0.39)	$ (0.49)	$ (0.61)	$ (1.36)
Weighted average number of common shares	98,124,731	80,618,528	74,019,501	73,692,987	70,685,234
Diluted per share amounts:					
Income (loss) from continuing operations	$ (0.35)	$ (0.70)	$ (0.49)	$ 0.03	$ (0.35)
Discontinued operations(1)	3.22	0.31		(0.48)	(0.98)
Cumulative effect of changing method of accounting for variable interest entity(2)					(0.03)
Net income (loss)	$ 2.87	$ (0.39)	$ (0.49)	$ (0.45)	$ (1.36)
Weighted average number of common shares	98,124,731	80,618,528	74,019,501	100,402,063	70,685,234

Pro forma amounts assuming the changed method of accounting for variable interest entity is applied retroactively(2)	
Loss from continuing operations	$ (24,452)
Loss from discontinued operations	(69,900)
Net loss	$ (94,352)
Basic and diluted loss from continuing operations per share	$ (0.35)
Basic and diluted loss from discontinued operations per share	(0.98)
Basic and diluted net loss per share	$ (1.33)

(1) Ligand sold its Oncology Product Line, or Oncology, on October 25, 2006 and its AVINZA Product Line, or AVINZA, on February 26, 2007. The operating results for Oncology and AVINZA have been presented in Ligand's consolidated statements of operations as "Discontinued Operations." See Note 3 to Ligand's consolidated financial statements included in Ligand's annual report on Form 10-K for the year ended December 31, 2007, which is incorporated herein by reference.

(2) In December 2003, Ligand adopted Financial Accounting Standard Board Interpretation No. 46 (revised December 2003) (FIN46(R)), *Consolidation of Variable Interest Entities, an interpretation of ARB No. 51*. Under FIN 46(R), Ligand was required to consolidate the variable interest entity from which it leased its corporate headquarters. Accordingly, as of December 31, 2003, Ligand consolidated assets with a carrying value of $13.6 million, debt of $12.5 million, and a non-controlling interest of $0.6 million. In connection with the adoption of FIN 46(R), Ligand recorded a charge of $2.0 million as a cumulative effect of the accounting change on December 31, 2003. In April 2004, Ligand acquired the portion of the variable interest entity that it did not previously own. The acquisition resulted in Ligand assuming the existing loan against the property and making a payment of $0.6 million to the entity's other shareholder.

(3) Effective January 1, 2006, Ligand adopted Statement of Financial Accounting Standards 123(R), *Share-Based Payment*, or SFAS 123(R), using the modified prospective transition method. The implementation of SFAS123(R) resulted in additional employee stock compensation expense of $4.8 million in 2006. See Note 2 to Ligand's consolidated financial statements included in Ligand's annual report on Form 10-K for the year ended December 31, 2007, which is incorporated herein by reference.

Consolidated Statement of Operations Data:	**Six Months Ended June 30, 2008**	**2007**
	(unaudited)	
Revenues:		
Royalties	$ 9,678	$ 1,410
Collaborative research and development and other revenues		235
Total revenues	9,678	1,645
Operating costs and expenses:		
Research and development	13,542	24,353
General and administrative	14,650	21,683
Total operating costs and expenses	28,192	46,036
Accretion of deferred gain on sale leaseback	(982)	(982)

Loss from operations	(17,532)	(43,409)
Other income (expense):		
Interest income	1,478	5,813
Interest expense	(91)	(460)
Other, net	(1,272)	62
Total other income (expense), net	115	5,415
Loss before income taxes	(17,417)	(37,994)
Income tax benefit	2,811	13,419
Loss from continuing operations	(14,606)	(24,575)

Discontinued operations:		
Income from discontinued operations before income taxes		5,993
Gain (loss) on sale of AVINZA Product Line before income taxes	7,165	310,414
Gain (loss) on sale of Oncology Product Line before income taxes	230	9,807
Income tax benefit (expense) on discontinued operations	(3,151)	(27,137)
Discontinued operations	4,244	299,077
Net income (loss):	$ (10,362)	$ 274,502
Basic and diluted per share amounts:		
Loss from continuing operations	$ (0.15)	$ (0.24)
Discontinued operations	0.04	2.98
Net income (loss)	$ (0.11)	$ 2.74
Weighted average number of common shares	95,051,672	100,279,949

	As of June 30,	December 31,				
	2008	2007	2006	2005	2004	2003
	(unaudited)			(in thousands)		
Consolidated Balance Sheet Data:						
Cash, cash equivalents, short-term investments and restricted cash and investments	$ 86,407	$ 95,819	$ 212,488	$ 88,756	$ 114,870	$ 100,690
Working capital (deficit)(1)	51,500	58,975	64,747	(102,244)	(48,505)	(16,930)
Total assets	160,023	173,278	326,053	314,619	332,466	314,046
Current portion of deferred revenue, net			57,981	157,519	152,528	105,719
Current portion of deferred gain	1,964	1,964	1,964			
Long-term obligations (excludes long-term portions of deferred revenue, net and deferred gain)	57,225	53,048	85,780	173,280	174,214	173,851
Long-term portion of deferred revenue, net	2,546	2,546	2,546	4,202	4,512	3,448
Long-term portion of deferred gain	24,274	25,256	27,220			
Common stock subject to conditional redemption/repurchase	12,345	12,345	12,345	12,345	12,345	14,595
Accumulated deficit	(591,874)	(581,512)	(862,802)	(831,059)	(794,660)	(749,519)
Total stockholders' equity (deficit)	19,021	29,115	27,352	(110,419)	(75,317)	(37,554)

(1) Working capital (deficit) includes deferred product revenue recorded under the sell-through revenue recognition method.

PHARMACOPEIA, INC.

SELECTED HISTORICAL CONSOLIDATED FINANCIAL INFORMATION

The following selected historical consolidated financial information should be read in conjunction with Pharmacopeia's financial statements and the related notes thereto and the sections entitled, "Management's Discussion and Analysis of Financial Condition and Results of Operations" from Pharmacopeia's annual report on Form 10-K and quarterly reports on Form 10-Q, which are incorporated by reference in this proxy statement/prospectus.

The unaudited interim consolidated financial statements include, in Pharmacopeia's opinion, all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of the results of the unaudited periods. You should not rely on these interim results as being indicative of results Pharmacopeia may expect for the full year or any other interim period. Historical results are not necessarily indicative of the results to be obtained in the future.

	Years ended December 31,				
	2007	2006	2005	2004	2003
	(in thousands, except per share data)				
Statement of Operations Data:					
Net revenue	$ 21,406	$ 16,936	$ 20,403	$ 24,359	$29,503
Collaborative research and development expense	23,735	13,551	17,734	20,689	22,157
Proprietary research and development expense	39,273	23,524	10,965	5,955	3,951
General and administrative expense	10,991	9,848	10,196	9,859	6,003
Total operating expenses	73,999	46,923	38,895	36,503	32,111
Operating loss	(52,593)	(29,987)	(18,492)	(12,144)	(2,608)
Interest and other income, net	3,815	1,568	1,120	561	19
Interest and other expense, net	(78)				
Decrease in warrant liability	173	89			
Restructuring and other charges		88		(5,947)	
Loss before income taxes	(48,683)	(28,242)	(17,372)	(17,530)	(2,589)
(Benefit from) provision for income taxes	(823)	(478)	(234)	(110)	259
Net loss	$(47,860)	$(27,764)	$(17,138)	$(17,420)	$ (2,848)
Net loss per share:					
Basic and diluted	$ (1.79)	$ (1.69)	$ (1.27)	$ (1.43)	$ (0.23)

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
	2008	2007	2008	2007
	(in thousands, except per share data)			
Statement of Operations Data:				
Revenue				
Net revenue	$ 5,882	$ 4,957	$ 12,086	$ 11,306
Operating Expenses				
Collaborative research and development expense	7,215	5,685	15,135	10,922
Proprietary research and development expense	9,188	5,033	17,952	12,451
General and administrative expense	4,077	2,771	7,464	5,459
Restructuring expense	1,695		1,695	
Total operating expenses	22,175	13,489	42,246	28,832
Operating loss	(16,293)	(8,532)	(30,160)	(17,526)
Other income	700		700	94
Interest income	244	942	887	1,544
Interest and other expense, net	(103)	(5)	(203)	(5)
(Increase) decrease in warrant liability	(145)	638	1,461	(1,068)
Loss before income taxes	(15,597)	(6,957)	(27,315)	(16,961)
Provision for (benefit from) income taxes	2	(52)	2	(52)
Net loss	$ (15,599)	$ (6,905)	$ (27,317)	$ (16,909)
Net loss per share:				
Basic and diluted	$ (0.53)	$ (0.26)	$ (0.92)	$ (0.63)
Weighted average number of common stock shares outstanding:				
Basic and diluted	29,688,920	26,336,997	29,688,000	26,716,303

	As of June 30,	As of December 31,				
	2008	2007	2006	2005	2004	2003
			(in thousands)			
Balance Sheet Data:						
Cash, cash equivalents and marketable securities	$ 44,440	$71,315	$46,140	$30,366	$40,885	$ 524
Total assets	63,678	90,398	66,127	46,019	57,005	11,052
Current liabilities	35,960	37,471	18,750	8,862	10,251	6,420
Long-term liabilities	30,127	29,843	16,946	1,904	3,046	325
Total stockholders' (deficit) equity	(2,409)	23,084	30,431	35,253	43,708	4,307
Cash dividends declared per common share						

SELECTED UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

The selected unaudited pro forma condensed combined financial information presented below is based on, and should be read together with, the historical information that Ligand and Pharmacopeia have presented in their respective filings with the SEC and the pro forma information that appears elsewhere in this proxy statement/prospectus. See the sections entitled "Unaudited Pro Forma Condensed Combined Financial Information" and "Where You Can Find More Information" beginning on pages 120 and 130, respectively, of this proxy statement/prospectus.

The selected unaudited pro forma condensed combined balance sheet as of June 30, 2008 gives effect to the proposed mergers as if they had occurred on June 30, 2008, and combines the historical balance sheets of Ligand and Pharmacopeia as of June 30, 2008. The selected unaudited pro forma condensed combined statements of operations for the year ended December 31, 2007 and for the six months ended June 30, 2008 are presented as if the proposed mergers had occurred on January 1, 2007, and combines the historical results of Ligand and Pharmacopeia for the year ended December 31, 2007 and for the six months ended June 30, 2008, respectively.

The pro forma adjustments related to the mergers are based on a preliminary purchase price allocation whereby the estimated cost to acquire Pharmacopeia was allocated to the assets acquired and the liabilities assumed based upon their estimated fair values. A final purchase price allocation will be performed using fair value as of the date of completion of the mergers. Differences between the preliminary and final purchase price allocations could have a material impact on the accompanying unaudited pro forma condensed combined financial statement information and Ligand's future results of operations and financial position.

The selected unaudited pro forma condensed combined financial statements do not reflect the realization of potential cost savings, or any related restructuring or integration costs. Certain cost savings may result from the mergers, however, there can be no assurance that these cost savings will be achieved.

The selected unaudited pro forma condensed combined financial information is presented for illustrative purposes only and is not necessarily indicative of the combined financial positions or results

of operations in future periods or the results that actually would have been realized if the proposed mergers had been completed as of the dates indicated.

	Unaudited Pro Forma Combined (in thousands, except per share data)	
	Six Months Ended June 30, 2008	Twelve Months Ended December 31, 2007
Earnings Data:		
Revenue	$ 21,764	$ 34,300
Expenses	70,438	149,032
Operating loss	(47,692)	(112,768)
Other income	2,848	10,405
Loss before income taxes	(44,844)	(102,363)
Income tax benefit (expense)	(2)	823
Loss from continuing operations	(44,846)	(101,540)
Basic and diluted per share amounts:		
Continuing operations	$ (0.40)	$ (0.88)

	Unaudited Pro Forma Combined (in thousands, except per share data)
	June 30, 2008
Balance Sheet Data:	
Total assets	$ 227,914
Total liabilities	194,744
Total stockholders' equity	20,825

COMPARATIVE PER SHARE DATA

The tables below reflect:

- the historical net income (loss) and book value per share of Ligand common stock and the historical net income (loss) and book value per share of Pharmacopeia common stock;
- the combined Ligand and Pharmacopeia unaudited pro forma net income and book value per share after giving effect to the mergers on a purchase basis if the mergers had been consummated on September 24, 2008 (the last full trading day prior to the public announcement of the merger agreement);
- the equivalent unaudited pro forma net income and book value per share attributable to 0.58 of a share of Ligand common stock, which is the fraction of a Ligand share which would be received for each share of Pharmacopeia common stock if the mergers had been consummated on September 24, 2008 (the last full trading day prior to the public announcement of the merger agreement);
- the equivalent unaudited pro forma net income and book value per share attributable to 0.60 of a share of Ligand common stock, which is the maximum fraction of a Ligand share which would be received for each share of Pharmacopeia common stock pursuant to the merger agreement; and
- the equivalent unaudited pro forma net income and book value per share attributable to 0.49 of a share of Ligand common stock, which is the minimum fraction of a Ligand share which would be received for each share of Pharmacopeia common stock pursuant to the merger agreement.

The following tables should be read in conjunction with the historical consolidated financial statements and related notes of Ligand which are incorporated by reference in this proxy statement/prospectus and the historical consolidated financial statements of Pharmacopeia and related notes, which are included or incorporated by reference elsewhere in this proxy statement/prospectus.

The unaudited pro forma data are presented for illustrative purposes only and are not necessarily indicative of actual or future financial position or results of operation that would have been realized if the proposed mergers had been completed as of the date indicated or will be realized upon completion of the proposed mergers. See the section entitled "Unaudited Pro Forma Condensed Combined Financial Information" beginning on page 120 of this proxy statement/prospectus.

Ligand

	Year Ended December 31, 2007	Six Months Ended June 30, 2008
Historical per common share data (basic and diluted):		
Continuing operations	$ (0.35)	$ (0.15)
Discontinued operations	$ 3.22	$ 0.04
Net income (loss)	$ 2.87	$ (0.11)
Book value (based on basic weighted average shares outstanding)	$ 0.30	$ 0.20

Pharmacopeia

	Year Ended December 31, 2007	Six Months Ended June 30, 2008
Historical per common share data (basic and diluted):		
Net income (loss)	$ (1.79)	$ (0.92)
Book value (based on basic weighted average shares outstanding)	$ 0.86	$ (0.08)

Combined Ligand and Pharmacopeia

	Year Ended December 31, 2007	Six Months Ended June 30, 2008
Combined pro forma per Ligand common share data, calculated assuming the closing occurred on September 24, 2008:		
Net loss from continuing operations basic and diluted	$ (0.88)	$ (0.40)
Book value (based on basic weighted average shares outstanding)		$ 0.18
Combined pro forma per Pharmacopeia equivalent share data, calculated assuming the closing occurred on September 24, 2008:		
Net loss from continuing operations basic and diluted	$ (0.51)	$ (0.23)
Book value (based on basic weighted average shares outstanding)		$ 0.11
Combined pro forma per Pharmacopeia equivalent share data, calculated assuming the maximum number of Ligand shares were issued:		
Net loss from continuing operations basic and diluted	$ (0.60)	$ (0.23)
Book value (based on basic weighted average shares outstanding)		$ 0.10
Combined pro forma per Pharmacopeia equivalent share data, calculated assuming the minimum number of Ligand shares were issued:		
Net loss from continuing operations basic and diluted	$ (0.49)	$ (0.28)
Book value (based on basic weighted average shares outstanding)		$ 0.13

RISK FACTORS

If the mergers are completed, Ligand and Pharmacopeia will operate as a combined company in a market environment that is difficult to predict and that involves significant risks, many of which will be beyond the combined company's control. In addition to information regarding Ligand and Pharmacopeia contained in, or incorporated by reference into, this proxy statement/prospectus, you should carefully consider the risks described below before voting your shares. Additional risks and uncertainties not presently known to Ligand and Pharmacopeia or that they do not currently believe are important to an investor, if they materialize, also may adversely affect the mergers, Ligand, Pharmacopeia and the combined company. A discussion of additional risks and uncertainties regarding Ligand and Pharmacopeia can be found in the information that is incorporated by reference in this proxy statement/prospectus and referred to in the section entitled "Where You Can Find More Information" beginning on page 130 of this proxy statement/prospectus. If any of the events, contingencies, circumstances or conditions described in the following risks actually occur, Ligand's and Pharmacopeia's respective businesses, financial condition or their results of operations (both separately and as combined) could be seriously harmed. If that happens, the trading price of Ligand common stock or Pharmacopeia common stock could decline and you may lose part or all of the value of any Ligand shares or Pharmacopeia shares held by you.

Risks Related to the Mergers and the Combined Company

The number of shares and the value of Ligand common stock that Pharmacopeia stockholders will receive in connection with the mergers will fluctuate.

The number of shares and precise value of the merger consideration to be received by Pharmacopeia stockholders at the effective time of merger 1 cannot be determined at the present time. The exchange ratio, which determines the number of shares of Ligand common stock that Pharmacopeia stockholders will receive in connection with the mergers, will not be determined until shortly before the special meeting of Pharmacopeia stockholders.

Upon the terms of the merger agreement, Ligand would issue approximately 0.58 of a share for each share of Pharmacopeia common stock outstanding immediately prior to the effective time of merger 1, subject to certain adjustments for cancelled stock options. However, this exchange ratio is fixed only if the Ligand Common Stock Value falls in the range of $3.00 and $3.75. Otherwise, the following will apply:

- if the Ligand Common Stock Value is greater than $3.75 but not greater than $4.50, the overall transaction value will be fixed at $66 million, and the exchange ratio will decrease as prices increase within the range;

- if the Ligand Common Stock Value is greater than $4.50, then the exchange ratio will be approximately 0.49;

- if the Ligand Common Stock Value is equal to or greater than $2.38 but less than $3.00, then the exchange ratio will increase as prices decrease within the range (provided that if the Ligand Common Stock Value is less than $2.93, the exchange ratio will be approximately 0.60), subject to specified limitations in the merger agreement. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive cash consideration for an overall transaction value fixed at $52.8 million; or

- if the Ligand Common Stock Value is less than $2.38, then the exchange ratio will be approximately 0.60. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive a proportionate share of $10 million in cash.

The price of Ligand common stock at the closing of the mergers may vary from its price on the date the merger agreement was executed, on the date of this proxy statement/prospectus and on the date of the special meeting of Pharmacopeia stockholders. Stock price changes may result from a

variety of factors beyond Ligand's control, including general economic and market conditions. In addition, there will be a period of time between completion of the mergers and the time at which former Pharmacopeia stockholders actually receive stock certificates evidencing the Ligand common stock. Until stock certificates are received, former Pharmacopeia stockholders may not be able to sell their Ligand shares in the open market and, therefore, may not be able to avoid losses from any decrease in the trading price of Ligand common stock during that period.

If a certain trigger event does not occur, no payments will be made under the CVRs or, even if this event occurs, Ligand may not be able to make the cash payments payable pursuant to the CVRs.

Pursuant to the terms of the merger agreement, the CVRs provide former Pharmacopeia stockholders and certain securityholders with the right to receive an aggregate of $15 million cash payment if Ligand enters into a license, sale, development, marketing or option agreement with respect to any product candidate from Pharmacopeia's DARA program (other than any agreement with Bristol-Myers Squibb or any of its affiliates) on or prior to December 31, 2011.

The trigger event for the contingent payment may not occur due to numerous factors. If this event is not achieved within the required timeframe, the CVRs will expire and no payments will be made in connection with the CVRs. Accordingly, the CVRs may ultimately have no value. The CVRs are not transferable other than in certain limited circumstances and accordingly you may not sell them prior to their termination. Following the consummation of the mergers, Ligand intends to review the DARA program to determine what financial commitments, if any, will be made with respect to such program. Ligand also intends to solicit and consider the interests of potential collaborators and/or partners with respect to any investment by such parties in the DARA program. Ligand does not intend to make any investment in the DARA program unless its review of the DARA program demonstrates that such investment is likely to increase Ligand stockholder value. Under the terms of the CVR agreement, Ligand has sole discretion and decision making authority over whether to continue to invest in the DARA program, how much to invest in the DARA program and whether and on what terms, if any, to enter into any license, sale, development, marketing or option agreement with respect to DARA. Accordingly, Ligand may decide not to make any investment in the DARA program and may decide not to pursue partnering discussions. In addition, the CVRs are unsecured obligations of Ligand and the necessary funds for the CVR payments have not been placed in an escrow account. Even if the trigger event occurs, at the time the aggregate $15 million cash payment is due pursuant to the CVR agreement, Ligand may not have available enough cash or cash equivalents to make the aggregate cash payment due pursuant to the CVRs. Any rights or claims by the CVR holders relating thereto would be subordinated in the right of payment to the prior payment in full of any senior or secured Ligand obligations.

If Ligand is not successful in integrating Pharmacopeia into its own business, then the benefits of the mergers will not be fully realized and the market price of Ligand's common stock may be negatively affected.

Ligand may not achieve successful integration of the Pharmacopeia assets in a timely manner, or at all, and Ligand may not realize the benefits and synergies of the mergers to the extent, or in the timeframe, anticipated. Ligand and Pharmacopeia entered into the merger agreement with the expectation that the mergers will result in benefits arising out of the combination of the companies. The successful integration of Ligand and Pharmacopeia will require, among other things, integration of Pharmacopeia's assets into Ligand. 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 Ligand's ability to achieve the anticipated benefits of the mergers, or could reduce Ligand's earnings or otherwise adversely affect the business and financial results of the combined company and, as a result, adversely affect the market price of Ligand common stock. For example, as part of the integration process,

Ligand intends to review and reduce the workforce levels at Pharmacopeia, as appropriate. Such workforce reductions may adversely affect Ligand's ability to successfully integrate Pharmacopeia's business and may disrupt the combined company's ongoing business operations.

Ligand expects to incur significant costs and commit significant management time integrating Pharmacopeia's business operations, technology, development programs, products and personnel with those of Ligand's. If Ligand does not successfully integrate the business of Pharmacopeia, the expenditure of these costs will reduce Ligand's cash position.

Uncertainty regarding the mergers and the effects of the mergers could cause each company's licensors, collaborators, suppliers or other strategic partners to delay or defer decisions, which could increase costs of the ongoing business for Ligand and/or Pharmacopeia.

Ligand's and Pharmacopeia's strategy for developing and commercializing many of their potential products includes entering into agreements with licensors, collaborators, suppliers and other strategic partners. These partners, in response to the announcement of the mergers, may delay or defer decisions regarding their business relationships with each company, which could increase costs for the business of the subject company and delay, interrupt or terminate the collaborate research, development and commercialization of certain potential products, regardless of whether the mergers are ultimately completed. Under specified circumstances, these partners may also terminate their agreements with each company. Any such delay, interruption or termination of the combined company's relationship with any of these partners could materially harm the combined company's business and financial condition, and frustrate any commercialization efforts for its product candidates.

The mergers are subject to closing conditions that could result in the completion of the mergers being delayed or not consummated, which could negatively impact Ligand's and/or Pharmacopeia's stock price and future business and operations.

Completion of the mergers is conditioned upon Ligand and Pharmacopeia satisfying closing conditions, including adoption of the merger agreement by Pharmacopeia's stockholders, all as set forth in the merger agreement. See the section entitled "Certain Terms of the Merger Agreement Conditions to the Mergers" for a discussion of the conditions to the completion of the mergers. The required conditions to closing may not be satisfied in a timely manner, if at all, or, if permissible, waived, and the mergers may not be consummated. Failure to consummate the mergers could negatively impact Ligand's and/or Pharmacopeia's stock price, future business and operations, and financial condition. Any delay in the consummation of the mergers or any uncertainty about the consummation of the mergers may adversely affect the future business, growth, revenue and results of operations of either or both of the companies.

Failure to complete the mergers could negatively impact the market price of Ligand common stock and/or Pharmacopeia common stock and the future business and financial results of Ligand and/or Pharmacopeia.

If the mergers are not completed for any reason, the ongoing business of Ligand and Pharmacopeia may be adversely affected and will be subject to a number of risks, including:

Pharmacopeia may be required, under some circumstances, to pay Ligand a termination fee of $3.375 million or reimburse Ligand for up to $1.4 million of merger-related expenses. See "Certain Terms of the Merger Agreement Termination Fee" beginning on page 110 of this proxy statement/prospectus;

the diversion of management's attention, the reduction in capital spending and acquisitions, the suspension of planned hiring and other affirmative and negative covenants in the merger agreement restricting the companies' businesses;

failure to pursue other beneficial opportunities as a result of the focus of management of each of the companies on the mergers, without realizing any of the anticipated benefits of the mergers;

the market price of Ligand common stock or Pharmacopeia common stock may decline to the extent that the current market price reflects a market assumption that the mergers will be completed;

Ligand and Pharmacopeia may experience negative reactions to the termination of the mergers from licensors, collaborators, suppliers, or other strategic partners;

Ligand's and Pharmacopeia's costs incurred related to the mergers, such as legal and accounting fees, must be paid even if the mergers are not completed; and

Pharmacopeia's common stock may be subject to delisting from Nasdaq. On September 30, 2008, Pharmacopeia received a notification from The Nasdaq Stock Market indicating that Pharmacopeia was not in compliance with Nasdaq's continued listing requirements because its market value of its listed securities was below $50 million for 10 consecutive trading days.

If the merger agreement is terminated and Pharmacopeia's board of directors seeks another merger or business combination, Pharmacopeia stockholders cannot be certain that Pharmacopeia will be able to find a party willing to pay a price equivalent to or more attractive than the price Ligand has agreed to pay in the mergers. Despite active efforts, Pharmacopeia was not able to raise funds to further the development of its business during the period from November 2007 through August 2008.

The pro forma financial statements are presented for illustrative purposes only and may not be an indication of the combined company's financial condition or results of operations following the mergers.

The pro forma financial statements contained in this proxy statement/prospectus are presented for illustrative purposes only and may not be an indication of the combined company's financial condition or results of operations following the mergers for several reasons. For example, the pro forma financial statements have been derived from the historical financial statements of Ligand and Pharmacopeia and certain adjustments and assumptions have been made regarding the combined company after giving effect to the mergers. The information upon which these adjustments and assumptions have been made is preliminary, and these kinds of adjustments and assumptions are difficult to make with complete accuracy. For example, we have assumed that the consummation of the mergers will occur on or prior to December 31, 2008. If the consummation of the mergers does not occur by such time, certain accounting rule changes in 2009 will have a significant impact on the accounting treatment of the mergers. Moreover, the pro forma financial statements do not reflect all costs that are expected to be incurred by the combined company in connection with the mergers. For example, the impact of any incremental costs incurred in integrating the two companies is not reflected in the pro forma financial statements. As a result, the actual financial condition and results of operations of the combined company following the mergers may not be consistent with, or evident from, these pro forma financial statements.

In addition, the assumptions used in preparing the pro forma financial information may not prove to be accurate, and other factors may affect the combined company's financial condition or results of operations following the mergers. Any potential decline in the combined company's financial condition or results of operations may cause significant variations in the stock price of the combined company. See the section entitled "Unaudited Pro Forma Condensed Combined Financial Information" beginning on page 120 of this proxy statement/prospectus.

If Ligand is unable to retain key Ligand and/or Pharmacopeia personnel after the mergers are completed, Ligand's business may suffer.

The success of the mergers will depend in part on Ligand's ability to retain personnel currently employed by Ligand and those key Pharmacopeia employees who continue employment with Ligand

after the mergers. It is possible that these employees might decide not to remain with Ligand after the mergers is completed. There is no assurance that Ligand will be able to retain key employees of Pharmacopeia. If key employees terminate their employment, or insufficient numbers of employees are retained to maintain effective operations, Ligand's development activities might be adversely affected; management's attention might be diverted from successfully integrating Pharmacopeia's operations to hiring suitable replacements; and Ligand's business might suffer. In addition, Ligand might not be able to locate suitable replacements for any key employees that leave Ligand or Pharmacopeia, and Ligand may not be able to offer employment to potential replacements on reasonable terms.

In the event the mergers are completed, Ligand will incur significant additional expenses in connection with the integration of Pharmacopeia.

In the event the mergers are completed, Ligand expects to incur significant additional expenses in connection with the integration of Pharmacopeia, including integrating personnel, information technology systems, accounting systems, vendors and strategic partners of each company and implementing consistent standards, policies, and procedures, and may be subject to possibly material write downs in assets and charges to earnings, which are expected to include severance pay and other costs.

Pharmacopeia's executive officers and directors have interests different from your interests that may influence them to support or approve the mergers.

In considering the recommendation of the Pharmacopeia board of directors to adopt the merger agreement, Pharmacopeia stockholders should recognize that Pharmacopeia's executive officers and directors have interests that differ from those of Pharmacopeia's and Ligand's stockholders because of employment arrangements, severance arrangements, change of control agreements, indemnification and liability insurance and other reasons. These reasons are described in the section entitled "The Merger Agreement Interests of Pharmacopeia's Executive Officers and Directors in the Mergers."

The issuance of Ligand common stock in connection with the mergers could decrease the market price of Ligand common stock.

Based on the number of shares of Pharmacopeia common stock outstanding as of October 8, 2008, at the closing of the mergers, Ligand will issue up to 18,976,461 shares of Ligand common stock, or approximately 16.6% of the number of outstanding shares of Ligand's common stock currently in the public market, to Pharmacopeia stockholders in connection with the mergers. The issuance of the Ligand common stock may result in fluctuations in the price of Ligand common stock, including a stock price decline.

If Pharmacopeia stockholders sell the Ligand common stock received in connection with the mergers, they could cause a decline in the market price of Ligand common stock.

Ligand's issuance of common stock in connection with the mergers will be registered with the SEC. As a result, those shares will be immediately available for resale in the public market, except for shares of Ligand common stock that will be subject to additional transfer restrictions because those shares were issued to Pharmacopeia's former stockholders who become affiliates of Ligand upon completion of the mergers. Pharmacopeia former stockholders may sell the stock they receive immediately after the mergers, except for any shares subject to the additional transfer restrictions described above. If this occurs, or if other holders of Ligand common stock sell significant amounts of Ligand common stock immediately after the mergers are completed, the market price of Ligand common stock could decline. These sales may also make it more difficult for Ligand to sell equity securities in the future at a time and at a price that Ligand deems appropriate to raise funds through future offerings of common stock.

The market price of Ligand's common stock may decline as a result of the mergers.

The market price of Ligand's common stock may decline as a result of the mergers for a number of reasons including if:

- Ligand does not achieve the perceived benefits of the mergers as rapidly or to the extent anticipated by financial or industry analysts;
- the effect of the mergers on Ligand's business and prospects is not consistent with the expectations of financial or biopharmaceutical industry analysts; or
- investors react negatively to the effect on Ligand's business and prospects from the mergers.

Former Pharmacopeia stockholders will have limited ability to influence Ligand's actions and decisions following the mergers.

Following the mergers, former Pharmacopeia stockholders will hold up to only approximately 16.6% of the outstanding shares of Ligand common stock. As a result, former Pharmacopeia stockholders will have only limited ability to influence Ligand's business. Former Pharmacopeia stockholders will not have separate approval rights with respect to any actions or decisions of Ligand or have separate representation on Ligand's board of directors although pursuant to the merger agreement, Pharmacopeia's board of directors will select two nominees to serve on Ligand's board of directors upon completion of the mergers.

During the pendency of the mergers, Pharmacopeia may not be able to enter into certain business combinations with other parties because of restrictions in the merger agreement.

Covenants in the merger agreement impede the ability of Pharmacopeia to make certain acquisitions or complete other transactions that are not, among other things, in the ordinary course of business pending completion of the mergers. As a result, if the mergers are not completed, Pharmacopeia may be at a disadvantage to its competitors. See the section entitled "Certain Terms of the Merger Agreement Pharmacopeia's Conduct of Business Prior to Merger 1" beginning on page 95 of this proxy statement/prospectus.

The combined company's stock price is expected to be volatile, and the market price of its common stock may drop following the mergers.

The market price of the combined company's common stock could be subject to significant fluctuations following the mergers. Market prices for securities of pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of the combined company's common stock to fluctuate include:

- the ability of the combined company to obtain regulatory approvals for any of its product candidates, and delays or failures to obtain such approvals;
- failure of any of the combined company's product candidates, if approved, to achieve commercial success;
- issues in manufacturing the combined company's approved products, if any, or product candidates;
- the results of the combined company's current and any future clinical trials of its product candidates;
- the entry into, or termination of, key agreements, including key commercial partner agreements;
- the initiation of, material developments in, or conclusion of litigation to enforce or defend any of the combined company's intellectual property rights or defend against the intellectual property rights of others;
- developments concerning current or future strategic collaborations;

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announcements by commercial partners or competitors of new commercial products, clinical progress or the lack thereof, significant contracts, commercial relationships or capital commitments;

the introduction of technological innovations or new therapies that compete with potential products of the combined company;

additions or departures of key employees;

third-party coverage and reimbursement policies;

changes in estimates or recommendations by securities analysts, if any, who cover the combined company's common stock;

future sales of the combined company's common stock;

general and industry-specific economic conditions that may affect the combined company's research and development expenditures; and

period-to-period fluctuations in the combined company's financial results.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of the combined company's common stock.

In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm the combined company's profitability and reputation.

The merger agreement limits Pharmacopeia's ability to pursue alternatives to the mergers.

The merger agreement contains "no shop" provisions that, subject to limited exceptions, preclude Pharmacopeia, whether directly or indirectly through its subsidiaries, officers, directors, agents or other representatives, from soliciting, initiating, knowingly facilitating, encouraging or inducing, any inquiry with respect to, or the making, submission or announcement of, any acquisition proposal, participating in any discussions or negotiations, or furnishing any nonpublic information with respect to any acquisition proposal, or taking any other action to facilitate any inquiries or proposal that would be reasonably expected to result in an acquisition proposal, approving, endorsing or recommending any acquisition proposal, or entering into any agreement contemplating or otherwise relating to any acquisition proposal. Under certain circumstances, the merger agreement also provides that Pharmacopeia will be required to reimburse Ligand for up to $1.4 million of merger-related expenses or pay a termination fee of $3.375 million to Ligand upon termination of the merger agreement. These provisions might discourage a potential competing acquirer that might have an interest in acquiring all or a significant part of Pharmacopeia from considering or proposing an acquisition even if it were prepared to pay consideration with a higher per share market price than that proposed in the mergers, or might result in a potential competing acquirer proposing to pay a lower per share price to acquire Pharmacopeia than it might otherwise have proposed to pay.

The United States federal income tax treatment of the CVRs is unclear.

There is substantial uncertainty as to the tax treatment of the CVRs. The receipt of the CVRs as part of the merger consideration may be treated as a "closed transaction" or an "open transaction" for United States federal income tax purposes, which affects the amount of gain, if any, that may be recognized at the time of consummation of merger 1. See "The Mergers Material United States Federal Income Tax Consequences of the Mergers" beginning on page 83 of this proxy statement/prospectus for a more detailed explanation of the United States federal income tax treatment of the CVRs.

Ligand and Pharmacopeia have each been named in a putative class action lawsuit that could prevent or delay the completion of the mergers.

On October 6, 2008, a putative class action complaint was filed in the Superior Court of New Jersey, Mercer County (Equity Division) by Allen Heilman, one of Phamacopeia's stockholders, against Pharmacopeia, the members of its board of directors, Ligand, Margaux and Latour. The complaint generally alleges that Pharmacopeia's board of directors' decision to enter into the proposed transaction with Ligand on the terms contained in the merger agreement constitutes a breach of fiduciary duty and gives rise to other unspecified state law claims. The complaint also alleges that Ligand, Margaux and Latour aided and abetted Pharmacopeia'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. Neither Ligand nor Pharmacopeia can provide any assurances as to the outcome of the foregoing legal proceeding and its potential effect on the completion of the mergers.

The defense of this or any future legal proceeding could divert management's attention and resources from the needs of their respective businesses. Either Pharmacopeia or Ligand or both of them may be required to make substantial payments or incur other adverse effects in the event of adverse judgments or settlements of any such proceedings.

Risks Related to Ligand

Ligand relies heavily on collaborative relationships, and any disputes or litigation with its collaborative partners or termination or breach of any of the related agreements could reduce the financial resources available to it, including milestone payments and future royalty revenues.

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

In addition, Ligand's collaborators may develop drugs, either alone or with others that compete with the types of drugs they are developing with Ligand. This would result in increased competition for Ligand's programs. If products are approved for marketing under Ligand's collaborative programs, revenues it receives will depend on the manufacturing, marketing and sales efforts of its collaborative partners, who generally retain commercialization rights under the collaborative agreements. Generally, Ligand's current collaborative partners also have the right to terminate their collaborations under specified circumstances. If any of Ligand's collaborative partners breaches or terminates their agreements with Ligand or otherwise fails to conduct their collaborative activities successfully, Ligand's product development under these agreements will be delayed or terminated. Disputes or litigation may also arise with Ligand's collaborators, including disputes or litigation over ownership rights to intellectual property, know-how or technologies developed with its collaborators. Such disputes or litigation could adversely affect Ligand's rights to one or more of its product candidates, including its LGD-4665 and other small-molecule TPO mimetic compounds. Any such dispute or litigation could delay, interrupt or terminate the collaborative research, development and commercialization of certain potential products, create uncertainty as to ownership rights of intellectual property, or could result in litigation or arbitration. The occurrence of any of these problems could be time-consuming and expensive and could adversely affect Ligand's business.

Ligand's product candidates face significant regulatory hurdles prior to marketing which could delay or prevent sales.

Before Ligand obtains the approvals necessary to sell any of its potential products, it must show through preclinical studies and human testing that each product is safe and effective. Ligand and its partners have a number of products moving toward or currently awaiting regulatory action, including eltrombopag, bazedoxifene and lasofoxifene. Failure to show any product's safety and effectiveness could delay or prevent regulatory approval of a product and could adversely affect Ligand's 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 United States Food and Drug Administration (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 Ligand completes its clinical trials depends on many factors, including, but not limited to, its 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 Ligand's trials may result in increased costs and longer development times. In addition, Ligand's 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, Ligand or its collaborative partners still may not apply for FDA approval in a timely manner or the FDA still may not grant approval.

Third party intellectual property may prevent Ligand or its partners from developing Ligand's potential products and Ligand may owe a portion of any payments it receives from its collaborative partners to one or more third parties.

Ligand's success will depend on its ability and the ability of its 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 Ligand's 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 Ligand's potential products or its collaborative partners' products or potential products may infringe the patent rights of others. This could impact AVINZA, eltrombopag, bazedoxifene, lasofoxifene, LGD-4665 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 Ligand's business. Others have filed patent applications and received patents that conflict with patents or patent applications Ligand has licensed for its use, either by claiming the same methods or compounds or by claiming methods or compounds that could dominate those licensed to Ligand. In addition, Ligand may not be aware of all patents or patent applications that may impact its ability to make, use or sell any of its potential products. For example, United States 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.

In July 2007, the Salk Institute for Biological Studies, or Salk, filed a demand for arbitration with the American Arbitration Association, seeking damages for alleged breach of contract based on Salk's theory that it was entitled to a portion of the money paid by Eisai, the purchaser of Ligand's oncology product line, to Ligand for Targretin-related assets. In September 2008, Ligand reached a settlement with Salk, whereby the parties resolved all disputes that had arisen between them, including Salk's

primary claim in arbitration relating to the sale of Targretin to Eisai in 2006. As part of the settlement, the parties executed mutual releases and agreed to jointly seek dismissal with prejudice of all claims and counterclaims asserted in the arbitration. Ligand agreed to pay Salk $9.5 million immediately upon settlement and $3.5 million six months from the date of settlement in return for which Salk acknowledged that no additional payments would be due from Ligand or any sublicensee for any past, present or future conduct, including development of any compound in Ligand's internal or partnered pipeline, except for any future bazedoxifene related payments. Pursuant to the parties' agreement, the American Arbitration Association dismissed the proceeding.

On March 4, 2008, Rockefeller University, or Rockefeller, filed suit, now proceeding in the United States District Court for the Southern District of New York, against Ligand alleging, among other things, a breach by Ligand of its 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. The complaint seeks damages of at least $1.9 million, plus alleges that Rockefeller is entitled to 25% of payments to be received by Ligand in the future related to Promacta and SB-559448 or from any third party in connection with certain products (which products, according to the complaint, include LGD-4665), and 5% of future net sales of certain of Ligand's other products. The complaint requests a trial by jury, and also seeks to impose a constructive trust upon payments previously received by Ligand to which Rockefeller claims it is owed a portion. Ligand has filed an answer and counterclaims seeking, among other things, a judicial determination that (i) eltrombopag and the backup compound SB-559448 (including the use of such compounds) do not embody any invention(s) described or claimed in certain licensed patent rights under the September 30, 1992 license agreement between Ligand and Rockefeller, (ii) Rockefeller technical information was not essential to the discovery or development of eltrombopag and the backup compound SB-559448, (iii) Ligand is not liable for any additional payments under its September 30, 1992 license agreement with Rockefeller beyond any payments that it has already made, and (iv) the September 30, 1992 license agreement between Ligand and Rockefeller was terminated in November 2007, and that subsequent to the termination of such agreement, Ligand is not liable for future payments under such agreement. Discovery is scheduled to be completed in the second quarter of 2009, but delays are possible and Ligand is unable to guarantee when a final decision will be rendered. Intellectual property license disputes are subject to inherent uncertainties and there can be no assurance this litigation will be resolved favorably to Ligand or that it will not have a material adverse effect on Ligand. Ligand's management is unable to assess the likelihood of an unfavorable outcome and, accordingly, no accrual has been recorded as of June 30, 2008.

Further, these and other possible disagreements or litigation with Ligand's collaborative partners could delay Ligand's ability and the ability of its collaborative partners to achieve milestones or Ligand's receipt of other payments. In addition, these and any other possible disagreements or litigation could delay, interrupt or terminate the research, development and commercialization of certain potential products being developed by either Ligand's collaborative partners or by Ligand. Moreover, if Ligand is unable to resolve the current dispute with Rockefeller or any other possible disagreements with licensors or collaborative partners, protracted litigation or arbitration could result. The occurrence of any of the foregoing problems could adversely affect Ligand's business.

As noted above, Rockefeller has filed a lawsuit against Ligand claiming, among other things, that it is owed and will be owed certain payments under Ligand's agreement with Rockefeller. Other third parties have not directly threatened an action or claim against Ligand, although Ligand does 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, Ligand may be required to obtain licenses to those patents or to develop or obtain alternative technology. Ligand 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 Ligand from pursuing the development or commercialization of its 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 Ligand's results of operations and financial condition. Ligand 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 Ligand's financial position, liquidity and results of operations.

Ligand is substantially dependent on AVINZA royalties for its revenues.

King Pharmaceuticals, or King, is obligated to pay Ligand royalties in the future based on sales of AVINZA by King. Specifically, beginning in October 2008, King is required to make royalty payments based upon calendar year net sales of AVINZA. If calendar year net sales are less than $200.0 million, the royalty payment will be 5% of all net sales. If calendar year net sales are greater than $200.0 million, the royalty payment will be 10% of all net sales less than $250.0 million, plus 15% of net sales greater than $250.0 million. In addition, beginning in 2009, Ligand will no longer be entitled to receive royalties on a quarterly basis, but will collect royalties on an annual basis, which may adversely impact Ligand's cash flows. These royalties represent and will for some time represent substantially all of Ligand's ongoing revenue. Although Ligand may also receive royalties and milestones from its partners in various past and future collaborations, the amount of revenue from these royalties and milestones is unknown and highly uncertain.

As a result, any setback that may occur with respect to AVINZA could significantly impair Ligand's operating results and/or reduce the market price for its 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.

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 Ligand in February 2007. According to the report, Actavis's Paragraph IV Certification sets forth allegations that United States 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.

AVINZA was licensed from Elan Corporation 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. Similarly, King's AVINZA sales efforts could be affected by a number of factors and decisions regarding its organization, operations, and activities as well as events both related and unrelated to AVINZA, including sales force reorganizations and lower than expected sales call and prescription volumes. AVINZA could also face stiffer competition from existing or future pain products. The negative impact on the AVINZA's sales growth in turn may negatively affect Ligand's royalties, revenues and earnings.

AVINZA sales 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 product safety and abuse issues, regulatory action, and the inability to obtain sufficient quotas of morphine from the Drug

Enforcement Agency to support production requirements. With respect to regulatory action and product safety issues, 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 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.

Ligand's stock price has been volatile and could experience a sudden decline in value.

Ligand's common stock has experienced significant price and volume fluctuations and may continue to experience volatility in the future. As a result, stockholders may not be able to sell their shares quickly or at the latest market price if trading in Ligand's stock is not active or the volume is low. Many factors may have a significant impact on the market price of Ligand's common stock, including, but not limited to, the following factors: results of or delays in Ligand's preclinical studies and clinical trials; the success of Ligand's collaboration agreements; publicity regarding actual or potential medical results relating to products under development by Ligand or others; announcements of technological innovations or new commercial products by Ligand or others; developments in patent or other proprietary rights by Ligand or others; comments or opinions by securities analysts or major stockholders; future sales of Ligand's 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 Ligand's 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 SEC have adopted certain new rules. If Ligand were unable to continue to comply with the new rules, it could be delisted from trading on Nasdaq, and thereafter trading in Ligand's 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, Ligand's common stock. Delisting of Ligand's common stock could also result in lower prices per share of its common stock than would otherwise prevail.

Ligand's product development is uncertain, and Ligand may never generate sufficient collaborative payments and royalties from the development of products to become profitable.

Ligand was founded in 1987. Ligand has incurred significant losses since its inception. As of June 30, 2008, Ligand's accumulated deficit was $591.9 million.

Most of Ligand's products in development will require extensive additional development, including preclinical testing and human studies, as well as regulatory approvals, before they can be marketed. Ligand cannot predict if or when any of the products it is developing or those being developed with its partners will be approved for marketing. There are many reasons why Ligand or its collaborative partners may fail in their efforts to develop their potential products, including the possibility that: preclinical testing or human studies may show that their 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 the products, which could adversely affect their commercial success; or the proprietary rights of other parties may prevent Ligand or its partners from marketing the products.

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

The past restatement of Ligand's consolidated financial statements increased the possibility of legal or administrative proceedings. Any future material weaknesses or deficiencies in Ligand's internal control over financial reporting could harm stockholder and business confidence on its financial reporting, its ability to obtain financing and other aspects of its business.

Ligand determined that its 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 Ligand's 2004 annual report on Form 10-K, should be restated. As a result of these events, Ligand has become subject to a number of additional risks and uncertainties. Ligand expects to continue to incur unanticipated accounting and legal costs as noted below. In addition, the SEC instituted a formal investigation into Ligand's restated consolidated financial statements identified above. This investigation will likely continue to divert more of Ligand's management's time and attention and cause Ligand to continue to incur substantial costs. Such investigations can also lead to fines or injunctions or orders with respect to future activities, as well as further substantial costs and diversion of Ligand's management time and attention.

While no material weaknesses were identified as of December 31, 2007, Ligand 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 Ligand's consolidated financial statements. Substantial costs and resources may be required to rectify any internal control deficiencies. If Ligand fails to achieve and maintain the adequacy of its internal controls in accordance with applicable standards, it may be unable to conclude on an ongoing basis that it has effective internal controls over financial reporting. If Ligand cannot produce reliable financial reports, its business and financial condition could be harmed, investors could lose confidence in its reported financial information, or the market price of its stock could decline significantly. In addition, Ligand's ability to obtain additional financing to operate and expand its business, or obtain additional financing on favorable terms, could be materially and adversely affected, which, in turn, could materially and adversely affect its business, its financial condition and the market value of its securities. Moreover, Ligand's 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 Ligand's business.

Ligand's success will depend on its ability and the ability of its licensors to obtain and maintain patents and proprietary rights for its 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. Ligand's 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. Ligand may not develop or obtain rights to products or processes that are patentable. Even if Ligand does obtain patents, such patents may not adequately protect the technology Ligand owns or has licensed. In addition, others may challenge, seek to invalidate, infringe or circumvent any patents Ligand owns or licenses and rights Ligand receives under those patents may not provide competitive advantages to Ligand.

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

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

Ligand also relies on unpatented trade secrets and know-how to protect and maintain its competitive position. Ligand requires its employees, consultants, collaborative partners and others to sign confidentiality agreements when they begin their relationship with Ligand. These agreements may be breached, and Ligand may not have adequate remedies for any breach. In addition, Ligand's competitors may independently discover its trade secrets.

Ligand's legacy commercial product lines expose it to product liability risks and Ligand may not have sufficient insurance to cover any claims.

Ligand completed the sale of its commercial product lines in February 2007. Nevertheless, products Ligand sold prior to divesting these product lines expose it to potential product liability risks. For example, such products may need to be recalled to address regulatory issues. A successful product liability claim or series of claims brought against Ligand could result in payment of significant amounts of money and divert management's attention from running its business.

In addition, some of the compounds Ligand is investigating may be harmful to humans. Ligand believes that it carries reasonably adequate insurance for product liability claims. However, Ligand may not be able to maintain its insurance on commercially reasonable terms, or its 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, Ligand will be required to self-insure the risks associated with such claims.

Ligand will have continuing obligations to indemnify the buyers of its commercial product lines, and may be subject to other liabilities related to the sale of Ligand's commercial product lines.

In connection with the sale of Ligand's AVINZA product line, Ligand has 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, Ligand has agreed to indemnify Eisai, the purchaser of its Oncology product line, for damages suffered by Eisai arising from any breach of Ligand's representations, warranties, covenants or obligations in the asset purchase agreement. Ligand's obligation to indemnify Eisai extends beyond the closing of the sale of its 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, Ligand's obligation to indemnify Eisai survives in perpetuity. Under Ligand's agreement with King, $15.0 million of the total upfront cash payment was deposited into an escrow account to secure Ligand's indemnification obligations to King. As of March 31, 2008, all amounts in the King escrow account had been released to Ligand. Similarly, Ligand's agreement with Eisai required that $20.0 million of the total upfront cash payment be deposited into an escrow account to secure its indemnification obligations to Eisai. As of June 30, 2008, all amounts in the Eisai escrow account had been released to Ligand.

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 Ligand, including AVINZA royalty payments. Under the asset purchase agreements, Ligand's 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, Ligand's indemnification obligation is not subject to the foregoing limits on liability. For example, Ligand is obligated to indemnify King, without limitation, for all liabilities arising under certain agreements with Catalent Pharma Solutions related to the manufacture of AVINZA. Similarly, Ligand is obligated to indemnify Eisai, without limitation, for all liabilities related to certain claims regarding promotional materials for the ONTAK and Targretin drug products. Ligand cannot predict the liabilities that may arise as a result of these matters. Any claims related to Ligand's indemnification obligations to King or Eisai could materially and adversely affect Ligand's financial condition.

In connection with the AVINZA sale transaction, King assumed Ligand's obligation to make payments to Organon based on net sales of AVINZA (the fair value of which was $59.0 million as of June 30, 2008). As Organon did not consent to the legal assignment of the co-promote termination obligation from Ligand to King, Ligand remains liable to Organon in the event King defaults on this obligation. Any successful claim brought against Ligand or any requirement to pay a material amount to Organon, could adversely affect Ligand's business and the price of its securities.

If Ligand does not reach the market with its products before its competitors offer products for the same or similar uses, or if Ligand is not effective in marketing its products, its revenues from product sales, if any, will be reduced.

Ligand faces intense competition in its development activities. Many of its competitors are fully integrated pharmaceutical companies and more established biotechnology companies, which have substantially greater financial, technical, sales and marketing and human resources than Ligand does. These companies might succeed in obtaining regulatory approval for competitive products more rapidly than Ligand can for its 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 Ligand, which could impair its product development and render its technology obsolete.

Ligand uses hazardous materials, which requires it to incur substantial costs to comply with environmental regulations.

In connection with Ligand's research and development activities, Ligand handles hazardous materials, chemicals and various radioactive compounds. To properly dispose of these hazardous materials in compliance with environmental regulations, Ligand is required to contract with third parties at a substantial cost. Ligand's annual cost of compliance with these regulations is approximately $0.7 million. In addition, Ligand believes that it carries reasonably adequate insurance for toxic tort claims. However, Ligand cannot eliminate the risk or predict the exposure of accidental contamination or injury from the handling and disposing of hazardous materials, whether by Ligand or its third-party contractors. Any accident in the handling and disposing of hazardous materials may expose Ligand to significant liability.

Ligand's shareholder rights plan and charter documents may hinder or prevent change of control transactions.

Ligand's shareholder rights plan and provisions contained in its certificate of incorporation and bylaws may discourage transactions involving an actual or potential change in Ligand's ownership. In addition, Ligand's 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 Ligand's ownership. If changes in Ligand's ownership are discouraged, delayed or prevented, it would be more difficult for Ligand's current board of directors to be removed and replaced, even if Ligand's stockholders believe that such actions are in the best interests of Ligand and its stockholders.

Return from any dividend is speculative; stockholders may not receive a return on their securities.

In general, Ligand intends to retain any earnings to support the expansion of its business. Ligand has previously paid a special dividend of a substantial portion of the net proceeds from its product line asset sales. However, other than this special dividend, Ligand does not anticipate paying cash dividends on any of its securities in the foreseeable future. Any returns stockholders receive from Ligand's stock will be highly dependent on increases in the market price for Ligand's securities, if any. The price for Ligand's common stock has been highly volatile and may decrease.

Ligand may lose some or all of the value of some of its short term investments.

Ligand engages one or more third parties to manage some of its 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. In light of the recent changes in the credit market, one of Ligand's short term investments in commercial paper is now in default. Ligand intends to pursue collection efforts, but it might not recoup some or all of its investment in the commercial paper. In addition, from time to time Ligand may suffer other losses on its short term investment portfolio.

Ligand may require additional money to run its business and may be required to raise this money on terms which are not favorable to it or which reduce its stock price.

Ligand may need to complete additional equity or debt financings to fund its operations. Ligand's inability to obtain additional financing could adversely affect its business. Financings may not be available at all or on terms favorable to Ligand. In addition, these financings, if completed, may not meet Ligand's capital needs and could result in substantial dilution to its stockholders.

If adequate funds are not available, Ligand may be required to delay, reduce the scope of or eliminate one or more of its research or drug development programs. Ligand may also be required to liquidate its business or file for bankruptcy protection. Alternatively, Ligand may be forced to attempt to continue development by entering into arrangements with collaborative partners or others that require it to relinquish some or all of its rights to technologies or drug candidates that it would not otherwise relinquish.

Ligand's drug development programs will require substantial additional future funding which could hurt its operational and financial condition.

Ligand's 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.

Ligand's future operating and capital needs will depend on many factors, including: the pace of scientific progress in Ligand's 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; Ligand's ability to establish additional collaborations; changes in Ligand's existing collaborations; the cost of manufacturing scale-up; and the effectiveness of Ligand's commercialization activities.

Ligand expects its research and development expenditures over the next three years to continue to be significant. However, Ligand bases its outlook regarding the need for funds on many uncertain

variables. Such uncertainties include regulatory approvals, the timing of events outside Ligand's 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 Ligand's cash requirements.

While Ligand expects to fund its research and development activities primarily from cash generated from AVINZA royalties to the extent possible, if Ligand is unable to do so, it may need to complete additional equity or debt financings or seek other external means of financing. These financings could depress Ligand's stock price. If additional funds are required to support Ligand's operations and it is unable to obtain them on terms favorable to Ligand, Ligand may be required to cease or reduce further development or commercialization of its products, to sell some or all of its technology or assets or to merge with another entity.

Significant returns of products Ligand sold prior to selling its commercial businesses could harm its operating results.

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

Risks Related to Pharmacopeia

If Pharmacopeia consumes cash more quickly than expected, and if Pharmacopeia is unable to raise additional capital, Pharmacopeia may be forced to curtail operations.

As of June 30, 2008, Pharmacopeia had cash, cash equivalents and marketable securities of approximately $44.4 million. In addition, as of June 30, 2008, Pharmacopeia had deferred revenue of approximately $46.2 million relating to research and development activities that are to be performed by it subsequent to June 30, 2008. Pharmacopeia's cash used in operating activities for the six months ended June 30, 2008 was approximately $25.0 million, which included $5.0 million in upfront payments from collaborators. Excluding these receipts, Pharmacopeia's cash used in operating activities would have been $30.0 million for the six months ended June 30, 2008. As the development of Pharmacopeia's clinical programs progresses, Pharmacopeia expects this amount to increase in the future. Clinical and preclinical development of drug candidates is a long, expensive and uncertain process that may require Pharmacopeia to raise funds from time to time to support its internal development programs.

Examples of relevant potential changes that could impact Pharmacopeia's capital resources include:

- the costs associated with Pharmacopeia's drug research and development activities, including the costs associated with Pharmacopeia's Phase 2 and Phase 1 clinical development programs for its product candidates PS433540 and PS178990 and additional costs Pharmacopeia may incur if its development programs are delayed or are more expensive to implement than it currently anticipates;

- changes in existing collaborative relationships, including the funding Pharmacopeia receives in connection with those relationships;

- the progress of Pharmacopeia's milestone and royalty producing activities;

- acquisitions of other businesses or technologies;

the purchase of additional capital equipment;

cash refunds Pharmacopeia may be required to make to GlaxoSmithKline (GSK) if, prior to March 24, 2011, Pharmacopeia exercises its discretionary termination right under its product development and commercialization agreement with GSK;

cash payments Pharmacopeia may be required to make to Schering-Plough Corporation relating to a termination fee if, prior to August 2010, Pharmacopeia exercises its discretionary termination right under its amended and restated collaboration and license agreement with Schering-Plough Corporation;

cash payments Pharmacopeia may be required to make to Bristol-Myers Squibb if Pharmacopeia fails to deliver certain compound libraries under the license agreement for the DARA program, or DARA License Agreement;

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. Despite active efforts, Pharmacopeia was not able to secure appropriate financing to further the development of its business during the period from November 2007 through August 2008. If adequate funds are not available, Pharmacopeia may be required to further curtail operations significantly or to obtain funds by entering into arrangements with partners or others that may require Pharmacopeia to relinquish rights to certain of its technologies, products or potential markets that Pharmacopeia would not otherwise relinquish.

Because PS433540 is in Phase 2 clinical development and PS178990 is in Phase 1 clinical development, there is a high risk that further development and testing will demonstrate that neither compound is suitable for commercialization. In addition, because Pharmacopeia exclusively licensed each of PS433540 and PS178990 from Bristol-Myers Squibb, any dispute with Bristol-Myers Squibb may adversely affect its ability to develop and commercialize those product candidates.

Pharmacopeia has no products that have received regulatory approval for commercial sale. PS433540 is in Phase 2 clinical development and PS178990 is in Phase 1 clinical development. Pharmacopeia faces the substantial risks of failure inherent in developing drugs based on new technologies.

Both PS433540 and PS178990 must satisfy rigorous standards of safety and efficacy before the FDA and foreign regulatory authorities will approve either product candidate for commercial use. Phase 1 clinical trials with PS178990 may not demonstrate that the product candidate is sufficiently safe to warrant its continued development, and Phase 2 clinical trials with PS433540 may not demonstrate that it is safe or efficacious with respect to the clinical indications for which Pharmacopeia seeks to develop it. Pharmacopeia will need to conduct significant additional clinical trials to demonstrate the safety and efficacy of PS433540 and PS178990 to the satisfaction of the FDA and foreign regulatory authorities to obtain product approval.

Clinical development is a long, expensive and uncertain process. It may take Pharmacopeia many years to complete clinical trials, and failure can occur at any stage of trials. Success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful. Pharmacopeia may suffer significant setbacks in advanced clinical trials, even after promising results in earlier trials. Pharmacopeia may not be able to enroll a sufficient number of patients to complete its clinical trials in a timely manner. Based on results at any stage of preclinical testing or clinical trials, Pharmacopeia may decide to discontinue development of PS433540 and PS178990.

Pharmacopeia does not know whether any future clinical trials of PS433540 or PS178990 will demonstrate sufficient safety and efficacy necessary to obtain the requisite regulatory approvals or will result in marketable products. Pharmacopeia's failure to adequately demonstrate the safety and efficacy of PS433540 or PS178990 in their respective development programs will prevent receipt of FDA and foreign regulatory approvals and, ultimately, commercialization.

If there is any dispute between Pharmacopeia and Bristol-Myers Squibb regarding Pharmacopeia's rights under the DARA License Agreement, Pharmacopeia's ability to develop and commercialize PS433540 may be adversely affected. Any loss of Pharmacopeia's rights from Bristol-Myers Squibb could delay or completely terminate Pharmacopeia's product development efforts for PS433540 and other DARA compounds licensed from Bristol-Myers Squibb. Similarly, if there is any dispute between Pharmacopeia and Bristol-Myers Squibb regarding Pharmacopeia's rights under the discovery collaboration agreement relating to Pharmacopeia's selective androgen receptor modulator (SARM) program and/or performance under the discovery collaboration agreement, Pharmacopeia's ability to develop and commercialize PS178990 may be adversely affected. Any loss of Pharmacopeia's rights from Bristol-Myers Squibb could delay or completely terminate Pharmacopeia's product development efforts for PS178990 and other SARM compounds licensed from Bristol-Myers Squibb.

Pharmacopeia's development of PS433540 may be adversely impacted if its clinical trials show certain adverse effects reported by other companies in connection with clinical trials of their ERA and ARB product candidates.

Abnormal liver function test (LFT) results, which are indicative of potential liver toxicity, have been reported by other companies as complications in their clinical trials of endothelin receptor antagonists (ERAs) product candidates. Approval of PS433540 may be delayed or ultimately blocked by such concerns. If the results of any of Pharmacopeia's PS433540 clinical trials indicate abnormal LFTs, Pharmacopeia may not receive regulatory approval to market the product candidate and Pharmacopeia's product candidate, if approved for marketing, may not be able to compete with other products. There can be no assurance that the lack of LFT abnormalities seen with respect to PS433540 prior to now will be confirmed by subsequent clinical trial results.

As developed by other companies, ERAs and angiotensin receptor blockers (ARBs) have been teratogenic in animals. If approved for marketing, Pharmacopeia assumes that PS433450 will be subject to a black box warning regarding teratogenicity and therefore may not be able to compete with other products that do not have a similar warning.

Prior clinical trials by other companies have also indicated that the ERA therapeutic class may cause peripheral edema (fluid retention) in some patients. Consequently, Pharmacopeia may not receive regulatory approval to market PS433540, and PS433540, if approved for marketing, may not be able to compete with other products.

Pharmacopeia's development of PS178990 may be adversely impacted if its clinical trials show certain adverse effects reported in connection with testosterone and other anabolic steroids.

Testosterone and other anabolic steroids may cause serious unwanted side effects, including stimulating prostate cancer growth in men and masculinization in women. Approval of PS178990 may be delayed or ultimately blocked by such concerns. If the results of any of Pharmacopeia's PS178990 clinical trials indicate such stimulation of prostate cancer growth or masculinization, Pharmacopeia may not receive regulatory approval to market the product candidate and Pharmacopeia's product candidate, if approved for marketing, may not be able to compete with other products.

Pharmacopeia had net losses in recent years and its future profitability is uncertain.

During the year ended December 31, 2007, Pharmacopeia had a net loss of approximately $47.9 million. The net loss was primarily due to costs incurred in Pharmacopeia's internal product development efforts, including the costs of developing PS433540, which is currently in Phase 2 clinical trials, and the research and development of its other product candidates.

In connection with the acquisition of the SARM program, Pharmacopeia recorded a non-cash charge of $9.2 million to proprietary research and development expense. The amount of this charge approximates the fair value of the chemistry resources Pharmacopeia is to provide to Bristol-Myers Squibb under the discovery collaboration agreement.

Pharmacopeia expects to incur losses in future periods. Despite active efforts, Pharmacopeia was not able to secure appropriate financing to further the development of its business during the period from November 2007 through August 2008.

Pharmacopeia's adoption of SFAS No. 123 (revised 2004) "Share-Based Payment" (SFAS 123R), which was effective January 1, 2006, increased Pharmacopeia's compensation costs and will continue to have a significant impact on its results of operations. In addition, under Emerging Issues Task Force (EITF) No. 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock" (EITF 00-19), the accounting treatment of the warrants that Pharmacopeia issued in its October 2006 equity financing may have a significant impact on its results of operations, depending on the volatility of the market price of its common stock and the assumptions used in calculating the fair value of the warrants.

On a quarterly basis, Pharmacopeia's future operating results are likely to be highly volatile depending upon its receipt, if any, of milestone payments from its collaborators. Pharmacopeia may not receive milestone payments on a regular basis or at all. Pharmacopeia ability to achieve profitability, if ever, will be significantly impacted by the level of investment it plans to make in its internal proprietary programs in the future, as well as the results of those programs.

Continuing net losses may limit Pharmacopeia's ability to fund its operations and Pharmacopeia may not generate income from operations in the future.

Pharmacopeia's current revenue stream is highly dependent upon the extent to which the pharmaceutical and biotechnology industries collaborate with drug discovery and development companies for one or more aspects of their drug discovery and development process.

Pharmacopeia's revenue depends to a large extent on research and development expenditures by the pharmaceutical and biotechnology industries. Pharmacopeia's capabilities include aspects of the drug discovery and development process that pharmaceutical companies have traditionally performed internally. Although there is a history among pharmaceutical and biotechnology companies of outsourcing drug research and development functions, this practice may not continue.

The willingness of these companies to expand or continue collaborations to enhance their research and development activities is based on certain factors that are beyond Pharmacopeia's control. While Pharmacopeia is unaware of a specific reason that any of the following factors will have a material impact on the willingness of current or potential collaborators to expand or continue collaborations, examples of relevant factors include collaborators' changing spending priorities among various types of research activities, the increased presence of offshore companies that conduct research and have lower full-time equivalent costs than Pharmacopeia's, their ability to hire and retain qualified scientists, their approach regarding expenditures during recessionary periods and their policies regarding the balance of research expenditures versus cost containment. Also, general economic downturns in Pharmacopeia's collaborators' industries, adverse changes in the regulatory environment, the adverse impact of product litigation on Pharmacopeia's collaborators' businesses or any decrease in Pharmacopeia's research and

development expenditures could harm Pharmacopeia's operations, as could increased popularity of management theories, which counsel against outsourcing of critical business functions.

Continued consolidation in the pharmaceutical and biotechnology industries may further decrease the number of potential collaborators for Pharmacopeia or may alter the priorities of its current collaborators. For example, in 2007, subsequent to Pharmacopeia's entering into an agreement with N.V. Organon, Schering-Plough acquired N.V. Organon.

In addition, the popularity of scientific thinking that disfavors elements of Pharmacopeia's technology platform, such as large diverse libraries, could negatively impact Pharmacopeia's business. Any decrease in drug discovery spending by pharmaceutical and biotechnology companies could cause Pharmacopeia's revenue to decline.

Pharmacopeia's ability to collaborate with large pharmaceutical and biotechnology companies will depend on many factors, including its ability to:

- discover and develop high-quality drug candidates;
- identify and utilize scientists and technologies that are of the highest caliber; and
- achieve results in a timely fashion, with acceptable quality and at an acceptable cost.

The importance of these factors varies from collaborator to collaborator, and Pharmacopeia may be unable to meet any or all of them for some or all of its collaborators in the future.

If third parties do not manufacture PS433540 in sufficient quantities and at an acceptable cost, clinical development of PS433540 would be delayed.

Pharmacopeia does not currently own or operate manufacturing facilities, and Pharmacopeia's relies, and expect to continue to rely, on third parties for the production of clinical quantities of its product candidates. Pharmacopeia's current and anticipated future dependence upon others for the manufacture of its product candidates may adversely affect its future profit margins and its ability to develop product candidates and commercialize any product candidates on a timely and competitive basis.

Pharmacopeia has relied on third party vendors for the manufacture of clinical quantities of PS433540, and Pharmacopeia is currently assessing its manufacturing needs for additional clinical trial supply of PS433540 as it reviews its clinical strategy for PS433540. Pharmacopeia will evaluate whether to continue to rely on the manufacturing capabilities of its current third party vendors or whether some or all of the manufacturing process should be transferred to other contract manufacturers as it plans for its additional clinical trials. If Pharmacopeia's current supply of PS433540 becomes unusable, if its PS433540 supply is not sufficient to complete its clinical trials, or if Pharmacopeia is unsuccessful in identifying a contract manufacturer or negotiating a manufacturing agreement on a timely basis for its additional clinical trials, Pharmacopeia could experience a delay in receiving an adequate supply of PS433540.

Pharmacopeia may not be able to maintain or renew its existing or any other third-party manufacturing arrangements on acceptable terms, if at all. If Pharmacopeia is unable to continue relationships for PS433540, or to do so at an acceptable cost, or if these or other suppliers fail to meet its requirements for PS433540 for any reason, Pharmacopeia would be required to obtain alternate suppliers. Any inability to obtain alternate suppliers, including an inability to obtain approval from the FDA of an alternate supplier, would delay or prevent the clinical development of these product candidates.

Use of third-party manufacturers may increase the risk that Pharmacopeia will not have adequate supplies of its product candidates.

Reliance on third-party manufacturers entails risks to which Pharmacopeia would not be subject if it manufactured product candidates or products itself, including:

- Reliance on the third party for regulatory compliance and quality assurance;
- The possible breach of the manufacturing agreement by the third party because of factors beyond Pharmacopeia's control; and
- The possible termination or non-renewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for Pharmacopeia.

If Pharmacopeia is not able to obtain adequate supplies of its product candidates, it will be more difficult for Pharmacopeia to develop its product candidates and compete effectively. Pharmacopeia's product candidates and any products that Pharmacopeia may develop may compete with other product candidates and products for access to manufacturing facilities.

Pharmacopeia's present or future manufacturing partners may not be able to comply with FDA-mandated current Good Manufacturing Practice regulations, other FDA regulatory requirements or similar regulatory requirements outside the United States. Failure of its third-party manufacturers or Pharmacopeia to comply with applicable regulations could result in sanctions being imposed on Pharmacopeia, including fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval of its product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of Pharmacopeia's product candidates.

Pharmacopeia is dependent on its collaborations, and events involving these collaborations or any future collaborations could prevent Pharmacopeia from developing or commercializing product candidates.

The success of Pharmacopeia's current business strategy will depend in part on its ability to successfully perform under and manage strategic collaborations. Since Pharmacopeia does not currently possess the resources necessary to independently develop and commercialize all of the product candidates that may be discovered through its drug discovery technology, Pharmacopeia may need to enter into additional collaborative agreements to assist in the development and commercialization of some of these product candidates or in certain markets for a particular product candidate. Establishing strategic collaborations is difficult and time-consuming. Potential collaborators may reject collaborations based upon their assessment of Pharmacopeia's financial, regulatory or intellectual property position, and Pharmacopeia's discussions with potential collaborators may not lead to the establishment of new collaborations on acceptable terms.

Pharmacopeia and its present and future collaborators may fail to develop or effectively commercialize products covered by its present and future collaborations if:

- Pharmacopeia does not achieve its objectives under its collaboration agreements;
- Pharmacopeia or its collaborators are unable to obtain patent protection for the product candidates or proprietary technologies Pharmacopeia discovers in its collaborations;
- Pharmacopeia is unable to manage multiple simultaneous product discovery and development collaborations;
- Pharmacopeia's potential collaborators are less willing to expend their resources on Pharmacopeia's programs due to their focus on other programs or as a result of general market conditions;

Pharmacopeia's collaborators become competitors of Pharmacopeia's or enter into agreements with Pharmacopeia's competitors;

Pharmacopeia or its collaborators encounter regulatory hurdles that prevent commercialization of Pharmacopeia's product candidates;

Pharmacopeia develops products and processes or enters into additional collaborations that conflict with the business objectives of Pharmacopeia's other collaborators; or

Pharmacopeia's collaborators elect to terminate Pharmacopeia's partnerships under the permitted circumstances.

If Pharmacopeia or its collaborators are unable to develop or commercialize products as a result of the occurrence of any one or a combination of these events, Pharmacopeia will be prevented from developing and commercializing such product candidates. Moreover, disputes may arise with respect to the ownership of rights to any technology or products developed with any current or future partner. Lengthy negotiations with potential new partners or disagreements between Pharmacopeia and Pharmacopeia's partners may lead to delays or termination in the research, development or commercialization of product candidates. If Pharmacopeia is not able to establish additional partnerships on terms that are favorable to it or if a significant number of Pharmacopeia's existing partnerships are terminated and Pharmacopeia cannot replace them, Pharmacopeia may be required to increase its internal product development and commercialization efforts. Any of the foregoing may materially harm Pharmacopeia's business, financial condition and results of operations.

The development of Pharmacopeia's internal and collaborative products is at an early stage and is uncertain.

Drug development is a highly uncertain process. Pharmacopeia's approach and technology may never result in a commercial drug. None of Pharmacopeia's programs has resulted in products that have received regulatory approval for commercial sale. Pharmacopeia's most advanced internal compound, PS433540, is in Phase 2 clinical trials. Currently Pharmacopeia's collaborators have advanced multiple programs into active clinical trials. All of Pharmacopeia's therapeutic candidates, including these clinical candidates, face the substantial risks of failure inherent in the drug development process. Any potential pharmaceutical product emanating from one of Pharmacopeia's internal or collaborative programs must satisfy rigorous standards of safety and efficacy before the FDA and foreign regulatory authorities will approve them for commercial use. To satisfy these standards, significant additional research, preclinical studies and clinical trials will be required.

Pharmacopeia's internal and collaborative programs are in early stages relative to generating a commercial product. Therefore, Pharmacopeia and its collaborators must engage in significant, time-consuming and costly research and development efforts followed by Pharmacopeia's and its collaborators' applications for and receipt of, regulatory approvals. Consequently, Pharmacopeia does not expect compounds from these development activities to result in commercially available products for many years, if at all.

If Pharmacopeia's collaborators are not able to successfully develop its existing clinical candidates, Pharmacopeia's business will be harmed.

Pharmacopeia's collaborators Schering Corporation and Schering-Plough Ltd. (together Schering-Plough), Bristol-Myers Squibb and Celgene Corporation, currently are undertaking active clinical trials of prospective pharmaceutical products containing Pharmacopeia's proprietary compounds.

In each case, the collaborator is responsible for the development of these potential products, the level of resources devoted to such development and the decision as to when, or whether, such development should cease. Numerous additional studies are necessary to support the further development of these product candidates. Results from preclinical and clinical studies conducted to

date on these product candidates are not necessarily indicative of the results that may be obtained in clinical studies. Clinical results could cause Pharmacopeia's collaborators to discontinue or limit development of these product candidates. For example, in each of August 2007 and November 2005, Schering-Plough informed Pharmacopeia that it had discontinued Phase 1 clinical trials for the respective clinical compounds developed from leads from Pharmacopeia's collaboration with Schering-Plough. There can be no assurance that Schering-Plough, Bristol-Myers Squibb and Celgene will continue to develop the current clinical programs.

In addition, Pharmacopeia's collaborators may pursue alternative technologies or drug candidates, either on their own or in collaboration with others, that compete with the clinical candidates on which they collaborate with Pharmacopeia. If Pharmacopeia's collaborators do not continue their development efforts or if such efforts do not result in positive clinical results, Pharmacopeia will not receive additional milestone and royalty payments from those efforts, and Pharmacopeia's business will be harmed.

Pharmacopeia's stock price may be volatile and Pharmacopeia's stock could decline in value.

The market price for Pharmacopeia's common stock has been highly volatile and may continue to be highly volatile in the future. During the nine months ended September 30, 2008, the closing market price of Pharmacopeia's common stock ranged from $1.19 per share at its low point in September 2008 to $5.46 per share at its high point in January 2008. Results from Pharmacopeia's development programs, especially the DARA program, Pharmacopeia's quarterly operating results, changes in general conditions in the economy or the financial markets, and other developments affecting Pharmacopeia's competitors or Pharmacopeia could cause the market price of its common stock to continue to fluctuate substantially. In recent months, the stock market has experienced significant price and volume fluctuations.

While Pharmacopeia is unaware of a specific reason that any of the following factors will have a material impact on its stock price, the following factors, in addition to the factors described in the other risk factors contained in this report, may have a significant impact on the market price of Pharmacopeia's common stock:

- publicity concerning the status of potential drug products under development by Pharmacopeia or its collaborators or its competitors and their partners;
- reduction, termination or expiration of Pharmacopeia's collaborations;
- announcements by Pharmacopeia or its competitors of significant acquisitions, strategic partnerships or joint ventures;
- announcements of technological innovations or new commercial products by Pharmacopeia or its competitors;
- developments concerning proprietary rights, including patents;
- litigation;
- economic and other external factors or disasters or other crises;
- actual or anticipated period-to-period fluctuations in its financial results;
- changes in financial estimates prepared by securities analysts;
- differences in the valuations assigned by the equity markets and, in particular, the biopharmaceutical sector of the equity markets, to biopharmaceutical companies like Pharmacopeia that have more drug discovery than drug development capabilities; and
- the general performance of the equity markets and, in particular, the biopharmaceutical sector of the equity markets.

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Disputes may arise between Pharmacopeia's partners and Pharmacopeia as to royalties and milestones to which Pharmacopeia believes it is entitled.

The compound basis for drugs developed by a partner may be a derivative or optimized version of the compound screened or optimized by Pharmacopeia. While Pharmacopeia's existing collaborative agreements provide that Pharmacopeia will receive milestone payments and royalties with respect to certain products developed from certain derivative compounds, there can be no assurance that disputes will not arise over the application of payment provisions to such products.

There can be no assurance that current or future partners will not pursue alternative technologies, or develop alternative products either on their own or in collaboration with others, including Pharmacopeia's competitors, as a means for developing treatments based on the targets which are the subject of the collaborative arrangements with Pharmacopeia.

In addition, many of Pharmacopeia's agreements that provide for potential royalty payments to Pharmacopeia also contain provisions that reduce Pharmacopeia's expected royalty if a partner is also required to pay a royalty on a product to a third party.

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

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

If Pharmacopeia cannot manage the multiple relationships and interests involved in its collaborative arrangements and internal programs, Pharmacopeia's business, financial condition and results of operations may be materially adversely affected.

Pharmacopeia needs to successfully structure and manage multiple internal programs and collaborative relationships, including maintaining confidentiality of the research being performed for multiple collaborators. Pharmacopeia may be unable to successfully manage conflicts between competing drug development programs of third parties to which it offers services. From time to time, more than one of Pharmacopeia's collaborators may want to perform research concerning the same or molecularly similar disease targets.

Because of that, Pharmacopeia may be required to reconcile its relationships with those collaborators, particularly if both want to establish exclusive relationships with Pharmacopeia with respect to that target or if one collaborator has an existing arrangement with Pharmacopeia and the other would like Pharmacopeia to perform services regarding a target restricted by that arrangement.

Further, if Pharmacopeia is working with a collaborator regarding a particular target, another of Pharmacopeia's collaborators may be researching the same target in one of its internal programs of which Pharmacopeia may have no knowledge. As a result, potential conflicts involving Pharmacopeia may arise due to this competition between collaborators in a particular disease field of interest.

Conflicts also may arise between Pharmacopeia's collaborators as to proprietary rights to particular compounds in Pharmacopeia's libraries or as to proprietary rights to biological targets such as receptors

or enzymes against which Pharmacopeia screens compounds in its libraries. The occurrence of conflicts, or the perception of conflicts, could have a material adverse effect on Pharmacopeia's business, financial condition and results of operations.

If Pharmacopeia uses hazardous materials in a manner that causes injury or violates laws, Pharmacopeia may be liable for damages.

Pharmacopeia's activities involve the use of potentially harmful hazardous materials, chemicals and various radioactive compounds. These materials are utilized in the performance of Pharmacopeia's assay development, high-throughput screening and chemistry optimization services, and include common organic solvents, such as acetone, hexane, methylene chloride, acetonitrile, and isopropyl and methyl alcohol, as well as common acids and bases. The waste from utilization of these solvents and other materials is disposed of through licensed third-party contractors. Further, Pharmacopeia utilizes an extremely wide variety of chemicals in the performance of its assay development, screening and optimization services. These chemicals, such as reagents, buffers and inorganic salts, typically are employed in extremely small amounts in connection with the work performed in Pharmacopeia's laboratories.

Pharmacopeia cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling or disposal of these materials. In the event of contamination or injury, Pharmacopeia could be held liable for damages that result.

Pharmacopeia maintains insurance coverage against environmental hazards arising from the storage and disposal of the materials utilized in its business. Although Pharmacopeia's management believes that such insurance has terms, including coverage limits, which are appropriate for its business, liabilities arising from the use, storage, handling or disposal of these materials could exceed Pharmacopeia's insurance coverage, as well as its resources. Pharmacopeia is subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with these laws and regulations could be significant. To Pharmacopeia's knowledge, it has not been, and currently is not, the subject of any governmental investigation concerning the violation of these federal, state and local laws and regulations. There can be no assurance that Pharmacopeia will not be the subject of future investigations by governmental authorities.

Pharmacopeia and its products are subject to strict government regulation, which may limit the development of products by it or its collaborators.

Regulation by governmental entities in the United States and other countries will be a significant factor in the production and marketing of any pharmaceutical products Pharmacopeia or its collaborators may develop. The nature and the extent to which government regulation may apply to Pharmacopeia and its collaborators will vary depending on the nature of the pharmaceutical products, if any. Virtually all pharmaceutical products require regulatory approval prior to commercialization.

If Pharmacopeia or its collaborators or licensees fail to obtain, or encounter delays in obtaining or maintaining, regulatory approvals, Pharmacopeia's financial results could be adversely affected. Similar regulatory procedures are required in countries outside the United States.

In addition, new legislation related to health care could reduce the prices pharmaceutical and biotechnology companies can charge for drugs they sell which, in turn, could reduce the amounts that they have available for collaborative relationships with Pharmacopeia. If pharmaceutical and biotechnology companies decrease the resources they devote to the research and development of new drugs, the number of collaborations Pharmacopeia concludes could be adversely impacted and Pharmacopeia's revenue and profitability would be reduced. If prices that pharmaceutical and biotechnology companies can charge for drugs they sell decrease, the royalties, if any, Pharmacopeia

would receive from the sale of such drugs would also decrease, which would adversely impact Pharmacopeia's revenue and profitability.

Failure to attract and retain skilled personnel could materially and adversely affect Pharmacopeia.

Pharmacopeia is a small company and its success depends in part on the continued service of key scientific and management personnel and its ability to identify, hire and retain additional personnel. There is intense competition for qualified personnel. Immigration laws may further restrict Pharmacopeia's ability to attract or hire qualified personnel. Pharmacopeia may not be able to continue to attract and retain the personnel necessary for its growth and development. Failure to attract and retain key personnel could have a material adverse effect on its business, financial condition and results of operations. Further, Pharmacopeia is highly dependent on the principal members of its scientific and management staff. One or more of these key employees could retire or otherwise leave Pharmacopeia's employ within the foreseeable future and the loss of any of these people could have a material adverse effect on Pharmacopeia's business, financial condition and results of operations. Pharmacopeia does not, and does not intend to, maintain key person life insurance on the life of any employee.

If third parties on whom Pharmacopeia relies do not perform as contractually required or expected, Pharmacopeia may not be able to obtain regulatory approval for or to commercialize its product candidates.

Pharmacopeia does not have the ability to independently conduct clinical trials for its product candidates, and Pharmacopeia must rely on third parties, such as contract research organizations, medical institutions, clinical investigators and contract laboratories to conduct its clinical trials. In addition, Pharmacopeia relies on third parties to assist with its preclinical development of product candidates. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if the third parties need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to Pharmacopeia's clinical protocols or regulatory requirements or for other reasons, Pharmacopeia's preclinical development activities or clinical trials may be extended, delayed, suspended or terminated, and Pharmacopeia may not be able to obtain regulatory approval for, or successfully commercialize, its product candidates.

In addition, Pharmacopeia continues to depend heavily upon the expertise and dedication of sufficient resources by partners to develop and commercialize products primarily based on lead compounds discovered by Pharmacopeia. If a partner fails to develop or commercialize a compound or product with respect to which it has rights from Pharmacopeia, Pharmacopeia may not receive any future milestone payments or royalties associated with that compound or product.

Similarly, while Pharmacopeia is unaware of a specific reason that any of the following factors will be experienced by its partners, because it relies heavily on them, Pharmacopeia's revenue could be adversely affected if its partners:

fail to select a target or product candidate Pharmacopeia has identified for subsequent development;

fail to gain the requisite regulatory approvals for product candidates;

do not successfully commercialize products based on the compounds that Pharmacopeia originates;

do not conduct their collaborative activities in a timely manner;

do not devote sufficient time or resources to Pharmacopeia's partnered programs or potential products;

terminate their alliances or arrangements with Pharmacopeia;

develop, either alone or with others, products that may compete with Pharmacopeia's product candidates;

dispute Pharmacopeia's respective allocations of rights to any products or technology developed during collaborations; or

merge with or are acquired by a third party that seeks to terminate Pharmacopeia's collaboration.

Pharmacopeia's operations may be interrupted by the occurrence of a natural disaster or other catastrophic event at its primary facilities.

Pharmacopeia depends on its laboratories and equipment for the continued operation of its business. Pharmacopeia's research and development operations and administrative functions are primarily conducted at its facilities in the Princeton, New Jersey area. Although Pharmacopeia has contingency plans in effect for natural disasters or other catastrophic events, catastrophic events could still disrupt its operations.

Even though Pharmacopeia carries business interruption insurance policies, it may suffer losses as a result of business interruptions that exceed the coverage available under its insurance policies. Any natural disaster or catastrophic event in Pharmacopeia's facilities or the areas in which they are located could have a significant negative impact on Pharmacopeia's operations.

Accounting for Pharmacopeia's collaboration agreements, in-licensing agreements, revenues and costs, warrants and share-based compensation and other significant transactions involve significant estimates which, if incorrect, could have a material adverse effect on Pharmacopeia's financial position, results of operations and ability to raise capital.

As further described in "Critical Accounting Policies and Estimates" under "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Pharmacopeia's annual report on Form 10-K for the year ended December 31, 2007, accounting for Pharmacopeia's collaborative, development, and other transactions in the course of its business requires Pharmacopeia to make a variety of significant estimates and assumptions. Although Pharmacopeia believes it has sufficient experience and processes in place to enable it to formulate appropriate assumptions and produce reliable estimates, these assumptions and estimates may change significantly in the future and these changes could have a material adverse effect on Pharmacopeia's financial position, its results of operations and its ability to raise capital.

Positions taken by the United States Patent and Trademark Office or foreign patent and trademark officials may preclude Pharmacopeia from obtaining sufficient or timely protection for its intellectual property.

The patent positions of pharmaceutical and biotechnology companies are uncertain and involve complex legal and factual questions. The coverage claimed in a patent application can be significantly reduced before the patent is issued. There is a significant risk that the scope of a patent may not be sufficient to prevent third parties from marketing other products or technologies with the same functionality of Pharmacopeia's products and technologies. Consequently, some or all of Pharmacopeia's patent applications may not issue into patents, and any issued patents may provide ineffective remedies or be challenged or circumvented.

Third parties may have filed patent applications of which Pharmacopeia's may or may not have knowledge, and which may adversely affect Pharmacopeia's business.

Patent applications in the United States are maintained in secrecy for 18 months from filing or until a patent issues. Under certain circumstances, patent applications are never published but remain

in secrecy until issuance. As a result, others may have filed patent applications for products or technology covered by one or more pending patent applications upon which Pharmacopeia is relying. If applications covering similar technologies were to be filed before Pharmacopeia's applications, Pharmacopeia's patent applications may not be granted. There may be third-party patents, patent applications and other intellectual property or information relevant to Pharmacopeia's chemical compositions and other technologies that are not known to Pharmacopeia, that block it or compete with its chemical compositions or other technologies, or limit the scope of patent protection available to it. Moreover, from time to time, patents may issue which block or compete with Pharmacopeia's chemical compositions or other technologies, or limit the scope of patent protection available to it. Litigation may be necessary to enforce patents issued to Pharmacopeia or to determine the scope and validity of the intellectual property rights of third parties.

Pharmacopeia may not be able to protect adequately the trade secrets and confidential information that it discloses to its employees.

Pharmacopeia relies upon trade secrets, technical know-how and continuing technological innovation to develop and maintain its competitive position. Competitors through their independent discovery (or improper means, such as unauthorized disclosure or industrial espionage) may come to know its proprietary information. Pharmacopeia generally requires employees and consultants to execute confidentiality and assignment-of-inventions agreements. These agreements typically provide that all materials and confidential information developed by or made known to the employee or consultant during his, her or its relationship with Pharmacopeia are to be kept confidential, and that all inventions arising out of the employee's relationship with Pharmacopeia are Pharmacopeia's exclusive property. Pharmacopeia's employees and consultants may breach these agreements, and in some instances Pharmacopeia may not have an adequate remedy. Additionally, in some instances, Pharmacopeia may have failed to require that employees and consultants execute confidentiality and assignment-of-inventions agreements.

Foreign laws may not afford Pharmacopeia sufficient protections for its intellectual property, and Pharmacopeia may not seek patent protection outside the United States.

Pharmacopeia believes that its success depends, in part, upon its ability to obtain international protection for its intellectual property. However, the laws of some foreign countries may not be as comprehensive as those of the United States and may not be sufficient to protect Pharmacopeia's proprietary rights abroad. In addition, Pharmacopeia may decide not to pursue patent protection outside the United States because of cost and confidentiality concerns. Accordingly, Pharmacopeia's international competitors could obtain foreign patent protection for, and market overseas, products and technologies for which Pharmacopeia is seeking United States patent protection and they may be able to use these products and technologies to compete against Pharmacopeia.

Pharmacopeia may not be able to adequately defend its intellectual property from third party infringement, and third party challenges to Pharmacopeia's intellectual property may adversely affect its rights and be costly and time consuming.

Some of Pharmacopeia's competitors have, or are affiliated with companies having, substantially greater resources than Pharmacopeia has, and those competitors may be able to sustain the costs of complex patent litigation to a greater degree and for longer periods of time than Pharmacopeia. Uncertainties resulting from the initiation and continuation of any patent or related litigation could have a material adverse effect on Pharmacopeia's ability to compete in the marketplace pending resolution of the disputed matters. If Pharmacopeia's competitors prepare and file patent applications in the United States that claim technology also claimed by Pharmacopeia, Pharmacopeia may have to participate in interference proceedings declared by the United States Patent and Trademark Office to

determine the priority of invention, which could result in substantial costs to Pharmacopeia, even if the outcome is favorable to it. Similarly, opposition proceedings may occur overseas, which may result in the loss or narrowing of the scope of claims or legal rights. Such proceedings will at least result in delay in the issuance of enforceable claims. An adverse outcome could subject Pharmacopeia to significant liabilities to third parties and require Pharmacopeia to license disputed rights from third parties or cease using the technology.

A patent issued to Pharmacopeia may not be sufficiently broad to protect adequately its rights in intellectual property to which the patent relates.

Even if patents are issued to Pharmacopeia, these patents may not sufficiently protect its interest in its chemical compositions or other technologies because the scope of protection provided by any patents issued to or licensed by Pharmacopeia are subject to the uncertainties inherent in patent law. Third parties may be able to design around these patents or develop unique products providing effects similar to Pharmacopeia's products. In addition, others may discover uses for Pharmacopeia's chemical compositions or technologies other than those uses covered in its patents and these other uses may be separately patentable. A number of pharmaceutical and biotechnology companies, and research and academic institutions, have developed technologies, filed patent applications or received patents on various technologies that may be related to Pharmacopeia's business. Some of these technologies, patent applications or patents may conflict with Pharmacopeia's technologies, patent applications or patents. These conflicts could also limit the scope of patents, if any, that Pharmacopeia may be able to obtain, or result in the denial of Pharmacopeia's patent applications. Pharmacopeia is not currently aware of any such patent applications or patents that could have a material adverse effect on its business.

Pharmacopeia may be subject to claims of infringement by third parties.

Third parties may claim infringement by Pharmacopeia of their intellectual property rights. In addition, to the extent Pharmacopeia's employees are involved in research areas similar to those areas in which they were involved at their former employers, Pharmacopeia may be subject to claims that one of its employees, or Pharmacopeia, has inadvertently or otherwise used or disclosed the alleged trade secrets or other proprietary information of a former employer. From time to time, Pharmacopeia has received letters claiming or suggesting that Pharmacopeia's products or activities may infringe third party patents or other intellectual property rights. Pharmacopeia's products may infringe patent or other intellectual property rights of third parties. A number of patents may have been issued or may be issued in the future that could cover certain aspects of Pharmacopeia's technology and that could prevent Pharmacopeia from using technology that it uses or expects to use. Pharmacopeia may be required to seek licenses for, or otherwise acquire rights to, technology as a result of claims of infringement. Pharmacopeia may not possess proper ownership or access rights to the intellectual property it uses. Third parties or other companies may bring infringement suits against Pharmacopeia. Any claims, with or without merit, could be time consuming to defend, result in costly litigation, divert management's attention and resources or require Pharmacopeia to enter into royalty or licensing agreements. Royalty or licensing agreements, if required, may not be available on terms acceptable to Pharmacopeia, if at all. In the event of a successful claim of product infringement against Pharmacopeia, Pharmacopeia's failure or inability to license or design around the infringed technology could have a material adverse effect on Pharmacopeia's business, financial condition and results of operations. Pharmacopeia is not currently involved in actions of this type that are material to its business.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This proxy statement/prospectus and the documents incorporated by reference into this proxy statement/prospectus contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties, as well as assumptions, that, if they never materialize or prove incorrect, could cause the results of Ligand, Pharmacopeia or the combined company to differ materially from those expressed or implied by such forward-looking statements. Forward-looking statements generally are identified by the words "may," "will," "project," "might," "expects," "anticipates," "believes," "intends," "estimates," "should," "could," "would," "strategy," "plan," "continue," "pursue", or the negative of these words or other words or expressions of similar meaning. All statements other than statements of historical fact are statements that could be deemed forward-looking statements. For example, forward-looking statements include statements about Ligand's and Pharmacopeia's future financial and operating results, plans, expectations for potential research and development payments, cash burn rates, timing of achieving positive cash flow, potential revenue and profits of a combined company, costs and expenses, interest rates, outcome of contingencies, financial condition, liquidity, business strategies and cost savings; any statements of the plans, strategies and objectives of management for future operations, including the execution of integration and restructuring plans and the anticipated timing of filings, approvals and the closing related to the mergers; any statements concerning Ligand's and Pharmacopeia's product candidates and product development; any statements regarding future economic conditions or performance; statements of belief and any statement of assumptions underlying any of the foregoing. The risks, uncertainties and assumptions referred to above include the risk that the mergers may not close, including the risk that any required stockholder and/or regulatory approvals for the merger and related transactions may not be obtained; the possibility that expected synergies and cost savings will not be obtained or that litigation may delay the mergers; the difficulty of integrating the business, operations and employees of the two companies; as well as the reliance on collaborative partners for milestone and royalty payments, regulatory hurdles facing product candidates, uncertain product development costs, disputes regarding ownership of intellectual property, and the commercial success of any approved products; and other risks and uncertainties described in the section entitled "Risk Factors" and in the documents that are incorporated by reference into this proxy statement/prospectus. You should note that the discussion of Pharmacopeia's board of directors' reasons for the mergers and the description of its financial advisor's opinion contain forward-looking statements that describe beliefs, assumptions and estimates as of the indicated dates and those forward-looking expectations may have changed as of the date of this proxy statement/prospectus.

If any of these risks or uncertainties materializes or any of these assumptions proves incorrect, the results of Ligand, Pharmacopeia or the combined company could differ materially from the expectations in these statements. The forward-looking statements included in this proxy statement/prospectus are made only as of the date of this proxy statement/prospectus, and neither Ligand nor Pharmacopeia is under any obligation to update their respective forward-looking statements and neither party intends to do so.

THE COMPANIES

Ligand Pharmaceuticals Incorporated

Ligand Pharmaceuticals Incorporated (NASDAQ: LGND), a Delaware corporation, is a biotechnology company that focuses on discovering and developing new drugs that address critical unmet medical needs in the areas of thrombocytopenia, anemia, cancer, hormone related diseases, osteoporosis and inflammatory diseases. Ligand aims to develop drugs that are more effective and/or safer than existing therapies, that are more convenient to administer and that are cost effective. Ligand plans to build a profitable company by generating income from research, milestone and royalty and co-promotion revenues resulting from its collaborations with pharmaceutical partners.

Additional information regarding Ligand is contained in Ligand's filings with the SEC.

Ligand was incorporated in Delaware in 1987. Ligand's principal executive offices are located at 10275 Science Center Drive, San Diego, California, 92121. Ligand's telephone number is (858) 550-7500.

Margaux Acquisition Corp.

Margaux Acquisition Corp. is a Delaware corporation and a wholly-owned subsidiary of Ligand organized on September 18, 2008. Margaux does not engage in any operations and exists solely to facilitate the mergers. Its principal executive offices have the same address and telephone number as Ligand.

Latour Acquisition, LLC

Latour Acquisition, LLC is a Delaware limited liability company and a wholly-owned subsidiary of Ligand organized on September 18, 2008. Latour does not engage in any operations and exists solely to facilitate the mergers. Its principal executive offices have the same address and telephone number as Ligand.

Pharmacopeia, Inc.

Pharmacopeia, Inc. (NASDAQ: PCOP) is a clinical development stage biopharmaceutical company dedicated to discovering and developing novel small molecule therapeutics to address significant medical needs. Pharmacopeia's strategy has been to retain the rights to product candidates at least to clinical validation, and to continue development on its own to New Drug Application (NDA) filing and commercialization for selected indications. Pharmacopeia has a broad portfolio of clinical and preclinical candidates under development internally or by partners.

Additional information regarding Pharmacopeia is contained in Pharmacopeia's filings with the SEC.

Pharmacopeia is a Delaware corporation. Pharmacopeia was incorporated in February 2002 as a wholly-owned subsidiary of Accelrys, Inc. (Accelrys), formerly Pharmacopeia, Inc. On April 30, 2004, Accelrys completed the spin-off of Pharmacopeia into an independent, separately traded and publicly held company through the distribution to its stockholders of a dividend of one share of Pharmacopeia common stock for every two shares of Accelrys common stock held. The mailing address of Pharmacopeia's principal executive offices is P.O. Box 5350, Princeton, New Jersey 08543-5350, and its telephone number is (609) 452-3600.

THE SPECIAL MEETING OF PHARMACOPEIA STOCKHOLDERS

General

This proxy statement/prospectus is being furnished to holders of Pharmacopeia common stock as part of the solicitation of proxies by Pharmacopeia's board of directors for use at the special meeting of stockholders to be held on , 2008, starting at , local time, at Pharmacopeia's offices located at 1002 Eastpark Boulevard, Cranbury, New Jersey 08512, or at any adjournment or postponement thereof.

The purpose of the special meeting is for Pharmacopeia stockholders to consider and vote on (1) the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers and (2) the adjournment or postponement of the special meeting to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement. No other business will be conducted at the special meeting.

The holders of a majority of the shares of Pharmacopeia common stock outstanding must vote to adopt the merger agreement in order for the mergers to occur. If Pharmacopeia stockholders fail to adopt the merger agreement, the mergers will not occur. A copy of the merger agreement is attached to this proxy statement/prospectus as *Annex A* and the form of CVR agreement is attached as *Annex B*. You are urged to read the merger agreement and the form of CVR agreement in their entirety.

Record Date; Shares Entitled to Vote; Quorum

Pharmacopeia's board of directors has fixed the close of business on , 2008 as the record date for the special meeting, and only holders of record of Pharmacopeia common stock on the record date are entitled to notice of, and to vote (in person or by proxy) at, the special meeting. Each share of Pharmacopeia common stock entitles its holder to one vote on all matters properly coming before the special meeting. As of the record date, there were shares of Pharmacopeia common stock outstanding and entitled to vote at the special meeting.

The presence, in person or by proxy, of stockholders representing a majority of the shares of Pharmacopeia common stock entitled to vote at the special meeting will constitute a quorum for the special meeting. Shares of Pharmacopeia common stock represented at the special meeting but not voted, including shares of such common stock for which proxies have been received but for which stockholders have abstained, will be treated as present at the special meeting for purposes of determining the presence or absence of a quorum for the transaction of all business. In the event that a quorum is not present at the special meeting, the special meeting may be adjourned or postponed to solicit additional proxies.

Vote Required for Approval

You may vote **"FOR"** or **"AGAINST"**, or you may **"ABSTAIN"** from voting on, the proposal to adopt the merger agreement. To adopt the merger agreement, the holders of a majority of the outstanding shares of Pharmacopeia common stock entitled to vote must vote in favor of adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers. **Because adoption of the merger agreement requires the affirmative vote of a majority of shares outstanding, a Pharmacopeia stockholder's failure to vote or abstention will have the same effect as a vote against adoption of the merger agreement. A Pharmacopeia stockholder's failure to vote or abstention from voting will have no effect on the proposal for possible adjournment or postponement of the special meeting.**

To approve the proposal to adjourn or postpone the special meeting, if necessary or appropriate, a majority of the shares of Pharmacopeia common stock present in person or represented by proxy at the special meeting and entitled to vote must vote in favor of such proposal.

Shares Beneficially Owned by Management on the Record Date

As of , 2008, the record date for the special meeting, the directors and executive officers of Pharmacopeia beneficially owned in the aggregate approximately shares of Pharmacopeia common stock, which is equal to approximately % of the outstanding shares of Pharmacopeia common stock entitled to vote at the special meeting.

Recommendation of Pharmacopeia's Board of Directors

The board of directors of Pharmacopeia has determined and believes that the merger agreement and the mergers are fair to, advisable for, and in the best interests of, Pharmacopeia and its stockholders and has approved such items. The board of directors of Pharmacopeia unanimously recommends that Pharmacopeia stockholders vote **"FOR"** adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers.

The board of directors of Pharmacopeia unanimously recommends that Pharmacopeia stockholders vote "**FOR**" approval of the possible adjournment or postponement of the special meeting of Pharmacopeia stockholders.

Proxies

If you are the stockholder of record of your shares of Pharmacopeia common stock and you submit a proxy via the Internet or telephone or by returning a signed and dated proxy card by mail that is received by Pharmacopeia at any time prior to a.m., local time, on the date of the special meeting, your shares will be voted at the special meeting as you indicate. If you sign your proxy card without indicating your vote, your shares will be voted **"FOR"** the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and **"FOR"** the adjournment or postponement of the special meeting to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and in accordance with the recommendations of Pharmacopeia's board of directors on any other matters properly brought before the special meeting, or at any adjournment or postponement thereof, for a vote.

If your shares of Pharmacopeia common stock are held in "street name," you will receive instructions from your brokerage firm, bank, trust or other nominee that you must follow in order to have your shares voted. If you have not received such voting instructions or require further information regarding such voting instructions, contact your brokerage firm, bank, trust or other nominee. Nominees who hold shares of Pharmacopeia common stock in "street name" for a beneficial owner of those shares typically have the authority to vote in their discretion on "routine" proposals when they have not received instructions from beneficial owners. However, nominees are typically not allowed to exercise their voting discretion with respect to the approval of matters that are "non-routine," such as the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, without specific instructions from the beneficial owner. Broker non-votes are shares held by a broker or other nominee that are represented at the meeting, but with respect to which the broker or other nominee is not instructed by the beneficial owner of such shares to vote on the particular proposal and the broker or other nominee does not have discretionary voting power on such proposal. Broker non-votes count as present for establishing a quorum, but will have the same

effect as a vote **"AGAINST"** the adoption of the merger agreement and the transactions contemplated by the merger agreement, including the mergers, and will have no effect on the proposal for possible adjournment or postponement of the special meeting. If your brokerage firm, bank, trust or other nominee holds your shares of Pharmacopeia common stock in "street name," your brokerage firm, bank, trust or other nominee will vote your shares only if you provide instructions on how to vote by filling out the voter instruction form sent to you by such brokerage firm, bank, trust or other nominee with this proxy statement/prospectus.

Proxies received by Pharmacopeia at any time prior to a.m., local time, on the date of the special meeting, which have not been revoked or superseded before being voted, will be voted at the special meeting.

Revoking of Proxies

If you are the stockholder of record of your shares of Pharmacopeia common stock, you have the right to change or revoke your proxy at any time before the vote taken at the special meeting by:

- delivering to Pharmacopeia's Corporate Secretary at any time prior to a.m., local time, on the date of the special meeting, a signed written notice of revocation bearing a date later than the date of the proxy, stating that the proxy is revoked;
- Completing, signing and submitting to Pharmacopeia's Corporate Secretary at any time prior to a.m., local time, on the date of the special meeting, a new proxy, relating to the same shares of Pharmacopeia common stock and bearing a later date;
- submitting another proxy via the Internet or telephone at any time prior to a.m., local time, on the date of the special meeting; or
- attending the special meeting and voting in person (your attendance at the meeting will not, by itself, revoke your proxy; you must vote in person at the meeting).

Written notices of revocation and other communications with respect to the revocation of any proxies should be addressed to:

Corporate Secretary
Pharmacopeia, Inc.
P.O. Box 5350
Princeton, New Jersey 08543-5350
(609) 452-3600

If you are a "street name" holder of Pharmacopeia common stock, and you have instructed a broker, bank or nominee to vote your shares of Pharmacopeia common stock, you must follow the directions received from your broker, bank or nominee to change your instructions.

Voting in Person

If you plan to attend Pharmacopeia's special meeting and wish to vote in person, you will be given a ballot at the special meeting.

You should submit your completed proxy even if you plan to attend the special meeting. If you are the stockholder of record of your shares of Pharmacopeia common stock, you can change your vote at the special meeting. If you hold shares in street name, you may not vote in person at the special meeting unless you obtain a signed proxy from the record holder giving you the right to vote the shares in person at the meeting.

Your vote is important. Accordingly, please sign and return the enclosed proxy card whether or not you plan to attend the special meeting in person.

Adjournments and Postponements

Although it is not currently expected, the special meeting may be adjourned or postponed to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement. Pharmacopeia's bylaws provide that notice need not be given of the adjourned meeting if the time and place of the adjourned meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting, Pharmacopeia may transact any business that might have been transacted at the original meeting. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Any signed proxies received by Pharmacopeia prior to a.m., local time, on the date of the special meeting in which no voting instructions are provided on such matter will be voted **"FOR"** an adjournment or postponement of the special meeting to a later date or time, if necessary or appropriate, to solicit additional proxies in the event there are insufficient votes at the time of the special meeting to adopt the merger agreement, and the transactions contemplated by the merger agreement, including the mergers. Whether or not a quorum exists, holders of a majority of the shares of Pharmacopeia's common stock present in person or represented by proxy at the special meeting may adjourn the special meeting. Because a majority of the votes represented at the meeting, whether or not a quorum exists, is required to approve the proposal to adjourn the meeting, abstentions will have the same effect on such proposal as a vote **"AGAINST"** the proposal. Broker non-votes and any shares that are not voted will have no effect on the proposal to adjourn the special meeting. Pharmacopeia stockholders who have already sent in their proxies may revoke them at any time prior to their use at the special meeting as adjourned or postponed.

Stock Certificates

You should not send in any stock certificates with your proxy card. If you are a Pharmacopeia stockholder, after the mergers are completed, a letter of transmittal will be sent to you informing you where to deliver your Pharmacopeia stock certificates in order to receive the merger consideration. You should not send in your Pharmacopeia common stock certificates prior to receiving this letter of transmittal.

Solicitation of Proxies

Pharmacopeia is conducting this proxy solicitation and will bear the cost of soliciting proxies. Pursuant to the merger agreement, Pharmacopeia and Ligand each agreed to pay one-half of all fees and expenses (other than attorneys' and accountants' fees and expenses) incurred in connection with the printing, mailing and filing of this proxy statement/prospectus. Pharmacopeia has retained Morrow & Co., LLC, a professional proxy solicitation firm, to assist in the solicitation of proxies for the special meeting for a fee of approximately $7,500 plus reimbursement of out-of-pocket expenses. In addition, Pharmacopeia may reimburse brokers, banks and other custodians, nominees and fiduciaries representing beneficial owners of shares for their expenses in forwarding soliciting materials to such beneficial owners. Pharmacopeia's directors, officers and employees may also solicit proxies by personal interview, mail, e-mail, telephone, facsimile or other means of communication. These persons will not be paid additional remuneration for their efforts.

Householding of this Proxy Statement/Prospectus and other Special Meeting Materials

The SEC has adopted rules that permit companies and intermediaries (for example, brokers) to satisfy the delivery requirements for proxy statements with respect to two or more stockholders sharing the same address if Pharmacopeia believes the stockholders are members of the same family, by

delivering a single proxy statement addressed to those stockholders. Each stockholder will continue to receive a separate proxy card or voting instruction card. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies by reducing the volume of duplicate information.

Pharmacopeia may send only one proxy statement/prospectus to multiple stockholders that share the same address. Upon written or oral request, Pharmacopeia will promptly supply such stockholders additional copies of the proxy statement/prospectus. Such requests and requests for separate annual reports, proxy statements or notice of Internet availability in the future should be made by contacting Pharmacopeia either by mail by writing to the Corporate Secretary, c/o Pharmacopeia, Inc., P.O. Box 5350, Princeton, New Jersey 08543-5350, or by telephone at (609) 452-3600.

Questions and Additional Information

Pharmacopeia stockholders who have questions about the mergers, including the procedures for voting their shares of Pharmacopeia common stock, or how to submit they proxy, or who need additional copies, without charge, of this proxy statement/prospectus, should contact:

Pharmacopeia, Inc.
P.O. Box 5350
Princeton, New Jersey 08543-5350
Attn: Corporate Secretary
(609) 452-3600
or Pharmacopeia's solicitation agent:
Morrow & Co., LLC
470 West Avenue
Stamford, Connecticut 06902
For stockholders: (800) 278-2141
For banks and brokers: (800) 662-5200

Availability of Documents

Documents incorporated by reference (excluding exhibits to those documents unless the exhibit is specifically incorporated by reference into those documents) will be provided by first class mail without charge to each person to whom this proxy statement/prospectus is delivered upon written or oral request of such person. In addition, a list of stockholders entitled to vote at the special meeting will be available for inspection at Pharmacopeia's principal executive offices at least 10 days prior to the date of the special meeting and continuing through the special meeting for any purpose germane to the meeting. The list will also be available at the meeting for inspection by any stockholder present in person at the meeting.

THE MERGERS

General

The discussion of the mergers in this proxy statement/prospectus and the description of the mergers are only summaries of the material features of the proposed mergers. Pharmacopeia stockholders can obtain a more complete understanding of the mergers by reading the merger agreement and the form of CVR agreement, copies of which are attached to this proxy statement/prospectus as *Annex A* and *Annex B*, respectively. Pharmacopeia stockholders are encouraged to read the merger agreement and the other annexes to this proxy statement/prospectus in their entirety.

General Description of the Mergers

At the effective time of merger 1, Ligand's wholly-owned subsidiary, Margaux, will be merged with and into Pharmacopeia, with Pharmacopeia continuing as the surviving corporation, or the intermediate surviving corporation. At the effective time of merger 2, the intermediate surviving corporation will be merged with and into Ligand's wholly-owned subsidiary, Latour, with Latour continuing as the surviving entity, or the Surviving Entity.

If the merger agreement is adopted by Pharmacopeia's stockholders and the other conditions to the mergers are satisfied or waived, upon completion of merger 1, Ligand would issue approximately 0.58 of a share for each share of Pharmacopeia common stock outstanding immediately prior to the effective time of merger 1, subject to certain adjustments for cancelled stock options. However, this exchange ratio is fixed only if the Ligand Common Stock Value falls in the range of $3.00 and $3.75. Otherwise, the following will apply:

- if the Ligand Common Stock Value is greater than $3.75 but not greater than $4.50, the overall transaction value will be fixed at $66 million, and the exchange ratio will decrease as prices increase within the range;

- if the Ligand Common Stock Value is greater than $4.50, then the exchange ratio will be approximately 0.49;

- if the Ligand Common Stock Value is equal to or greater than $2.38 but less than $3.00, then the exchange ratio will increase as prices decrease within the range (provided that if the Ligand Common Stock Value is less than $2.93, the exchange ratio will not exceed approximately 0.60), subject to specified limitations in the merger agreement. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive cash consideration for an overall transaction value fixed at $52.8 million; or

- if the Ligand Common Stock Value is less than $2.38, then the exchange ratio will be approximately 0.60. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive a proportionate share of $10 million in cash.

Based on Ligand's closing price on October 17, 2008 of $1.99, the exchange ratio set forth above implies a purchase price of $1.53 per common share of Pharmacopeia, or an equity value of approximately $46 million and a premium over the closing price of Pharmacopeia on September 24, 2008 (the last full trading day prior to the public announcement of the merger agreement) of 29%.

These values exclude a potential for approximately $0.50 per share or an aggregate of $15 million related to the CVRs. The CVRs provide each holder the right to receive a proportionate share of an aggregate of $15 million if Ligand enters into a license, sale, development, marketing or option agreement with respect to any product candidate from Pharmacopeia's DARA program, of which the lead clinical product candidate is PS433540 (other than any agreement with Bristol-Myers Squibb or any of its affiliates), on or prior to December 31, 2011.

Ligand will issue between approximately 14,000,000 and 18,976,461 shares of common stock to Pharmacopeia stockholders in merger 1, depending on the market price of Ligand's common stock during the twenty consecutive trading days ending at the close of trading on the fifth trading day prior to the date of the special meeting of Pharmacopeia stockholders. Pharmacopeia stockholders will own between approximately % and % of the outstanding Ligand common stock after the mergers. The above calculations are based on the number of shares of Ligand common stock and Pharmacopeia common stock outstanding on the record date, and assume that no Pharmacopeia stock options or warrants will be exercised on a cashless basis, but does not take into account stock options or warrants of Ligand.

Each share of Ligand common stock that is issued in connection with the mergers will be accompanied by a right under Ligand's rights agreement.

Treatment of Stock Options, Restricted Stock Units and Warrants

Pharmacopeia has agreed to offer to cancel, effective immediately prior to the effective time of merger 1, any stock options granted under Pharmacopeia's existing equity compensation plans in exchange for the payment of up to $0.20 per share for each share of Pharmacopeia common stock subject to such options, but in no event will the option cancellation payments exceed $1,000,000 in the aggregate. Any cancellation offer by Pharmacopeia will be on such terms and conditions as are reasonably acceptable to Ligand and will comply in all material respects with applicable federal and state securities laws, including, if necessary, the rules applicable to tender offers. In any case, at the effective time of merger 1, each option granted under the Amended and Restated 1994 Incentive Stock Plan of Pharmacopeia and the 1995 Director Option Plan of Pharmacopeia that is outstanding and unexercised immediately prior to the effective time of merger 1 and that is not the subject of an effective option cancellation agreement will not be assumed by the intermediate surviving corporation or Ligand, but will instead be cancelled without any payment being made in respect of those options (each such option, a 1994/1995 option). As of the effective time of merger 1, all 1994/1995 options will no longer be outstanding and will automatically cease to exist, and each holder of a 1994/1995 option will cease to have any rights with respect thereto. Each 1994/1995 option cancelled as described in this paragraph and each option cancelled pursuant to an effective option cancellation agreement under any of Pharmacopeia's existing equity compensation plans is referred to herein as a "cancelled option." At the effective time of merger 1, each option that is not a 1994/1995 option or a cancelled option and that is outstanding and unexercised immediately prior to the effective time of merger 1 (whether vested or unvested) will be assumed by Ligand (each, an assumed option). Each assumed option will continue to have, and be subject to, the same terms and conditions set forth in the applicable assumed option (including any applicable stock option agreement or other document evidencing such assumed option) immediately prior to the effective time of merger 1 (including any repurchase rights or vesting provisions), except that such assumed option will be exercisable (or will become exercisable in accordance with its terms) for the applicable merger consideration that would have been receivable upon merger 1 by the holder of shares of Pharmacopeia common stock underlying the option, instead of shares of Pharmacopeia common stock. Each member of Pharmacopeia's board of directors, including Dr. Mollica, has agreed to forego the above cash consideration payable for each share of Pharmacopeia common stock subject to the stock options that such member holds, and at the effective time of merger 1, all such stock options will be cancelled without any payment being made in respect of those options. As of October 8, 2008, the members of Pharmacopeia's board of directors held 582,215 stock options in the aggregate.

Effective immediately prior to the effective time of merger 1, each then unvested Pharmacopeia restricted stock unit will become fully vested and all restrictions will lapse and each share of Pharmacopeia common stock issuable pursuant to those Pharmacopeia restricted stock units will be converted into the right to receive the merger consideration.

Effective as of immediately prior to the effective time of merger 1, each existing warrant to acquire shares of Pharmacopeia capital stock shall be converted into a new warrant entitling its holder to receive, at a total price not to exceed that payable upon the exercise or conversion of the existing warrant, the applicable merger consideration that would have been receivable upon merger 1 by the holder of the existing warrant if the existing warrant had been exercised immediately prior to the effective time of merger 1, instead of shares of Pharmacopeia common stock.

See the section entitled "Certain Terms of the Merger Agreement Pharmacopeia Stock Options, Restricted Stock Units and Warrants" beginning on page 93 of this proxy statement/prospectus.

Background of the Mergers

From time to time prior to the date of the merger agreement, Pharmacopeia's board of directors had considered various strategic initiatives intended to further the development of Pharmacopeia's business, including engaging in discussions with other companies regarding potential business combinations. These communications were either initiated by Pharmacopeia management or resulted from inquiries from the other companies. Pharmacopeia's management team has seriously considered potential business transactions or combinations as well as other various strategic alternatives, including continuing to operate as an independent public company.

On October 17-18, 2007, Pharmacopeia's management team proposed a forward-looking plan for the development of Pharmacopeia's DARA program, of which the lead clinical product candidate is PS433540, at the Pharmacopeia board of directors annual strategic retreat meetings. The plan contemplated external clinical and preclinical studies for the DARA program that would cost approximately $25 million through the end of calendar year 2008 and included various corporate fundraising strategies. Management's plan projected that the additional studies would position the DARA program to be partnered with a larger pharmaceutical or biopharmaceutical company.

From November 2007 through January 2008, Pharmacopeia's management team sought to execute various fundraising transactions. The potential transactions included potential investments in Pharmacopeia by existing stockholders, venture capital and private equity firms, project financing around certain Pharmacopeia development programs, efforts to sell interests in Pharmacopeia's potential future royalties from its collaborative development programs and sales of convertible securities. None of those discussions reached the stage at which Pharmacopeia was in a position to negotiate definitive documentation.

From November 2007 through March 2008, Pharmacopeia's management team also contacted fourteen potential partners regarding a potential collaboration for the DARA program focusing on the indication of hypertension. None of those discussions reached the stage at which Pharmacopeia was in a position to negotiate definitive documentation.

On March 25, 2008, John L. Higgins, President and Chief Executive Officer of Ligand, and Leslie J. Browne, President and Chief Executive Officer of Pharmacopeia, had a telephone conversation to discuss a possible business transaction between Ligand and Pharmacopeia.

On April 10, 2008, Pharmacopeia announced that Dr. Browne, had resigned, effective April 9, 2008, as President and Chief Executive Officer of Pharmacopeia and a member of the Pharmacopeia board of directors in order to pursue other interests. Effective April 9, 2008, Joseph A. Mollica, Chairman of the Pharmacopeia board of directors, assumed the additional position of Interim President and Chief Executive Officer of Pharmacopeia. Pharmacopeia also announced that a search would be undertaken to identify a permanent successor to Dr. Browne. The Pharmacopeia board of directors endorsed a multi-pronged strategy to be followed by Dr. Mollica to: raise additional funds while reducing Pharmacopeia's operating burn; identify and hire a permanent chief executive officer; continue Pharmacopeia's efforts to partner the DARA program; and consider other strategic alternatives.

On April 23, 2008, Mr. Higgins and Syed Kazmi, Ligand's Vice President, Business Development & Strategic Planning, met at Pharmacopeia's offices in Cranbury, New Jersey with Dr. Mollica, Stephen C. Costalas, Pharmacopeia's Executive Vice President, Corporate Development, General Counsel and Secretary, Brian M. Posner, Pharmacopeia's Executive Vice President, Chief Financial Officer and Treasurer, and other members of Pharmacopeia's management team. Mr. Higgins and Dr. Kazmi proposed a possible business transaction between Ligand and Pharmacopeia.

On May 5, 2008, Pharmacopeia engaged Russell Reynolds Associates, Inc. to coordinate the search for a permanent chief executive officer.

On May 16, 2008, Pharmacopeia announced positive data from its Phase 2a clinical trial of PS433540 at the American Society of Hypertension meeting in New Orleans.

On May 29, 2008, Pharmacopeia reduced its workforce by approximately 15% through attrition and termination of 22 positions. Twenty of the terminations were effective as of May 30, 2008, and two were effective as of July 31, 2008.

On June 10, 2008, Dr. Mollica and Mr. Higgins met in Princeton, New Jersey to further discuss a possible business transaction between Ligand and Pharmacopeia.

On June 11, 2008, Pharmacopeia engaged Cowen as exclusive financial advisor in connection with assessing a possible sale of Pharmacopeia. Pharmacopeia directed Cowen to coordinate Cowen's efforts on behalf of Pharmacopeia with Pharmacopeia's ongoing efforts related to partnering the DARA program.

From June 16, 2008 through June 30, 2008, Pharmacopeia sought to execute a registered direct financing transaction facilitated by a team of investment banks. Pharmacopeia was unsuccessful in executing such a transaction despite offering significant warrant coverage to prospective purchasers. Subsequent to that unsuccessful financing effort, Pharmacopeia also sought to execute various project financing, equity line of credit and debt financing transactions. In addition, Pharmacopeia attempted to sell interests in its potential future royalties from its collaborative development programs and attempted to negotiate the transfer of its obligations under certain research and development collaborations to an offshore company. None of those discussions reached the stage at which Pharmacopeia was in a position to negotiate definitive agreements.

From June 2008 through September 2008, Cowen contacted 39 potential partner companies on behalf of Pharmacopeia. All 39 companies received an initial Pharmacopeia non-confidential summary and two companies, one of which was Ligand, received and signed a confidentiality agreement and began preliminary due diligence on Pharmacopeia.

From November 2007 through August 27, 2008, Pharmacopeia contacted 35 additional potential partners, including Company C further discussed below, regarding a potential acquisition of Pharmacopeia or collaboration for the DARA program. Eight companies signed a confidentiality agreement and seven of these companies began to conduct preliminary due diligence on Pharmacopeia's DARA program. Following its engagement by Pharmacopeia and at Pharmacopeia's direction, Cowen also contacted 13 of the 35 companies. None of those companies proffered terms of a prospective partnership around the DARA program.

On July 9, 2008, the Strategic Planning Committee of Pharmacopeia's board of directors, accomplished regulatory, finance and marketing consultants, and members of Pharmacopeia management discussed in detail the possibility of focusing the DARA program on the following indications with significant markets: general hypertension, congestive heart failure, pulmonary arterial hypertension, resistant hypertension and diabetic nephropathy. The Strategic Planning Committee, the consultants and members of management also discussed in detail the possibility of focusing the program on the following areas with smaller markets: (i) African Americans who have hypertension, (ii) isolated systolic hypertension and (iii) Stage 3 hypertension with chronic kidney disease. The

Strategic Planning Committee also discussed feedback from the partnering discussions concerning the DARA program and the lack of interest in the program shown by many potential partners. The consensus of the Strategic Planning Committee, the consultants and management was that Pharmacopeia should focus its future development efforts with respect to the DARA program on the indication of diabetic nephropathy. The Strategic Planning Committee recommended that Pharmacopeia's board of directors consider the potential change in focus to diabetic nephropathy.

On July 22, 2008, Pharmacopeia and Ligand executed a mutual confidentiality agreement.

During late July, August and early September 2008, Pharmacopeia and Ligand conducted due diligence reviews of the business and operations of each other.

On July 24, 2008, the Pharmacopeia board of directors considered the conclusions reached at the July 9, 2008 meeting of the Strategic Planning Committee with respect to the development focus of the DARA program. The board of directors endorsed the recommendation of the Strategic Planning Committee and management that Pharmacopeia pursue diabetic nephropathy as the primary indication for PS433540.

On July 29, 2008, Dr. Mollica and Mr. Higgins met in San Diego, California to further discuss a possible business transaction between Ligand and Pharmacopeia.

On July 31, 2008, based on input from accomplished regulatory, finance and marketing consultants, potential corporate partners, and the investment community, Pharmacopeia announced that it intended to pursue diabetic nephropathy as the primary indication for PS433540.

From August 1, 2008 through August 28, 2008, members of the senior management of Ligand and Pharmacopeia and their respective bankers held various conversations in which they further discussed a potential business transaction between the companies.

On August 4, 2008, Pharmacopeia reduced its workforce by approximately 40% through termination of 64 positions. This action was part of Pharmacopeia's overall plan to focus its efforts on, and allocate a greater portion of its resources to, its development programs. Sixty of the terminations were effective as of October 3, 2008, and four are effective as of December 4, 2008. Together with the workforce reduction announced in May 2008, Pharmacopeia reduced its workforce by approximately 55% in aggregate.

On August 28, 2008, Ligand provided Pharmacopeia a non-binding term sheet contemplating a merger between Pharmacopeia and Ligand.

On August 28, 2008 through September 11, 2008, senior management from Pharmacopeia and Ligand and their respective bankers and counsel negotiated various matters related to the non-binding term sheet.

On September 4, 2008, members of the senior management of Ligand and Pharmacopeia and their respective bankers met at Pharmacopeia's offices in Cranbury, New Jersey to further discuss the terms of a potential business transaction between the companies and to discuss various due diligence matters.

On September 11, 2008, Ligand provided Pharmacopeia a revised non-binding term sheet contemplating a merger of Pharmacopeia into Ligand.

On September 12, 2008, a special meeting of the Pharmacopeia board of directors was held via teleconference. All members of the board of directors, except for Martin H. Soeters, who was out of the United States, and Frank Baldino, Jr., were present. An update was given regarding recent discussions with Ligand and other strategic discussions.

From September 12, 2008 through September 16, 2008, senior management from Pharmacopeia and Ligand and their respective bankers and counsel negotiated various matters related to the non-binding term sheet.

On September 17, 2008, Ligand's counsel, Latham & Watkins LLP, or Latham, distributed an initial draft of the merger agreement and the form of CVR agreement to Pharmacopeia. On September 17, 2008, Dr. Mollica met with Mr. Higgins in New York, New York to discuss further the potential merger transaction.

On September 18, 2008, the chief executive officer of Company C e-mailed a non-binding term sheet to certain members of Pharmacopeia's management team, which outlined terms on which Company C would be prepared to make a substantial investment in Pharmacopeia. The non-binding term sheet contemplated a transaction in which Company C would acquire a majority of the outstanding shares of Pharmacopeia common stock, appoint a majority of the members of the Pharmacopeia board of directors and appoint Company C's chief executive officer as the new chief executive officer of Pharmacopeia. Pursuant to the non-binding term sheet, Company C would acquire the shares at a discount to Pharmacopeia's market price and with significant warrant coverage.

On the same day, Pharmacopeia's counsel, Dechert LLP, or Dechert, distributed a revised draft of the merger agreement to Ligand.

On September 19, 2008, the chief executive officer of Company C e-mailed an expression of interest to the management team of Pharmacopeia, which outlined terms on which Company C would be prepared to proceed with a transaction and which reattached the non-binding term sheet initially sent to Pharmacopeia on September 18, 2008.

On September 19, 2008, a special teleconference meeting of the Pharmacopeia board of directors was convened. All members of the board of directors were present. Also present were: Messrs. Costalas and Posner from Pharmacopeia management; representatives from Cowen; and representatives from Dechert. Pharmacopeia's board of directors reviewed the status of ongoing negotiations with Ligand. The Pharmacopeia board of directors focused on the consideration, treatment of Pharmacopeia's option holders, warrant holders and employees and closing conditions associated with the proposed transaction with Ligand. The Pharmacopeia board of directors also discussed and considered the fact that a member of the Ligand board of directors was also employed by an affiliate of Cowen, and the Pharmacopeia board of directors was satisfied that such member had no involvement in Pharmacopeia's engagement of Cowen. Bruce A. Peacock, the lead director of the Pharmacopeia board of directors, and Pharmacopeia management updated Pharmacopeia's board of directors concerning discussions with Company C and the recent expression of interest and non-binding term sheet received from Company C. There was extensive discussion of the proposed financial terms offered by Company C, and the board of directors focused on the lack of premium for shares of Pharmacopeia common stock offered by Company C. The Pharmacopeia board of directors also discussed Company C's lack of historic success in developing its clinical programs and concern about Company C's ability to progress Pharmacopeia's clinical programs given that history. Pharmacopeia's board of directors directed management to continue to progress discussions with Ligand and to continue discussions with Company C in an effort to improve the economic terms of that potential transaction.

During September 19 and 20, 2008, Pharmacopeia and Ligand conducted on-site negotiations in San Diego, California, with Mr. Costalas and Dechert representatives attending on behalf of Pharmacopeia. Mr. Costalas and the Dechert representatives had regular communications with various members of Pharmacopeia's board of directors during these two days. The negotiations with Ligand focused on the consideration, treatment of Pharmacopeia's option holders, warrant holders and employees and closing conditions associated with the proposed transaction with Ligand.

On September 21, 2008, a morning teleconference was convened among Messrs. Costalas and Peacock, Dechert representatives and the chairman of the board of directors and other members of management of Company C. The parties discussed extensively the expression of interest and related non-binding term sheet sent to Pharmacopeia by Company C. The parties also had extensive discussion of different ways to structure an investment by Company C in Pharmacopeia, including, among other

things, traditional tranched financing, merger with control premium paid and change of control financing without control premium paid. As a condition of any potential transaction, Company C required a change of control transaction with Pharmacopeia that would give Company C ownership of greater than 50% of Pharmacopeia's common stock and appointment of a majority of the Pharmacopeia board of directors and Pharmacopeia's chief executive officer. However, Company C was unwilling to pay any premium to market price and instead insisted on a discounted transaction through warrant coverage.

Later that same day, a special teleconference meeting of the Pharmacopeia board of directors was convened. All of the members of the Pharmacopeia board of directors except Mr. Soeters, who was out of the United States, were present at this meeting. Also present were Messrs. Costalas and Posner, representatives from Cowen and representatives from Dechert. Pharmacopeia's board of directors reviewed the status of the ongoing negotiations with Ligand. The board of directors focused on the consideration, treatment of Pharmacopeia's option holders, warrant holders and employees and closing conditions associated with the proposed transaction with Ligand. Pharmacopeia's board of directors agreed that, in the event a transaction with Ligand moved forward, members of the board of directors would forego consideration for their outstanding stock options. Messrs. Posner and Costalas updated the Pharmacopeia board of directors concerning the discussions with Company C. There was extensive discussion of the proposed financial terms offered by Company C. In particular, the Pharmacopeia board of directors focused on the lack of premium for shares of Pharmacopeia common stock offered by Company C. The board of directors also focused on Company C's unwillingness to alter materially the proposed financial terms. Cowen discussed a presentation that had been distributed to the Pharmacopeia board of directors in advance of the meeting comparing potential transactions with each of Ligand and Company C. There was extensive discussion of the alternate transactions, including the alternative of continuing to operate Pharmacopeia as an independent public company. Following careful consideration of the two potential transactions, Pharmacopeia's board of directors directed management to attempt to finalize a transaction with Ligand.

During September 22 and 23, 2008, negotiations between Ligand and Pharmacopeia continued. Dechert and Latham distributed various revisions of the merger agreement and other transaction documents. The parties continued their respective due diligence reviews of the business and operations of each other.

On September 23, 2008, a special teleconference meeting of the Pharmacopeia board of directors was convened. All members of the Board except Mr. Peacock were present. Also present were Mr. Costalas, Mr. Posner, representatives from Cowen and representatives from Dechert. Presentations prepared by Cowen and Dechert had been distributed to the Pharmacopeia board of directors in advance of the meeting. The Board reviewed in detail the strategic process undertaken and various alternatives considered by Pharmacopeia to date. Representatives of Dechert presented and reviewed the fiduciary duties of the Pharmacopeia board of directors in connection with the transaction. Pharmacopeia and Dechert also reviewed the terms of the merger agreement and other transaction documents with the board of directors. The Pharmacopeia board of directors focused on the contingent value payment, fiduciary duties, closing conditions and other consideration provisions of the documents. Cowen reviewed with the board of directors its financial analysis of the merger consideration provided for in the revised merger agreement provided to Cowen and delivered to the Pharmacopeia board of directors an oral opinion, which was confirmed by delivery of a written opinion dated September 23, 2008, to the effect that, as of that date and based upon and subject to the factors, procedures, assumptions, qualifications and limitations set forth in its opinion, the merger consideration to be received by holders of Pharmacopeia common stock was fair, from a financial point of view, to such holders. Cowen also identified again for the Pharmacopeia board of directors the fact that a member of the Ligand board of directors was also employed by an affiliate of Cowen. Following careful consideration of the proposed merger agreement and the transactions contemplated by the merger

agreement, the members of the Pharmacopeia board of directors present then unanimously approved the merger agreement and the transactions contemplated thereby, including the mergers, and resolved to recommend that Pharmacopeia's stockholders vote in favor of adoption of the merger agreement. The Pharmacopeia board of directors also appointed four of its members, Dr. Mollica, Mr. Peacock, Dennis H. Langer and Carol A. Ammon, to serve as a special committee to consider and, if appropriate, provide final approval of the merger agreement and the transactions contemplated thereby based upon management's final negotiations with Ligand.

On September 24, 2008, the Ligand board of directors approved the proposed transaction with Pharmacopeia during a board of directors meeting held in New York City, New York prior to the market close.

Later the same day, a teleconference meeting of the special committee of Pharmacopeia's board of directors was held following the market close. All members of the special committee were present. Also present were Mr. Costalas, Mr. Posner, representatives from Cowen and representatives from Dechert. At the meeting, members of Pharmacopeia's management and representatives from Dechert gave an overview of the status of the transaction versus where it stood at the prior night's meeting of the board of directors. The special committee focused on the closing condition provisions of the merger agreement and the treatment of Pharmacopeia's option holders. Cowen reviewed with the special committee its financial analysis of the merger consideration to be issued pursuant to the latest draft merger agreement reviewed by Cowen. At the request of a member of the special committee, Cowen also repeated to the special committee its oral opinion addressed to Pharmacopeia's board of directors, which had been delivered to the board of directors the previous evening, to the effect that, as of September 23, 2008 and based upon and subject to the factors, procedures, assumptions, qualifications and limitations set forth in its written opinion, the merger consideration to be received by holders of Pharmacopeia common stock pursuant to the latest draft merger agreement reviewed by Cowen as of September 23, 2008 was fair, from a financial point of view, to such holders. The special committee reviewed in detail the strategic process undertaken and various alternatives considered by Pharmacopeia to date. Following careful consideration of the proposed merger agreement and the mergers, the special committee unanimously approved the merger agreement and the transactions contemplated thereby, including the mergers, and resolved to recommend that Pharmacopeia's stockholders vote in favor of adoption of the merger agreement.

Following the market close on September 24, 2008, Ligand and Pharmacopeia executed the merger agreement. Following execution of the merger agreement, Ligand and Pharmacopeia issued a joint press release announcing the execution of the merger agreement and held a joint conference call related to such announcement.

Pharmacopeia's Reasons for the Mergers; Recommendation of Pharmacopeia Board of Directors

The Pharmacopeia board of directors, acting with the advice and assistance of its financial and legal advisors, including Cowen and Dechert, as well as the special committee of the Pharmacopeia board of directors, evaluated the terms and conditions of the merger agreement and related transactions. All of the members of the Pharmacopeia board of directors present at the meeting held on September 23, 2008 unanimously (i) determined that the merger agreement and the transactions contemplated thereby, including the mergers, are fair to, advisable for, and in the best interests of, Pharmacopeia and its stockholders, (ii) approved the merger agreement and the transactions contemplated thereby, including the mergers, and (iii) resolved to recommend that Pharmacopeia stockholders vote in favor of the adoption of the merger agreement.

Pharmacopeia's board of directors considered a number of factors in its deliberations, including, among others, the following:

- the possible alternatives to a sale of Pharmacopeia and the risks and uncertainties related to not selling the company, including risks involved in Pharmacopeia's product development pipeline

(including the fact that none of Pharmacopeia's development compounds has advanced beyond Phase 2 clinical development, and all of Pharmacopeia's development compounds face the substantial risk of failure inherent in drug discovery and development), and the fact that Pharmacopeia would need to raise significant additional capital to support its business operations, which would likely result in further significant dilution to Pharmacopeia's stockholders;

the risk that Pharmacopeia would be unable to partner the DARA program on financial and strategic terms that would be acceptable to Pharmacopeia, or at all;

Pharmacopeia's inability to secure appropriate financing during the period from November 2007 through August 2008 despite Pharmacopeia management's attempts to execute multiple varied financing transactions and the resulting concern about Pharmacopeia's ability to continue to support its business operations;

a sale process that involved many other potential bidders;

the upfront merger consideration represents an approximate 29% premium over the closing price ($1.19) of Pharmacopeia common stock on Nasdaq on September 24, 2008, the last full trading day before the announcement of the merger agreement;

the total potential merger consideration, including the CVR payments, represents an approximate 71% premium over the closing price ($1.19) of Pharmacopeia common stock on September 24, 2008, the last full trading day before the announcement of the merger agreement;

a significant portion of the merger consideration consists of shares of Ligand common stock, which allows Pharmacopeia stockholders to benefit from any future growth of the combined company, and Pharmacopeia's business would benefit from the greater resources of Ligand;

the CVRs represent further potential upside to the upfront merger consideration that, if paid, would add approximately $0.50 per share in cash value for Pharmacopeia stockholders;

the financial and other terms and conditions of the merger agreement and the transactions contemplated by the merger agreement were the product of extensive arms-length negotiations among the parties and the board of directors' view of the likelihood of closing the transaction;

the fact that under the terms of the merger agreement, the completion of the mergers is not conditioned on Ligand's ability to obtain financing or an affirmative vote of its stockholders;

financial analyses of Cowen and its opinion, delivered on September 23, 2008, to the effect that, as of such date and based upon and subject to the factors, procedures, assumptions, qualifications and limitations set forth in the opinion, the merger consideration was fair, from a financial point of view, to the holders of Pharmacopeia common stock, as described below in the section entitled " Opinion of Pharmacopeia's Financial Advisor";

the terms of the merger agreement that, subject to compliance with the terms and conditions of the merger agreement:

- permit the board of directors to furnish nonpublic information to and negotiate unsolicited alternative written acquisition proposals in the exercise of its fiduciary duties; and

- allow the board of directors to change its recommendation of the merger if it determines in good faith, after it has received a superior offer and after consultation with outside counsel, that the failure to do so would reasonably be expected to result in a breach of its fiduciary duties;

the belief that the termination fee amount under the merger agreement, and the circumstances under which the termination fee would be required to be paid, is reasonable compared to other similar public company merger transactions, and would not unreasonably deter another potential bidder from considering a transaction with Pharmacopeia at a higher price;

the results of Pharmacopeia's due diligence review of Ligand's products, business, finances, operations and perceived prospects; and

the fact that a vote of Pharmacopeia stockholders on the mergers is required under Delaware law, and that stockholders who do not vote in favor of the adoption of the merger agreement will have the right to demand appraisal of the fair value of their shares under Delaware law.

The Pharmacopeia board of directors also considered a variety of risks and other potentially negative factors concerning the merger agreement, the merger and the other transactions contemplated by the merger agreement, including the following:

following the mergers, Pharmacopeia will no longer exist as an independent, stand-alone company and its stockholders will not benefit from appreciation in value of the company other than through the CVRs and their ownership of Ligand common stock;

the risks and costs (both financial and otherwise) to Pharmacopeia if the mergers do not close, including the diversion of management and employee attention, potential employee attrition and potential impact on its business;

risks relating to the value of the Ligand common stock that Pharmacopeia stockholders will receive in the mergers;

a significant portion of the merger consideration, which is represented by the CVRs, is contingent and is dependent on Ligand's ability to partner Pharmacopeia's DARA program subsequent to the mergers;

the restrictions on the conduct of Pharmacopeia's business prior to the consummation of the mergers, which could delay or prevent Pharmacopeia from undertaking business opportunities that may arise during the term of the merger agreement, whether or not the mergers are consummated;

if the mergers are not consummated for certain reasons, Pharmacopeia may be required to pay, if it consummates an acquisition transaction or enters into an acquisition agreement within a specified time period after the merger agreement is terminated, the termination fee to Ligand or in certain circumstances, to reimburse Ligand for reasonable, documented expenses;

the restrictions on Pharmacopeia's ability to solicit or participate in discussions or negotiations regarding alternative business combination transactions, subject to specified exceptions, which Pharmacopeia's board of directors understood, while potentially having the effect of discouraging third parties from proposing a competing business combination transaction, were conditions to Ligand's willingness to enter into the merger agreement and were reasonable in light of, among other things, the benefits of the mergers to Pharmacopeia's stockholders;

the fact that Pharmacopeia did not undertake a full public auction prior to entering into the merger agreement, although the Pharmacopeia board of directors was satisfied that the terms of the merger agreement, including the ability of the board of directors to exercise its fiduciary duties to consider unsolicited potential alternative acquisition proposals and the amount of the termination fee payable by Pharmacopeia upon acceptance of an alternative acquisition proposal, would not unreasonably deter another potential bidder from considering a transaction with Pharmacopeia at a higher price;

the fact that the receipt of the cash consideration, if any, in exchange for shares of Pharmacopeia common stock pursuant to the mergers will be a taxable transaction for United States federal income tax purposes;

the fact that the mergers may not be completed in a timely manner or at all due to a failure to receive necessary approvals, clearances or expirations of waiting periods, including the HSR Act; and

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the fact that some of Pharmacopeia's directors and executive officers may have interests in the mergers that are different from, or in addition to, those of Pharmacopeia stockholders generally, including as a result of employment and compensation arrangements with Pharmacopeia and the manner in which they would be affected by the mergers (see the section entitled "Interests of Pharmacopeia's Executive Officers and Directors in the Mergers").

The foregoing discussion of the factors considered by Pharmacopeia's board of directors is not intended to be exhaustive, but, rather, includes the material factors considered by Pharmacopeia's board of directors. In reaching its decision to declare the merger agreement and mergers fair to, advisable for, and in the best interests of, Pharmacopeia and its stockholders, and in approving the merger agreement, the mergers and the other transactions contemplated by the merger agreement, Pharmacopeia's board of directors did not quantify or assign any relative weights to the factors considered, and individual directors may have given different weights to different factors. Pharmacopeia's board of directors considered all these factors as a whole, including discussions with, and questioning of, Pharmacopeia's management and financial and legal advisors, and overall considered the factors to be favorable to, and to support, its decision.

For the reasons set forth above, Pharmacopeia's board of directors unanimously determined that the merger agreement and mergers are fair to, advisable for, and in the best interests of, Pharmacopeia and its stockholders, and unanimously approved the merger agreement, the mergers and the other transactions contemplated by the merger agreement.

Pharmacopeia's board of directors recommends that you vote **"FOR"** the adoption of the merger agreement and the transactions contemplated thereby, including the mergers, and **"FOR"** the adjournment or postponement of the special meeting, if necessary or appropriate, to solicit additional proxies.

Opinion of Pharmacopeia's Financial Advisor

Pursuant to an engagement letter dated June 11, 2008, Pharmacopeia retained Cowen to render an opinion to the board of directors of Pharmacopeia as to the fairness, from a financial point of view, to the holders of Pharmacopeia common stock of the merger consideration to be received by holders of Pharmacopeia common stock pursuant to the merger agreement.

On September 23, 2008, Cowen delivered certain of its written analyses and its oral opinion to the Pharmacopeia board of directors, subsequently confirmed in writing as of the same date, to the effect that and subject to the various assumptions, qualifications and limitations set forth therein, as of September 23, 2008, the merger consideration to be received by the holders of Pharmacopeia common stock in merger 1 was fair, from a financial point of view, to such stockholders.

The full text of the written opinion of Cowen, dated September 23, 2008, is attached as *Annex C* and is incorporated by reference in its entirety. Holders of Pharmacopeia common stock are urged to read the opinion in its entirety for the assumptions made, procedures followed, other matters considered and limits of the review by Cowen. The summary of the written opinion of Cowen set forth in this proxy statement/prospectus is qualified in its entirety by reference to the full text of such opinion. Cowen's analyses and opinion were prepared for and addressed to the Pharmacopeia board of directors and are directed only to the fairness, from a financial point of view, of the consideration to be received by the holders of Pharmacopeia common stock in merger 1, and do not constitute an opinion as to the merits of the transactions contemplated by the merger agreement or a recommendation to any stockholder as to how to vote with respect to the proposed transactions or take any other action in connection with the proposed transactions or otherwise. The consideration to be received by the holders of Pharmacopeia common stock pursuant to the merger agreement was determined through negotiations between Pharmacopeia and Ligand and not pursuant to recommendations of Cowen.

In arriving at its opinion, Cowen reviewed and considered such financial and other matters as it deemed relevant, including, among other things:

- a draft of the merger agreement dated as of September 22, 2008 and a draft of the CVR agreement dated as of September 22, 2008, which were the most recent drafts available to Cowen;
- certain publicly available financial and other information for Pharmacopeia and Ligand, respectively, including equity research, and certain other relevant financial and operating data furnished to Cowen by the managements of Pharmacopeia and Ligand, respectively;
- certain internal financial analyses, financial forecasts, reports and other information concerning Pharmacopeia, or the Pharmacopeia Forecast, and Ligand, or the Ligand Forecast, prepared by the managements of Pharmacopeia and Ligand, respectively, which were adjusted for clinical and regulatory risk by Pharmacopeia management;
- discussions Cowen had with certain members of the managements of each of Pharmacopeia and Ligand concerning the historical and current business operations, financial conditions and prospects of Pharmacopeia and Ligand, respectively, and such other matters Cowen deemed relevant;
- certain operating results of Pharmacopeia as compared to the operating results of certain publicly traded companies Cowen deemed relevant;
- the reported price and trading histories of the shares of the common stock of Pharmacopeia and Ligand, respectively, as compared to the reported price and trading histories of certain publicly traded companies Cowen deemed relevant;
- certain financial terms of the transactions contemplated by the merger agreement as compared to the financial terms of certain selected business combinations Cowen deemed relevant;
- based on the Pharmacopeia Forecast and the Ligand Forecast, the cash flows generated by Pharmacopeia and Ligand, respectively, on a stand-alone basis to determine the present value of the discounted cash flows;
- certain pro forma financial effects of the transactions contemplated by the merger agreement; and
- such other information, financial studies, analyses and investigations and such other factors that Cowen deemed relevant for the purposes of its opinion.

In conducting its review and arriving at its opinion, Cowen, with Pharmacopeia's consent, assumed and relied, without independent investigation, upon the accuracy and completeness of all financial and other information provided to it by Pharmacopeia and Ligand or which was publicly available or was otherwise reviewed by Cowen. Cowen did not undertake any responsibility for the accuracy, completeness or reasonableness of, or independent verification of, such information. Cowen relied upon, without independent verification, the assessment of Pharmacopeia management as to the existing products and services of Pharmacopeia and Ligand and the viability of, and risks associated with, the future products and services of Pharmacopeia and Ligand. In addition, Cowen did not conduct, or assume any obligation to conduct, any physical inspection of the properties or facilities of Pharmacopeia or Ligand. Cowen further relied upon Pharmacopeia's representation that all information provided to it by Pharmacopeia and Ligand was accurate and complete in all material respects. Cowen, with Pharmacopeia's consent, assumed that the financial forecasts provided to Cowen were reasonably prepared by the management of Pharmacopeia, and reflected the best available estimates and good faith judgments of such management as to the future performance of Pharmacopeia and Ligand, and that such financial forecasts provided a reasonable basis for its opinion. Cowen expressed no opinion as to the financial forecasts or the assumptions on which they were based. Cowen

expressly disclaimed any undertaking or obligation to advise any person of any change in any fact or matter affecting its opinion of which Cowen becomes aware after the date of its opinion.

Cowen did not make or obtain any independent evaluations, valuations or appraisals of the assets or liabilities of Pharmacopeia or Ligand, nor was Cowen furnished with those materials. In addition, Cowen did not evaluate the solvency or fair value of Pharmacopeia or Ligand under any state or federal laws relating to bankruptcy, insolvency or similar matters. With respect to all legal matters relating to Pharmacopeia and Ligand, Cowen relied on the advice of legal counsel to Pharmacopeia. Cowen expresses no opinion with respect to such legal matters. Cowen's opinion addressed only the fairness, from a financial point of view, to the holders of Pharmacopeia common stock of the consideration to be received by such holders pursuant to merger 1. Cowen expressed no view as to any other aspect or implication of the merger agreement or any other agreement, arrangement or understanding entered into in connection with the transactions contemplated by the merger agreement or otherwise. Cowen's opinion was necessarily based upon economic and market conditions and other circumstances as they existed and could be evaluated by Cowen on the date of its opinion. It should be understood that although subsequent developments may affect its opinion, Cowen does not have any obligation to update, revise or reaffirm its opinion and Cowen expressly disclaims any responsibility to do so.

In rendering its opinion, Cowen assumed, in all respects material to its analysis, that the representations and warranties of each party contained in the merger agreement and the CVR agreement are true and correct, that each party will perform all of the covenants and agreements required to be performed by it under the merger agreement and the CVR agreement and that all conditions to the consummation of the transactions contemplated by the merger agreement will be satisfied without waiver thereof. Cowen assumed that the final form of the merger agreement and the CVR agreement would be substantially similar to the last drafts received by Cowen prior to rendering its opinion. Pursuant to such draft agreements, each share of Pharmacopeia common stock would be converted in merger 1 into the right to receive 0.587 shares of Ligand common stock and one CVR, based on the closing price per share of Ligand common stock on September 22, 2008. Cowen also assumed that all governmental, regulatory and other consents and approvals contemplated by the merger agreement and the CVR agreement would be obtained and that, in the course of obtaining any of those consents, no restrictions will be imposed or waivers made that would have an adverse effect on the contemplated benefits of the transactions contemplated by the merger agreement. Pharmacopeia informed Cowen, and Cowen assumed, that the mergers, taken together, will be treated as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code.

Cowen's opinion does not constitute a recommendation to any stockholder as to how the stockholder should vote with respect to the proposed transactions or to take any other action in connection with the proposed transactions or otherwise. Cowen's opinion does not imply any conclusion as to the likely value, price or trading range for Ligand's common stock or the CVR's following consummation of the transactions contemplated by the merger agreement or otherwise, which may vary depending on numerous factors that generally influence the price of securities. Cowen's opinion is limited to the fairness, from a financial point of view, of the consideration to be received by the holders of Pharmacopeia common stock pursuant to merger 1. Cowen expresses no opinion as to the underlying business reasons that may support the decision of the Pharmacopeia board of directors to approve, or Pharmacopeia's decision to consummate, the transactions contemplated by the merger agreement or the relative merits of such transactions as compared to other business strategies or transactions that might be available to Pharmacopeia. Cowen's opinion does not address the fairness of the amount or the nature of any compensation to any of Pharmacopeia's officers, directors or employees, or any class of such persons, relative to the consideration to be provided to the public stockholders of Pharmacopeia.

The following is a summary of the principal financial analyses performed by Cowen to arrive at its opinion. Some of the summaries of financial analyses include information presented in tabular format.

In order to fully understand the financial analyses, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. Considering the data set forth in the tables without considering the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of the financial analyses. Cowen performed certain procedures, including each of the financial analyses described below, and reviewed with the managements of Pharmacopeia and Ligand the assumptions on which such analyses were based and other factors, including the historical and projected financial results of Pharmacopeia and Ligand.

Implied Transaction Valuation. Cowen calculated the valuation per share of Pharmacopeia common stock implied by the transactions by multiplying $3.36, the closing price per share of Ligand common stock on September 22, 2008, by 0.587, the exchange ratio pursuant to the merger agreement assuming such price per share of Ligand common stock. The valuation per share of Pharmacopeia common stock so implied was $1.97, excluding the CVR payment, and $2.47, assuming payment of the CVR.

Analysis of Selected Publicly Traded Companies. To provide contextual data and comparative market information, Cowen compared selected historical operating and financial data and ratios for Pharmacopeia to the corresponding financial data and ratios of certain other companies, or the Selected Companies, whose securities are publicly traded and which Cowen believes have operating, market valuation and trading valuations similar to what might be expected of Pharmacopeia. These companies were:

Selected Early Stage Drug Discovery Companies:

Array BioPharma

Idera Pharmaceuticals

Lexicon Pharmaceuticals

Infinity Pharmaceuticals

ArQule

Curis

Anadys Pharmaceuticals

Sunesis Pharmaceuticals

Selected Early Stage Life Sciences Companies with Less than 1 Year of Cash:

Ardea Biosciences

Penwest Pharmaceuticals

Metabasis Therapeutics

Achillion Pharmaceuticals

Sunesis Pharmaceuticals

ZIOPHARM Oncology

Inhibitex

Keryx Biopharmaceuticals

Memory Pharmaceuticals

TorreyPines Therapeutics

The Selected Early Stage Drug Discovery Companies include life sciences companies with a proprietary small molecule discovery platform and a lead product in Phase II or earlier. The Selected Early Stage Life Sciences Companies with Less than 1 Year of Cash include life sciences companies focused on the development of small molecule drugs with a lead product in Phase II or earlier and less than one year of cash as of latest filing.

The data and ratios included the market capitalization of common stock on a fully diluted basis (referred to as the equity value) and the equity value plus debt and less cash (referred to as the enterprise value) of the Selected Companies.

The following table presents the per share equity value and enterprise value for Pharmacopeia implied by the mean and median of the equity values and enterprise values of the Selected Companies divided by the fully diluted common stock of Pharmacopeia. The information in the table is based on the closing stock prices of the Selected Companies on September 22, 2008.

	Reference Range for Selected Companies		Implied Pharmacopeia Per Share Equity Value		Pharmacopeia Per Share Transaction Equity Value	
Valuation Methodology	Equity Value	Enterprise Value	Equity Value Basis	Enterprise Value Basis	Excluding CVR	Assuming Full Payment of CVR
Selected Early Stage Drug Discovery Companies	$145.0 $190.0	$55.0 $115.0	$4.83 $6.33	$2.28 $4.28	$ 1.97	$ 2.47
Selected Early Stage Life Sciences Companies with Less than 1 Year of Cash	$30.0 $50.0	$5.0 $30.0	$1.00 $1.67	$0.61 $1.45	$ 1.97	$ 2.47

Although the Selected Companies were used for comparison purposes, none of those companies are directly comparable to Pharmacopeia. Accordingly, an analysis of the results of such a comparison is not purely mathematical, but instead involves complex judgments and considerations concerning differences in historical and projected financial and operating characteristics of the Selected Companies and other factors that could affect the publicly traded value of the Selected Companies or Pharmacopeia to which they are being compared.

Analysis of Selected Transactions. Cowen reviewed the financial terms, to the extent publicly available, of selected transactions with an equity value of greater than $20 million involving Phase II small molecule companies, or Phase II Company Transactions, which were announced or completed since 2004. These transactions were (listed as acquiror/target):

Adenosine Therapeutics/Clinical Data (PGx Health)

Protez Pharmaceuticals/Novartis

IOMAI Corporation/Intercell

Proprius Pharmaceuticals/Cypress Bioscience

Systems Medicine/Cell Therapeutics

Hypnion/Eli Lilly

Arrow Therapeutics/AstraZeneca

Cabrellis Pharmaceuticals/Pharmion

Pipex Therapeutics/Sheffield Pharmaceuticals

RxKinetix/Endo Pharmaceuticals

Vela Pharmaceuticals/Pharmos

Miikana Therapeutics/EntreMed

Ionix Pharmaceuticals/Vernalis

Salmedix/Cephalon

Zycos/MGI Pharma

Aesgen/MGI Pharma

Chrysalis BioTechnology/OrthoLogic

The following table presents the range of per share equity values and per share transaction values for Pharmacopeia implied by this analysis.

	Reference Range for Selected Transactions		Implied Pharmacopeia Per Share Equity Value		Pharmacopeia Per Share Transaction Equity Value	
Valuation Methodology	Equity Value	Enterprise Value	Equity Value Basis	Enterprise Value Basis	Excluding CVR	Assuming Full Payment of CVR
Comparison to Phase II Company Transactions	$35.0	$75.0	$35.0	$75.0	$1.17	$2.50	$1.61	$2.95	$ 1.97	$ 2.47

Although the Phase II Company Transactions were used for comparison purposes, none of those transactions is directly comparable to the transactions contemplated by the merger agreement, and none of the companies in those transactions is directly comparable to Pharmacopeia. Accordingly, an analysis of the results of such a comparison is not purely mathematical, but instead involves complex considerations and judgments concerning differences in historical and projected financial and operating characteristics of the companies involved and other factors that could affect the acquisition value of Pharmacopeia or such companies to which it is being compared.

Analysis of Premiums Paid in Selected Transactions. Cowen reviewed the premium of the offer price over the trading prices one trading day and 20 trading days prior to the announcement date of 26 selected transactions in the life sciences industry announced since 2003, in which the target was a publicly-traded company at the time of announcement and the consideration to be received was comprised solely of stock. Cowen then applied these premiums to the Pharmacopeia stock prices one trading day and twenty trading days prior to September 22, 2008.

Using this methodology, the equity value per share of Pharmacopeia common stock implied by the analysis ranged from:.

$1.86 to $2.17 per share, based on the one day premium and stock price; and

$3.57 to $3.76 per share, based on the 20 trading day premium and stock price.

Discounted Cash Flow Analysis. Cowen estimated a range of values for Pharmacopeia common stock based upon the discounted present value of the projected after-tax cash flows of Pharmacopeia described in the Pharmacopeia Forecast provided by management of Pharmacopeia for the fiscal years ended 2009 through 2017, and of the terminal value of Pharmacopeia at December 31, 2017. After-tax cash flow was calculated by taking projected earnings before interest and taxes (EBIT) and subtracting

from this amount projected taxes. This analysis was based upon certain assumptions described by, projections supplied by and discussions held with the management of Pharmacopeia. In performing this analysis, Cowen utilized discount rates ranging from 20% to 25%, which were selected based on the weighted average cost of capital for companies Cowen deemed comparable to Pharmacopeia.

Utilizing this methodology, the per share equity value of Pharmacopeia implied by this analysis ranged from $1.47 to $4.45 per share.

Cowen also estimated a range of values for Pharmacopeia common stock based upon the relative discounted present value of the projected after-tax cash flows of Pharmacopeia and Ligand described in the Pharmacopeia Forecast and the Ligand Forecast provided by management of Pharmacopeia for the fiscal years ended 2009 through 2017, and of the terminal value of Pharmacopeia and Ligand at December 31, 2017. After-tax cash flow was calculated by taking projected EBIT and subtracting from this amount projected taxes. This analysis was based upon certain assumptions described by, projections supplied by and discussions held with the management of Pharmacopeia. In performing this analysis, Cowen utilized discount rates ranging from 20% to 25% for Pharmacopeia and 14% to 16% for Ligand, which were selected based on the weighted average cost of capital for companies Cowen deemed comparable to Pharmacopeia and Ligand, respectively.

Utilizing this methodology, the per share equity value of Pharmacopeia implied by this analysis ranged from $1.35 to $2.95 per share.

The summary set forth above does not purport to be a complete description of all the analyses performed by Cowen. The preparation of a fairness opinion involves various determinations as to the most appropriate and relevant methods of financial analysis and the application of these methods to the particular circumstances and, therefore, such an opinion is not readily susceptible to partial analysis or summary description. Cowen did not attribute any particular weight to any analysis or factor considered by it, but rather made qualitative judgments as to the significance and relevance of each analysis and factor. Accordingly, notwithstanding the separate factors summarized above, Cowen believes, and has advised the Pharmacopeia board of directors, that its analyses must be considered as a whole and that selecting portions of its analyses and the factors considered by it, without considering all analyses and factors, could create an incomplete view of the process underlying its opinion. In performing its analyses, Cowen made numerous assumptions with respect to industry performance, business and economic conditions and other matters, many of which are beyond the control of Pharmacopeia and Ligand. These analyses performed by Cowen are not necessarily indicative of actual values or future results, which may be significantly more or less favorable than suggested by such analyses. In addition, analyses relating to the value of businesses do not purport to be appraisals or to reflect the prices at which businesses or securities may actually be sold. Accordingly, such analyses and estimates are inherently subject to uncertainty, being based upon numerous factors or events beyond the control of the parties or their respective advisors. None of Pharmacopeia, Ligand, Cowen or any other person assumes responsibility if future results are materially different from those projected. The analyses supplied by Cowen and its opinion were among several factors taken into consideration by the Pharmacopeia board of directors in making its decision to enter into the merger agreement and should not be considered as determinative of such decision.

Cowen was selected by the Pharmacopeia board of directors to render an opinion to the Pharmacopeia board of directors because Cowen is a nationally recognized investment banking firm and because, as part of its investment banking business, Cowen is continually engaged in the valuation of businesses and their securities in connection with mergers and acquisitions, negotiated underwritings, secondary distributions of listed and unlisted securities, private placements and valuations for corporate and other purposes. Cowen and its affiliates in the ordinary course of business have from time to time provided, and in the future may continue to provide, commercial and investment banking services to

Pharmacopeia and Ligand and have received and may in the future receive fees for the rendering of such services. One member of Ligand's board of directors serves as an officer for an affiliate of Cowen. The issuance of Cowen's opinion to the Pharmacopeia board of directors was approved by Cowen's fairness opinion review committee.

Pursuant to the Cowen engagement letter, if merger 1 is consummated, Cowen will be entitled to receive a transaction fee. Pharmacopeia has also agreed to pay a fee to Cowen for rendering its opinion, which fee shall be credited against any transaction fee paid. Additionally, Pharmacopeia has agreed to reimburse Cowen for its out-of-pocket expenses, including attorneys' fees, and has agreed to indemnify Cowen against certain liabilities, including liabilities under the federal securities laws. The terms of the fee arrangement with Cowen, which are customary in transactions of this nature, were negotiated at arm's length between Pharmacopeia and Cowen, and the Pharmacopeia board of directors was aware of the arrangement, including the fact that a significant portion of the fee payable to Cowen is contingent upon the completion of merger 1.

Ligand's Reasons for the Mergers

Ligand believes that the mergers will enable Ligand to enhance its portfolio of royalty partnerships, pipeline assets and drug discovery resources, allowing the combined company to accelerate drug discovery efforts, increase the potential revenue earned from partnerships, cut costs and build long-term stockholder value. There were several important factors that contributed to the Ligand board of directors' approval, including the following:

Numerous Royalty Partnerships. Historically, Pharmacopeia's success was in early-stage drug research and Pharmacopeia has a strong record of entering drug discovery partnerships with well established pharmaceutical companies. At the current time, Pharmacopeia has multiple agreements with various drug companies that are developing numerous different molecules at various stages of development. If these programs are successful and advance in development and are commercialized, Ligand will be entitled to receive substantial milestone payments and royalties from these partners with little additional funding requirement by Ligand.

Promising Drug Discovery Platform. The drug discovery platform and proprietary technologies of the combined company are highly complementary and are capable of potentially generating unique and valuable drug candidates.

Pipeline. Pharmacopeia's product candidate pipeline may provide Ligand's stockholders with additional development opportunities to advance with the goal of entering into new license agreements.

Financial Implications. The combination of the two companies should allow the combined company to operate with a strong cash position, cut costs by eliminating redundant public company expenses and further reduce expenses by setting funding priorities on the programs considered to possess the highest potential financial return.

However, there can be no assurance that the benefits of the potential growth, synergies or opportunities considered by Ligand's board of directors will be achieved through completion of the mergers. Achieving Ligand's objectives is subject to particular risks which are discussed in the section of this proxy statement/prospectus entitled "Risk Factors."

Interests of Pharmacopeia's Executive Officers and Directors in the Mergers

In considering the recommendation of Pharmacopeia's board of directors that you vote to adopt the merger agreement, you should be aware that some of Pharmacopeia's executive officers and directors may have economic interests in the merger that are different from, or in addition to, those of Pharmacopeia's stockholders generally. Pharmacopeia's board of directors was aware of and considered these interests, among other matters, in reaching its determination that the merger agreement and the transactions contemplated thereby, including the mergers, are fair to, advisable for, and in the best interests of, Pharmacopeia and its stockholders, in approving the merger agreement and the transactions contemplated thereby, including the mergers, and in making its recommendation that Pharmacopeia's stockholders vote in favor of the adoption of the merger agreement. These interests include the following:

- upon the occurrence of certain types of termination of employment after the mergers, certain executive officers would be entitled to receive severance benefits, including certain lump sum payments, continuation of group medical coverage, and immediate vesting of options or other incentive securities as more fully described below;

- the surviving entity will maintain and honor all indemnification arrangements in place for all past and present directors, officers, employees and agents of Pharmacopeia for acts or omissions occurring at or prior to the effective time of merger 1;

- the surviving entity will indemnify all past and present directors, officers, employees and agents of Pharmacopeia to the fullest extent permitted by applicable Delaware law for acts or omissions occurring in connection with the approval of the merger agreement and the consummation of the transactions contemplated thereby, including the mergers;

- the organizational documents of the surviving entity will contain provisions with respect to exculpation and indemnification that are at least as favorable to the past and present indemnified directors, officers, employees and agents of Pharmacopeia as those contained in Pharmacopeia's certificate of incorporation and bylaws; and

- the surviving entity will also maintain a directors' and officers' insurance and indemnification policy which will cover those persons who are covered by Pharmacopeia's directors' and officers' insurance and indemnification policy for events occurring prior to the effective time of merger 1 on terms no less favorable than those applicable to the current directors and officers of Pharmacopeia for six years, subject to certain limitations.

Upon completion of the mergers, based on the number of shares of common stock of Ligand and Pharmacopeia outstanding on the record date, assuming that all Pharmacopeia stock options and warrants are exercised, but without taking into account stock options or warrants of Ligand, it is anticipated that the directors and executive officers of Pharmacopeia collectively will beneficially own between % and % of the then outstanding shares of Ligand common stock, depending on the market price of Ligand's common stock during the period prior to the special meeting. In addition, pursuant to the merger agreement, Pharmacopeia's board of directors will select two nominees to serve on the Ligand board of directors upon completion of the mergers.

Certain Potential Severance Benefits. Pharmacopeia is party to severance agreements with each of Messrs. Costalas and Posner, René Belder, Pharmacopeia's Senior Vice President, Clinical and Regulatory Affairs, and Maria L. Webb, Pharmacopeia's Vice President, Preclinical Research, Biological and Pharmacological Sciences. Pursuant to these severance agreements, each executive officer is entitled to certain severance benefits upon his or her termination of employment by Pharmacopeia without "cause" or by the executive for "good reason," in either case, during the period beginning two

months prior to a "change of control" and ending twelve months following a "change of control." In addition, Pharmacopeia is party to an employment agreement with Dr. Mollica. Pursuant to the employment agreement with Dr. Mollica, Dr. Mollica is entitled to certain severance benefits upon his termination of employment by Pharmacopeia without "cause" in connection with a "change of control."

Specifically, upon a termination of employment described in the preceding paragraph, each executive officer is entitled to receive all accrued but unpaid compensation, a lump sum payment equal to a certain number of months of his or her base salary (as described in the table below), a lump sum payment equal to a certain percentage of his or her target bonus for the year of termination (as described in the table below) and continuation of healthcare coverage for a certain number of months following his or her termination of employment (as described in the table below). The payments described in the preceding sentence are collectively referred to as the "severance payments." The mergers will constitute a "change of control" under each officer's severance or employment agreement, as the case may be.

As used in Dr. Mollica's employment agreement, the severance agreements and this proxy statement/prospectus, "cause" is generally defined as one of the following: (i) any gross failure of the executive (other than by reason of disability) to faithfully and professionally carry out his or her duties or to comply with any material provision of the agreement, which failure continues for thirty days without cure; (ii) the executive's dishonesty, misuse or misappropriation of Pharmacopeia assets, or other willful misconduct; (iii) the executive's conviction of any felony or other crime involving moral turpitude, whether or not relating to the executive's employment; (iv) the executive's insobriety or use of drugs, chemicals or controlled substances either in the course of performing his or her duties to Pharmacopeia or otherwise affecting his or her ability to do so; (v) the executive's failure to comply with a lawful written direction of Pharmacopeia; or (vi) any wanton or willful dereliction of duties by the executive.

As used in the severance agreements and this proxy statement/prospectus, "good reason" is generally defined as one of the following: (i) any action or inaction that constitutes a material breach by Pharmacopeia of the material terms of the agreement; (ii) any material change in the geographic location at which the executive must perform services for Pharmacopeia, which means a requirement that the executive commute more than fifty miles from the offices of Pharmacopeia at which he or she is principally employed; (iii) any material diminution of the authority, duties or responsibilities of the executive; or (iv) any material reduction of the executive's base salary (generally more than twenty percent), other than a reduction applicable generally to substantially all Pharmacopeia employees.

As used in Dr. Mollica's employment agreement and this proxy statement/prospectus when describing Dr. Mollica's employment agreement, a "change of control" is generally defined as one of the following: (i) the acquisition by any person of beneficial ownership of 50% or more of Pharmacopeia's voting stock; (ii) certain business combinations involving Pharmacopeia; or (iii) the sale, lease, exchange or other transfer of all or substantially all of Pharmacopeia's assets.

As used in the severance agreements and this proxy statement/prospectus when describing such severance agreements, a "change of control" is generally defined as one of the following: (i) the acquisition by any person of beneficial ownership of 30% or more of Pharmacopeia's voting stock; (ii) certain business combinations involving Pharmacopeia; (iii) a stockholder approved dissolution or liquidation of Pharmacopeia; (iv) the sale, lease, exchange or other transfer of all or substantially all of Pharmacopeia's assets; or (v) a change in the composition of a majority of Pharmacopeia's board of directors during any period of two consecutive years.

Assuming that merger 1 occurs, and each executive officer's employment is terminated, on or before December 31, 2008, the approximate value of the severance payments they would be entitled to receive before applicable withholding taxes is set forth in the table below.

Executive	Number of Months of Base Salary	Number of Months of Benefit Continuation	Percentage of Target Bonus for Year of Termination	Total Severance Payments
Joseph Mollica	24	0	200%	$ 1,215,000
Stephen Costalas	18	18	150%	$ 632,435
Brian Posner	18	18	150%	$ 527,312
Rene Belder	12	12	100%	$ 386,462
Maria Webb	9	9	100%	$ 228,250
Total				**$ 2,989,458**

Dr. Mollica's employment agreement provides that in the event he incurs any excise tax under Section 4999 of the Internal Revenue Code by reason of any payments or benefits he receives in connection with his employment, or termination of employment, with Pharmacopeia, Pharmacopeia will pay him an additional amount sufficient to put him in the same tax position as he would have been in had no excise tax been imposed on such payments. Assuming that merger 1 occurs, and his employment is terminated, on or before December 31, 2008, and the per share merger consideration is valued at $2.50, Dr. Mollica is not expected to incur any excise taxes under Section 4999 of the Internal Revenue Code by reason of any payments he receives in connection with the mergers.

Each of Messrs. Costalas' and Posner's severance agreements provide that if the payments and benefits either executive officer receives in connection with his employment, or termination of employment, with Pharmacopeia exceed the safe harbor amount under Section 280G of the Internal Revenue Code by at least 10% and the executive incurs any excise tax under Section 4999 of the Internal Revenue Code, then Pharmacopeia will pay the executive an additional amount sufficient to put him in the same tax position as he would have been in had no excise tax been imposed on such payments. If the payments and benefits received by such executive officers exceed the safe harbor amount of Section 280G of the Internal Revenue Code by less than 10%, then the payments to the executive officers will be reduced to the extent necessary to avoid the imposition of the excise tax under Section 4999 of the Internal Revenue Code. Assuming that merger 1 occurs, and his employment is terminated, on or before December 31, 2008, and the per share merger consideration is valued at $2.50, Mr. Costalas is not expected to incur any excise taxes under Section 4999 of the Internal Revenue Code by reason of any payments he receives in connection with the mergers. Assuming that merger 1 occurs, and Mr. Posner's employment is terminated in connection with the mergers, on or before December 31, 2008, and the per share merger consideration is valued at $2.50, the payments and benefits he would receive in connection with such termination are expected to exceed the safe harbor amount under Section 280G of the Internal Revenue Code by approximately $42,000 (or by approximately 6.8% of his safe harbor amount under Section 280G of the Internal Revenue Code). Because these payments and benefits would exceed his safe harbor amount under Section 280G of the Internal Revenue Code by less than 10%, Mr. Posner's payments could be reduced by approximately $42,000 upon such a termination.

To the extent the closing of the mergers occurs, or Dr. Mollica's, Mr. Costalas' or Mr. Posner's date of termination occurs, after December 31, 2008, or the per share merger consideration is valued at more than $2.50 per share, each such executive may be entitled to payments from Pharmacopeia with respect to reimbursement for excise taxes and the taxes thereon incurred under Section 4999 of the Internal Revenue Code under the foregoing provisions of their employment or severance agreements, as the case may be.

In addition to the severance payments, upon a termination of employment described above, Messrs. Costalas' and Posner's and Drs. Belder's and Webb's unvested stock options will become fully vested and exercisable until the earlier of one year following their termination of employment or the expiration of the term of the stock options. As of October 8, 2008, Messrs. Costalas and Posner and Drs. Belder and Webb had 117,764, 139,693, 167,685 and 40,939 unvested stock options, respectively. Pursuant to the merger agreement, all option holders, including the executives, will be given the opportunity to receive up to $0.20 in cancellation of each of their outstanding stock options (regardless of whether or not the stock options are vested). Assuming that (i) the mergers occur on or before December 31, 2008, (ii) none of the executives forfeit or exercise any of their stock options prior to the occurrence of the mergers and (iii) all outstanding stock options held by the executives prior to the mergers are cancelled in exchange for $0.20 for each stock option, the approximate payments that each of Messrs. Costalas and Posner and Drs. Belder and Webb will receive for their outstanding stock options before applicable withholding taxes is $53,500, $56,498, $43,033 and $41,819, respectively. In connection with the mergers, Dr. Mollica has agreed to cancel all stock options held by him for no consideration.

Pursuant to the merger agreement, all unvested restricted stock units held by Messrs. Costalas and Posner and Drs. Mollica, Belder and Webb will vest in full upon the consummation of the mergers. Assuming that the per share merger consideration is valued at $2.50, and that each executive officer continues to hold his or her restricted stock units prior to the effective time of merger 1, the approximate value that Messrs. Costalas and Posner and Drs. Mollica, Belder and Webb will realize with respect to their restricted stock units before applicable withholding taxes is $150,240, $75,120, $137,720, $100,160 and $30,048, respectively.

Upon the consummation of the mergers, Drs. Mollica and Webb and Paul A. Bartlett, a member of Pharmacopeia's board of directors, will receive all amounts they have deferred under Pharmacopeia's deferred compensation plan. The approximate value of these payments as of September 30, 2008, before applicable withholding taxes is $1,238,320 for Dr. Mollica, $241,971 for Dr. Webb and $87,201 for Dr. Bartlett.

Pursuant to the merger agreement, Pharmacopeia's executive officers are entitled to certain benefit arrangements with the surviving entity. See "Certain Terms of the Merger Agreement Covenants Treatment of Pharmacopeia Employees" beginning on page 101 of this proxy statement/prospectus.

In addition to the executive officers listed above, Leslie J. Browne, Pharmacopeia's former President and Chief Executive Officer, David M. Floyd, Pharmacopeia's former Executive Vice President and Chief Scientific Officer, and Simon M. Tomlinson, Pharmacopeia's former Senior Vice President, Business Development, each of whom were executive officers of Pharmacopeia during 2008 prior to the termination of their employment, will be given the opportunity to receive up to $0.20 in cancellation of each of their outstanding stock options, on the same terms as are offered to other employees and former employees. Assuming that (i) the mergers occur on or before December 31, 2008, (ii) none of such former executive officers forfeits or exercises any of his stock options prior to the occurrence of the mergers and (iii) all outstanding stock options held by such former executive officers prior to the mergers are cancelled in exchange for $0.20 for each stock option, the approximate payments that each of Drs. Browne, Floyd and Tomlinson will receive with respect to their stock options before applicable withholding taxes is $67,812, $48,755 and $30,200, respectively.

Insurance and Indemnification of Pharmacopeia Officers and Directors. After the mergers, the surviving entity will maintain and honor all indemnification arrangements in place for all past and present directors, officers, employees and agents of Pharmacopeia as of the date of the merger agreement for acts or omissions occurring at or prior to the effective time of merger 1. The surviving entity will also indemnify and hold harmless such persons to the fullest extent permitted by applicable Delaware law for acts or omissions occurring in connection with the approval of the merger agreement

and the consummation of the transactions contemplated thereby. The organizational documents of the surviving entity will contain provisions with respect to exculpation and indemnification that are at least as favorable to the past and present indemnified directors, officers, employees and agents of Pharmacopeia as those contained in Pharmacopeia's certificate of incorporation and bylaws as in effect on the date of the merger agreement. Such provisions will not be amended, repealed or otherwise modified for six years from the effective time of merger 1 in any manner that would adversely affect the rights thereunder of such indemnified persons.

Upon completion of the mergers, subject to certain exceptions, the surviving entity will also maintain a directors' and officers' insurance and indemnification policy which will cover those persons who are covered by Pharmacopeia's directors' and officers' insurance and indemnification policy as of the date of the merger agreement for events occurring prior to the effective time of merger 1 on terms no less favorable than those applicable to the current directors and officers of Pharmacopeia for six years; provided that the surviving entity shall not be obligated to make aggregate annual premium payments which exceed 250% of the annual premium payments on Pharmacopeia's current policy in effect as of the date of the merger agreement. See "Certain Terms of the Merger Agreement Covenants Director and Officer Indemnification and Insurance" beginning on page 102 of this proxy statement/prospectus.

Pharmacopeia Directors and Officers After Completion of the Mergers. Upon completion of merger 1, the directors and officers of Margaux immediately prior to merger 1 will become the directors and officers of the intermediate surviving corporation. Upon completion of merger 2, the managing member and officers of Latour immediately prior to merger 2 will become the managing member and officers of the surviving entity. In addition, pursuant to the merger agreement, Pharmacopeia's board of directors will select two nominees to serve on the Ligand board of directors upon completion of the mergers.

Regulatory Filings and Approvals Required to Complete the Mergers

Under the HSR Act and related rules, Ligand and Pharmacopeia may not complete the mergers until the expiration of a thirty-day waiting period following the filing of notification reports with the DOJ and the FTC by Ligand and Pharmacopeia, which each party made on October 8, 2008, unless early termination of the waiting period is granted. If, within the initial thirty day waiting period, either the DOJ or the FTC issues a request for additional information or documents concerning the mergers, then the waiting period will be extended until the thirtieth calendar day after the date of substantial compliance with the request by both parties, unless earlier terminated by the FTC or the DOJ.

While Ligand and Pharmacopeia expect to obtain all of these regulatory approvals, there can be no assurance that they will obtain the regulatory approvals necessary or that the granting of these regulatory approvals will not involve the imposition of conditions on the completion of the mergers or require changes to the terms of the mergers.

In addition, at any time before or after the completion of the mergers, the DOJ, the FTC or others could take action under the antitrust laws, including seeking to prevent the mergers, to rescind the mergers or to conditionally approve the mergers upon the divestiture by Pharmacopeia or Ligand of substantial assets. In addition, in some jurisdictions, a competitor, customer or other third party could initiate a private action under the antitrust or other laws challenging or seeking to enjoin the mergers, before or after it is completed.

Listing of Shares of Ligand Common Stock Issued in Merger 1 on Nasdaq

Ligand will use reasonable efforts to authorize for listing on Nasdaq, prior to the effective time of merger 1, the shares of Ligand common stock issuable and those required to be reserved for issuance in connection with merger 1, subject to official notice of issuance.

Delisting and Deregistration of Pharmacopeia Common Stock

If the mergers are completed, Pharmacopeia common stock will be delisted from Nasdaq and deregistered under the Exchange Act. In addition, Pharmacopeia will cease to be a reporting company under the Exchange Act.

On September 30, 2008, Pharmacopeia received a notice from The Nasdaq Stock Market indicating that Pharmacopeia is not in compliance with the continued listing requirements under Nasdaq Marketplace Rule 4450(b)(1)(A). Pharmacopeia received this notice because the market value of its listed securities was below $50 million for 10 consecutive trading days. In accordance with Nasdaq Marketplace Rule 4450(e)(4), Pharmacopeia will be provided 30 calendar days, or until October 30, 2008, to regain compliance with the continued listing requirements. If at any time before October 30, 2008, the market value of Pharmacopeia's listed securities is $50 million or more for a minimum of 10 consecutive business days (or such longer period of time as the Nasdaq staff may require in some circumstances), Pharmacopeia will regain compliance with the Rule. If Pharmacopeia cannot demonstrate compliance with the Rule by October 30, 2008, the Nasdaq staff will provide written notification to Pharmacopeia that Pharmacopeia's securities will be delisted from Nasdaq. Nasdaq rules permit Pharmacopeia to appeal the delisting determination to a Nasdaq Listings Qualifications Panel. Alternatively, Pharmacopeia may apply to transfer its securities to The Nasdaq Capital Market. In order to transfer, Pharmacopeia must satisfy the continued inclusion requirements for that market. This notification has no immediate effect on the listing of Pharmacopeia's common stock on The Nasdaq Global Market.

Sales of Shares of Ligand Common Stock Received in Merger 1

The shares of Ligand common stock to be issued in connection with merger 1 will be registered under the Securities Act and will be freely transferable, except for shares of Ligand common stock issued to any person who is deemed to be an "affiliate" of Ligand upon completion of the mergers. Persons who may be deemed to be "affiliates" of Ligand upon completion of the mergers include individuals or entities that control, are controlled by, or are under common control with Ligand. "Affiliates" of Pharmacopeia may no longer be subject to resale restrictions, provided they are not deemed affiliates of the combined entity.

Persons who may be deemed to be affiliates of Ligand upon completion of the mergers may not sell any of the shares of Ligand common stock received by them in connection with the mergers except pursuant to:

an effective registration statement under the Securities Act covering the resale of those shares; or

any other applicable exemption under the Securities Act.

Ligand's registration statement on Form S-4, of which this proxy statement/prospectus forms a part, does not cover the resale of shares of Ligand common stock to be received in connection with the mergers by persons who may be deemed to be affiliates of Ligand upon completion of the mergers.

Material United States Federal Income Tax Consequences of the Mergers

The following is a summary of the material United States federal income tax considerations of the mergers applicable to Pharmacopeia stockholders. This summary is based upon existing United States federal income tax law, which is subject to change or differing interpretations (possibly with retroactive effect). This summary does not address all aspects of United States federal income taxation which may be relevant to particular Pharmacopeia stockholders in light of their individual investment circumstances, such as stockholders subject to special tax rules (e.g., financial institutions, insurance companies, broker-dealers, and tax-exempt organizations) or to stockholders who acquired Pharmacopeia common stock in connection with stock option, stock purchase or restricted stock plans or in other compensatory transactions, or as part of a straddle, hedge, conversion, constructive sale, or other integrated security transaction for United States federal income tax purposes, all of whom may be subject to tax rules that differ significantly from those discussed below.

This summary does not discuss any United States federal income tax considerations to Pharmacopeia stockholders who are not "United States holders" (as defined below). If you are not a United States holder you should consult with your own tax advisor as to the United States federal, state, local, and foreign tax laws with respect to the mergers. In addition, this summary does not discuss any United States federal income tax considerations to Pharmacopeia stockholders who exercise appraisal and/or dissenter's rights under Delaware law. This summary is limited to Pharmacopeia stockholders that hold their Pharmacopeia common stock as a "capital asset" (generally, property held for investment) under the Internal Revenue Code. **You are urged to consult your own tax advisors regarding the United States federal income tax considerations of the mergers, as well as the effects of state, local, and foreign tax laws.**

For purposes of this summary, a "United States holder" is a Pharmacopeia stockholder that is, for United States federal income tax purposes, (i) an individual who is a citizen or resident of the United States; (ii) a corporation or other entity taxable as a corporation that is created in, or organized under the laws of, the United States or any state or political subdivision thereof; (iii) an estate, the income of which is includible in gross income for United States federal income tax purposes regardless of its source; or (iv) a trust (A) the administration of which is subject to the primary supervision of a United States court and which has one or more United States persons who have the authority to control all substantial decisions of the trust or (B) that has otherwise elected to be treated as United States person under the Internal Revenue Code.

If a partnership holds Pharmacopeia common stock, the tax treatment of a partner in such partnership will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding Pharmacopeia common stock, you should consult your tax advisor regarding the tax considerations of the mergers.

This discussion is for general information only and should not be construed as tax advice. It is a summary and does not purport to be a comprehensive analysis or description of all potential United States federal income tax consequences of the mergers. Pharmacopeia and Ligand urge you to consult your tax advisor with respect to the particular United States federal, state, local or foreign tax consequences of the mergers to you.

General

Pharmacopeia's obligation to complete the mergers is conditioned upon its receipt at closing of a tax opinion from Dechert that the mergers, taken together, will qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. Ligand's obligation to complete the mergers is conditioned upon its receipt at closing of a tax opinion from Latham that the mergers, taken together, will qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code. Neither Pharmacopeia nor Ligand may waive such closing conditions after the Pharmacopeia stockholders have approved the merger agreement and the transactions contemplated by the merger agreement, including the mergers, unless further approval is obtained from the Pharmacopeia stockholders with appropriate disclosure. These opinions will be based on factual representations and covenants made by Pharmacopeia and Ligand (including those contained in tax representation letters to be provided by Pharmacopeia and Ligand at the time of closing), and on customary factual assumptions. In addition, these opinions will be based on the law in effect on the date of the opinions. Any change in currently applicable law, which may or may not be retroactive, or the failure of any factual representation, statement or assumption to be true, correct and complete in all material respects, could affect the validity of these opinions. Neither Pharmacopeia nor Ligand will request a ruling from the Internal Revenue Service, or the IRS, regarding the tax consequences of the mergers to United States holders. The tax opinions are not binding on the IRS or any court. No assurance can be given that the IRS would not assert, or that a court would not sustain, a position contrary to any tax consequences set forth below.

The following material United States federal income tax consequences will result from qualification of the mergers, taken together, as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code:

None of Pharmacopeia, Ligand, Margaux and Latour will recognize gain or loss solely as a result of the mergers;

United States holders generally will not recognize any gain or loss with respect to the stock portion of the merger consideration, while with respect to the cash and CVR portion of the merger consideration United States holders will generally recognize capital gain (but not loss) in an amount equal to the lesser of: (1) the amount of cash and the fair market value of the CVRs received pursuant to merger 1 (excluding any cash received in lieu of a fractional share of Ligand common stock), and (2) the amount of gain realized on the transaction, if any, which is the amount by which the sum of the fair market value of the Ligand common stock determined as of the effective time of merger 1 and the amount of cash and fair market value of the CVRs received pursuant to merger 1 (excluding any cash received in lieu of a fractional share of Ligand common stock) for the Pharmacopeia common stock held by such United States holder exceeds the adjusted tax basis in the Pharmacopeia common stock;

United States holders generally will recognize capital gain or capital loss with respect to the amount of cash received in lieu of a fractional share of Ligand common stock equal to the difference between the cash received in lieu of this fractional share and the portion of the adjusted tax basis in Pharmacopeia common stock surrendered that is allocable to this fractional share;

United States holders will have an aggregate tax basis in the Ligand common stock received in merger 1 equal to each such United States holder's aggregate tax basis in the shares surrendered pursuant to merger 1, reduced by (1) the portion of such United States holder's tax basis in the shares surrendered in merger 1 that is allocable to a fractional share of Ligand common stock and (2) the amount of cash and fair market value of the CVRs received in merger 1 for the Pharmacopeia common stock and increased by (3) the amount of gain recognized in the exchange (but not by any gain recognized upon the receipt of cash in lieu of a fractional share of Ligand common stock pursuant to merger 1). If a United States holder acquired any of his or her shares of Pharmacopeia common stock at different prices or at different times, Treasury Regulations provide guidance on how such United States holder may allocate his or her tax basis to shares of Ligand common stock received in merger 1. United States holders that hold multiple blocks of Pharmacopeia common stock are urged to consult their tax advisors regarding the proper allocation of their basis among shares of Ligand common stock received under the Treasury Regulations; and

the holding period of the Ligand common stock received by a United States holder in connection with merger 1 will include the holding period of the Pharmacopeia common stock surrendered in connection with merger 1.

Capital gains or losses recognized as described above will generally constitute long-term capital gain or loss if the United States holder's holding period in the Pharmacopeia common stock surrendered in merger 1 is more than one year as of the effective time of merger 1. The deductibility of capital losses is subject to limitations.

United States Federal Income Tax Treatment of the CVRs

There is substantial uncertainty as to the tax treatment of the CVRs. The receipt of the CVRs as part of the merger consideration may be treated as a "closed transaction" or an "open transaction" for United States federal income tax purposes, which affects the amount of gain, if any, that may be

recognized at the time of consummation of merger 1. There is no authority directly on point addressing whether contingent value rights with characteristics similar to the CVRs should be taxed as "open transactions" or "closed transactions" and such question is inherently factual in nature. **Accordingly, you are urged to consult your tax advisors regarding this issue.** The analysis above assumes that the CVRs are not eligible for "open transaction" treatment and accordingly that the fair market value of the CVRs must be included as part of the merger consideration on the date on which merger 1 is consummated.

If the value of the CVRs can be "reasonably ascertained," merger 1 should be treated as a "closed transaction" for United States federal income tax purposes and a United States holder would recognize gain (but not loss) upon consummation of merger 1 taking into account the fair market value of the CVRs, determined on the date of the consummation of merger 1. If merger 1 is a "closed transaction" for United States federal income tax purposes, a United States holder's initial tax basis in the CVRs will equal the fair market value of the CVRs on the date of the consummation of merger 1. The holding period of the CVRs will begin on the day following the date of the consummation of merger 1.

If merger 1 is a "closed transaction" for United States federal income tax purposes, there is no direct authority with respect to the treatment of contingent variable rights' payments similar to the CVR payments. You should therefore consult your tax advisors regarding the taxation of such payments. As a "closed transaction," a portion of a payment, if any, with respect to the CVRs would likely be treated as non-taxable return of a United States holder's adjusted tax basis in the CVR. To the extent that payments are not treated as such, payments may be treated as either (i) payments with respect to a sale of a capital asset, (ii) income taxed at ordinary rates or (iii) dividends. Additionally, it is possible that a portion of a payment, if any, would constitute imputed interest under Section 483 of the Internal Revenue Code.

Due to the legal and factual uncertainty regarding the tax treatment of the CVRs, you should consult your tax advisors concerning the recognition of gain, if any, resulting from the receipt of the CVRs in merger 1.

Information Reporting and Backup Withholding

Under United States federal income tax laws, the exchange agent will generally be required to report to a United States holder and to the IRS any payments made to a United States holder in exchange for Pharmacopeia common stock in merger 1, and may be required to "backup withhold" 28% of any such payment. In addition, payments pursuant to the CVRs may be subject to backup withholding and information reporting. To avoid such backup withholding, a United States holder should provide the exchange agent or other applicable person a properly completed Form W-9 or Substitute Form W-9, signed under penalties of perjury, including such United States holder's current Taxpayer Identification Number, or TIN, and other certifications. If the United States holder does not provide the exchange agent with a TIN and other required certifications, the exchange agent will backup withhold 28% of payments made to the United States holder (unless the United States holder is an exempt recipient as described in the next sentence and demonstrates this fact).

Certain United States holders (including, among others, corporations) are exempt from these backup withholding and reporting requirements. Exempt holders who are not subject to backup withholding should indicate their exempt status on Form W-9 or a Substitute Form W-9 by entering their correct TIN, marking the appropriate box and signing and dating the Form W-9 or Substitute Form W-9 in the space provided.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a United States holder's United States federal income tax liability provided the required information is timely furnished to the IRS.

Anticipated Accounting Treatment

In accordance with generally accepted accounting principles in the United States, Ligand will account for merger 1 under the purchase method of accounting in accordance with Statement of Financial Accounting Standards No. 141, "Business Combinations." Under the purchase method of accounting, the total estimated purchase price, calculated as described in Note 2 to the unaudited pro forma condensed combined financial statements included in this proxy statement/prospectus, is allocated to the net tangible and intangible assets of Pharmacopeia based on their estimated fair values. Management has made a preliminary allocation of the estimated purchase price to the tangible and intangible assets acquired and liabilities assumed based on various preliminary estimates. A final determination of these estimated fair values, which cannot be made prior to the completion of merger 1, will be based on the actual net tangible and intangible assets of Pharmacopeia that exist as of the date of completion of merger 1, and upon the final purchase price.

Litigation Challenging the Mergers

On October 6, 2008, Allen Heilman, one of Pharmacopeia's stockholders, filed a putative class action complaint in the Superior Court of New Jersey, Mercer County (Equity Division), on behalf of the stockholders of Pharmacopeia against each of the directors of Pharmacopeia, Pharmacopeia, Ligand, Margaux and Latour. The complaint generally alleges that the decision of the Pharmacopeia board of directors to enter into the proposed transaction with Ligand on the terms contained in the merger agreement constitutes a breach of fiduciary duty and gives rise to other unspecified state law claims. The complaint also alleges that Ligand, Margaux and Latour aided and abetted the Pharmacopeia 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. Pharmacopeia and Ligand believe that the allegations in the complaint are without merit and intend to vigorously defend against this action.

Appraisal Rights of Dissenting Pharmacopeia Stockholders

In connection with the mergers, record holders of Pharmacopeia common stock who comply with the procedures summarized below will be entitled to appraisal rights if merger 1 is consummated. The following discussion is not a complete discussion of the law pertaining to appraisal rights under Section 262 of the Delaware General Corporate Law, or Section 262, and is qualified in its entirety by the full text of Section 262 which is attached to this proxy statement/prospectus as *Annex D*. The following summary does not constitute any legal or other advice, nor does it constitute a recommendation that Pharmacopeia stockholders exercise their right to seek appraisal under Section 262. All references in Section 262 and in this summary to a "stockholder" are to the record holder of the shares of Pharmacopeia common stock as to which appraisal rights are asserted. A person having a beneficial interest in shares of Pharmacopeia common stock held of record in the name of another person, such as a broker, fiduciary, depositary or other nominee, must act promptly to cause the record holder to follow the steps summarized below properly and in a timely manner to perfect appraisal rights.

Under Section 262, holders of shares of Pharmacopeia common stock who do not vote in favor of adoption of the merger agreement and the transactions contemplated thereby, including the mergers, and who otherwise follow the procedures set forth in Section 262 will be entitled to have their shares appraised by the Delaware Court of Chancery and to receive payment of the "fair value" of the shares, exclusive of any element of value arising from the accomplishment or expectation of the mergers, together with a fair rate of interest, if any, as determined by the court.

Under Section 262, where a merger is to be submitted for approval at a meeting of stockholders, as in the case of the adoption of the merger agreement and the transactions contemplated thereby,

including the mergers, by Pharmacopeia stockholders, the corporation, not less than 20 days prior to the meeting, must notify each of its stockholders entitled to appraisal rights that appraisal rights are available and include in the notice a copy of Section 262. This proxy statement/prospectus shall constitute the notice, and the full text of Section 262 is attached to this proxy statement/prospectus as *Annex D*. Any holder of Pharmacopeia common stock who wishes to exercise appraisal rights or who wishes to preserve such holder's right to do so, should review the following discussion and *Annex D* carefully because failure to timely and properly comply with the procedures specified will result in the loss of appraisal rights. Due to the complexity of the procedures for exercising the right to seek appraisal, Pharmacopeia stockholders who are considering exercising such rights are urged to seek the advice of legal counsel.

Pharmacopeia stockholders of record who desire to exercise their appraisal rights must satisfy all of the following conditions. They must:

hold of record shares of Pharmacopeia common stock on the date the written demand for appraisal is made and continue to hold the shares of record through the effective time of merger 1;

deliver to the Corporate Secretary of Pharmacopeia, before the vote on the adoption of the merger agreement, a written demand for the appraisal of the stockholder's shares; and

not vote its shares of common stock in favor of, or consent in writing to, the adoption of the merger agreement and the transactions contemplated thereby, including the mergers.

Neither voting against the adoption of the merger agreement and the transactions contemplated thereby, including the mergers (either in person or by proxy), nor abstaining from voting or failing to vote on the proposal to adopt the merger agreement and the transactions contemplated thereby, including the mergers, will in and of itself constitute a written demand for appraisal satisfying the requirements of Section 262. The written demand for appraisal must be in addition to and separate from any proxy or vote. The demand must reasonably inform Pharmacopeia of the identity of the holder as well as the intention of the holder to demand an appraisal of the "fair value" of the shares held by the holder. A stockholder's failure to make the written demand prior to the taking of the vote on the adoption of the merger agreement and the transactions contemplated thereby, including the mergers, at the Pharmacopeia special meeting will constitute a waiver of appraisal rights.

Only a holder of record of shares of Pharmacopeia common stock on the record date for the Pharmacopeia special meeting is entitled to assert appraisal rights for the shares registered in that holder's name. A demand for appraisal in respect of shares of Pharmacopeia common stock should be executed by or on behalf of the holder of record, fully and correctly, as the holder's name appears on the holder's stock certificates, should specify the holder's mailing address and the number of shares registered in the holder's name, and must state that the person intends to demand appraisal of the holder's shares pursuant to the merger agreement. If the shares are owned of record in a fiduciary capacity, such as by a trustee, guardian or custodian, execution of the demand should be made in that capacity. If the shares are owned of record by more than one person, as in a joint tenancy and tenancy in common, the demand should be executed by or on behalf of all joint owners. An authorized agent, including an agent for two or more joint owners, may execute a demand for appraisal on behalf of a holder of record. However, the agent must identify the record owner or owners and expressly disclose the fact that, in executing the demand, the agent is acting as agent for the record owner or owners. A record holder such as a broker who holds shares as nominee for several beneficial owners may exercise appraisal rights with respect to the shares held for one or more beneficial owners while not exercising the rights with respect to the shares held for other beneficial owners. In such case, however, the written demand should set forth the number of shares as to which appraisal is sought. If no number of shares is expressly mentioned, the demand will be presumed to cover all shares of Pharmacopeia common stock held in the name of the record owner. Stockholders who hold their shares in brokerage accounts

or other nominee forms and who wish to exercise appraisal rights are urged to consult with their brokers to determine the appropriate procedures for the making of a demand for appraisal by such a nominee.

A Pharmacopeia stockholder of record who elects to demand appraisal of his or her shares must mail or deliver his or her written demand to: Pharmacopeia, Inc., P.O. Box 5350, Princeton, New Jersey 08543-5350, Attention: Corporate Secretary. The written demand for appraisal should specify the stockholder's name and mailing address, the number of shares owned, and that the stockholder is thereby demanding appraisal of his or her shares, and such written demand must be received by Pharmacopeia prior to the special meeting.

In addition, a Pharmacopeia stockholder who desires to exercise appraisal rights must not vote its shares of common stock in favor of adoption of the merger agreement and the transactions contemplated thereby, including the mergers. A vote in favor of adoption of the merger agreement and the transactions contemplated thereby, including the mergers, by proxy, via the Internet, or in person, will constitute a waiver of your appraisal rights and will nullify any previously filed written demands for appraisal. Because a proxy that is signed and does not contain voting instructions will, unless revoked, be voted in favor of adoption of the merger agreement and the transactions contemplated thereby, including the mergers, a stockholder who votes by proxy and who wishes to exercise appraisal rights must vote against the merger agreement and the transactions contemplated thereby, including the mergers, or abstain from voting on the merger agreement and the transactions contemplated thereby, including the mergers.

Within 10 days after the effective time of merger 1, Pharmacopeia or its successor in interest, which is referred to generally as the surviving corporation, must notify each holder of Pharmacopeia common stock who has complied with Section 262 and who has not voted in favor of the adoption of the merger agreement and the transactions contemplated thereby, including the mergers, that merger 1 has become effective and shall include in such notice a copy of Section 262. Within 120 days after the effective time of merger 1, the surviving corporation or any stockholder who has timely and properly demanded appraisal of his or her shares and who has complied with the required conditions of Section 262 and is otherwise entitled to appraisal rights may commence an appraisal proceeding by filing a petition in the Delaware Court of Chancery demanding a determination of the fair value of the shares of all Pharmacopeia stockholders who have properly demanded appraisal. The surviving corporation is under no obligation to and has no present intention to file a petition. Accordingly, it is the obligation of the holders of Pharmacopeia common stock to initiate all necessary action to perfect their appraisal rights in respect of shares of Pharmacopeia common stock within the time prescribed in Section 262.

Within 120 days after the effective time of merger 1, any holder of Pharmacopeia common stock who has complied with the requirements for exercise of appraisal rights will be entitled, upon written request, to receive from the surviving corporation a statement setting forth the aggregate number of shares of Pharmacopeia common stock not voted in favor of the adoption of the merger agreement and the transactions contemplated thereby, including the mergers, and the aggregate number of shares that have made demands for appraisal. The statement must be mailed within 10 days after a written request has been received by the surviving corporation or within 10 days after the expiration of the period for delivery of demands for appraisal, whichever is later.

If a petition for an appraisal is timely filed by a holder of shares of Pharmacopeia common stock and a copy is served upon the surviving corporation, the surviving corporation will then be obligated within 20 days to file with the Delaware Register in Chancery a duly verified list containing the names and addresses of all stockholders who have demanded an appraisal of their shares and with whom agreements as to the value of their shares have not been reached. After notice to the stockholders as required by the Court, the Delaware Court of Chancery is empowered to conduct a hearing on the

petition to determine those stockholders who have complied with Section 262 and who have become entitled to appraisal rights thereunder. The Delaware Court of Chancery may require the stockholders who demanded payment for their shares to submit their stock certificates to the Register in Chancery for notation on the certificates of the pending appraisal proceeding. If any stockholder fails to comply with the direction, the Delaware Court of Chancery may dismiss the proceedings as to that stockholder.

After determining the holders of Pharmacopeia common stock entitled to appraisal, the Delaware Court of Chancery will determine the fair value of shares of the Pharmacopeia common stock exclusive of any element of value arising from the accomplishment or expectation of the mergers, together with interest, if any, to be paid upon the amount determined to be the fair value.

In determining fair value, and, if applicable, a fair rate of interest, the Delaware Court of Chancery is to take into account all relevant factors.

Pharmacopeia stockholders considering seeking appraisal should bear in mind that the fair value of their shares of common stock as determined under Section 262 could be more than, the same as, or less than the merger consideration they are entitled to receive pursuant to the merger agreement if they do not seek appraisal of their shares, and that opinions of investment banking firms as to the fairness from a financial point of view of the merger consideration payable in a merger are not opinions as to fair value under Section 262.

The cost of the appraisal proceeding (which does not include attorneys' fees or the fees or expenses of experts) may be determined by the Delaware Court of Chancery and levied upon the parties as the Delaware Court of Chancery deems equitable in the circumstances. Upon application of a stockholder seeking appraisal rights, the Delaware Court of Chancery may order that all or a portion of the expenses incurred by such stockholder in connection with the appraisal proceeding, including, without limitation, reasonable attorneys' fees and the fees and expenses of experts, be charged pro rata against the value of all shares entitled to appraisal. In the absence of such a determination of assessment, each party bears its own expenses.

Except as explained in the last sentence of this paragraph, at any time within 60 days after the effective time of merger 1, any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party will have the right to withdraw his or her demand for appraisal and to accept the merger consideration to which such stockholder is entitled pursuant to the mergers. After this period, such holder may withdraw his or her demand for appraisal only with the consent of the surviving corporation. If no petition for appraisal is filed with the Delaware Court of Chancery within 120 days after the effective time of merger 1, Pharmacopeia stockholders' rights to appraisal will cease and all Pharmacopeia stockholders will be entitled only to receive the merger consideration as provided for in the merger agreement.

Failure to comply with all of the procedures set forth in Section 262 will result in the loss of a stockholder's statutory appraisal rights. In view of the complexity of Section 262, stockholders who wish to dissent from the mergers and pursue appraisal rights should consult their legal advisors prior to attempting to exercise such rights.

CERTAIN TERMS OF THE MERGER AGREEMENT

The following description of the merger agreement describes certain material terms of the merger agreement, the CVR agreement, and other transaction documents. The full text of the merger agreement and the form of CVR agreement are attached as *Annex A* and *Annex B*, respectively, to this proxy statement/prospectus and are incorporated herein by reference. Pharmacopeia stockholders are encouraged to read the entire merger agreement, CVR agreement and the other annexes to this proxy statement/prospectus.

The merger agreement, the CVR agreement and the other annexes attached to this proxy statement/prospectus were included to provide investors and security holders with information regarding their respective terms. These agreements are not intended to provide any other factual information about Ligand or Pharmacopeia. The merger agreement, the CVR agreement and the other agreements attached as annexes to this proxy statement/prospectus contain representations and warranties that the parties thereto made to, and solely for the benefit of, each other, and such representations and warranties may be subject to standards of materiality applicable to the contracting parties that differ from those applicable to investors. The assertions embodied in the representations and warranties in the merger agreement are qualified by information in confidential disclosure letters that Ligand and Pharmacopeia delivered in connection with the execution of the merger agreement. Accordingly, investors and security holders should not rely on the representations and warranties as characterizations of the actual state of facts. Moreover, information concerning the subject matter of the representations and warranties may change after the date of the merger agreement, the CVR agreement or another agreement attached as an annex to this proxy statement/prospectus, which subsequent information may or may not be fully reflected in Ligand's or Pharmacopeia's public disclosures.

The Mergers

At the effective time of merger 1, Ligand's wholly-owned subsidiary, Margaux, will be merged with and into Pharmacopeia, with Pharmacopeia continuing as the surviving corporation, or the intermediate surviving corporation. Upon completion of merger 1, the directors and officers of Margaux immediately prior to merger 1 will become the directors and officers of the intermediate surviving corporation.

At the effective time of merger 2, the intermediate surviving corporation will be merged with and into Ligand's wholly-owned subsidiary, Latour, with Latour continuing as the surviving entity, or the surviving entity. Upon completion of merger 2, the managing member and officers of Latour immediately prior to merger 2 will become the managing member and officers of the surviving entity.

Effective Times of the Mergers

The merger agreement provides that merger 1 will become effective when a certificate of merger executed by Margaux is delivered to and filed with the Delaware Secretary of State, or such other date and time agreed to by the parties and specified in the certificate of merger. It is anticipated that the effective time of merger 1 will occur as soon as practicable on the closing date of merger 1.

The merger agreement provides that merger 2 will become effective when a certificate of merger executed by Latour is delivered to and filed with the Delaware Secretary of State, or such other date and time agreed to by the parties and specified in the certificate of merger. It is anticipated that the effective time of merger 2 will occur as soon as practicable following the effective time of merger 1.

Manner and Basis of Converting Shares

The merger agreement provides that, at the effective time of merger 1, each share of Pharmacopeia common stock then outstanding will automatically be converted into the right to receive:

per share cash consideration, if any, in an amount determined as follows:

if the volume weighted average of the daily closing price per share of Ligand common stock for the 20 consecutive trading days ending at the close of trading on the fifth trading day prior to the date of the special meeting of Pharmacopeia stockholders, or the Ligand Common Stock Value, is equal to or greater than $2.38, but less than $3.00, the quotient obtained by dividing (i) an amount equal to (1) $52,800,000 minus the aggregate payments made to cancel outstanding Pharmacopeia options, or the option cancellation payments, less (2) an amount equal to the product of (a) the applicable Ligand Common Stock Value and (b)(I)(x) $52,800,000 minus (y) the option cancellation payments divided by (II) the applicable Ligand Common Stock Value (provided that the quotient of (I) and (II) shall not exceed 18,000,000) by (ii) an amount equal to the sum of (1) the aggregate number of shares of Pharmacopeia common stock issued and outstanding immediately prior to the effective time of merger 1, (2) the aggregate number of shares of Pharmacopeia common stock issuable pursuant to Pharmacopeia restricted stock units issued and outstanding immediately prior to the effective time of merger 1 and (3) the aggregate number of shares of Pharmacopeia common stock into which Pharmacopeia options issued and outstanding immediately prior to the effective time of merger 1 would be exercisable, other than any shares of Pharmacopeia common stock issuable upon exercise of Pharmacopeia options that are excluded from the calculation pursuant to the terms of the merger agreement (the aggregate of (1) through (3) is referred to herein as the denominator); and

if the Ligand Common Stock Value is less than $2.38, the quotient obtained by dividing (i) $10,000,000 minus the option cancellation payments by (ii) the denominator;

any such per share cash consideration received being referred to in this proxy statement/prospectus as the cash consideration;

a portion of a share of Ligand common stock equal to the exchange ratio, with cash in lieu of any fractional share (after aggregating all fractional shares of Ligand common stock that otherwise would have been received), with the exchange ratio being determined as follows:

if the Ligand Common Stock Value is greater than $4.50, the exchange ratio shall be equal to a number that is (i)(1) 14,700,000 minus (2) the quotient of the option cancellation payments divided by the applicable Ligand Common Stock Value, or the option cancellation amount, divided by (ii) the denominator;

if the Ligand Common Stock Value is greater than $3.75 but not greater than $4.50, the exchange ratio shall be equal to a number that is (i)(1)(a) $66,000,000 minus (b) the option cancellation payments divided by (2) the applicable Ligand Common Stock Value divided by (ii) the denominator;

if the Ligand Common Stock Value is between $3.00 and $3.75, the exchange ratio shall be equal to a number that is (i)(1) 17,600,000 minus (2) the option cancellation amount divided by (ii) the denominator; and

if the Ligand Common Stock Value is less than $3.00, the exchange ratio shall be equal to a number that is (i)(1)(a) $52,800,000 minus (b) the option cancellation payments divided by (2) the applicable Ligand Common Stock Value (provided the quotient of (1) and (2) shall not exceed 18,000,000) divided by (ii) the denominator;

any such Ligand common stock received being referred to in this proxy statement/prospectus as the stock consideration; and

one non-transferable contingent value right, which entitles the holder to a proportionate share of an aggregate contingent payment of $15.0 million in cash, payable upon the achievement of certain commercial milestones, which is referred to in this proxy statement/prospectus as a CVR. See " CVR Agreement" for a description of the conditions to be satisfied for the contingent payment.

The cash consideration, stock consideration and CVR are collectively referred to in this proxy statement/prospectus as the merger consideration.

Pharmacopeia stockholders will not receive any fractional shares of Ligand common stock as part of the stock consideration. Instead, each Pharmacopeia stockholder otherwise entitled to a fractional share of Ligand common stock (after aggregating all fractional shares of Ligand common stock that otherwise would be received by such stockholder) will receive cash, without interest, in an amount (rounded to the nearest whole cent) equal to such fractional share multiplied by the Ligand Common Stock Value.

Each share of Ligand common stock that is issued in connection with merger 1 shall be accompanied by a right under Ligand's rights agreement.

If, between the date of the merger agreement and the effective time of merger 1, the outstanding shares of Pharmacopeia common stock or Ligand common stock are changed into or exchanged for a different number or class of shares by reason of any stock dividend, subdivision, reclassification, reorganization, recapitalization, split, combination, contribution or exchange of shares, then the merger consideration shall be appropriately adjusted.

Under the terms of the merger agreement, promptly following the effective time of merger 1, , which has been selected by Ligand to act as exchange agent, will mail to each record holder of Pharmacopeia common stock a letter of transmittal and instructions for use, which record holders will use to exchange Pharmacopeia common stock certificates for the merger consideration and cash for any fractional share of Ligand common stock (after aggregating all fractional shares of Ligand common stock that otherwise would be received by such stockholder). Pharmacopeia common stock certificates should not be surrendered for exchange by Pharmacopeia stockholders before the effective time of merger 1.

After the effective time of merger 1, transfers of Pharmacopeia common stock will not be registered on the stock transfer books of Pharmacopeia, and each certificate that previously evidenced Pharmacopeia common stock will be deemed to evidence the right to receive the merger consideration and the right to receive cash instead of any fractional shares of Ligand common stock (after aggregating all fractional shares of Ligand common stock that otherwise would be received by such stockholder). Ligand will not pay dividends or other distributions on any shares of Ligand common stock to be issued in exchange for any Pharmacopeia common stock certificate that is not surrendered until the Pharmacopeia common stock certificate is surrendered as provided in the merger agreement. No interest will be payable on the cash component of the merger consideration, if any.

Pharmacopeia Stock Options, Restricted Stock Units and Warrants

Stock Options

Pharmacopeia has agreed to offer to cancel, effective immediately prior to the effective time of merger 1, any stock options granted under Pharmacopeia's existing equity compensation plans in exchange for the payment of up to $0.20 per share for each share of Pharmacopeia common stock subject to such options, but in no event will the option cancellation payments exceed $1,000,000 in the aggregate. To facilitate the foregoing, an option cancellation agreement (and other appropriate and customary information and transmittal materials) in such form as Ligand and Pharmacopeia shall mutually agree will be distributed to each holder of a Pharmacopeia option to whom a cancellation offer is made. The option cancellation agreements will provide that, upon execution by the holder of

such option and delivery of such option cancellation agreement to Pharmacopeia in accordance with the provisions set forth in the merger agreement, such option will be cancelled in accordance with its terms, effective immediately prior to the effective time of merger 1, and the holder of such option, in cancellation and settlement therefor, will be entitled to an option cancellation payment reduced by any applicable withholding taxes. The option cancellation agreement will include a release of claims against Pharmacopeia with respect to such options. The Pharmacopeia board of directors has agreed to adopt all appropriate resolutions and take all other actions necessary, with respect to the options subject to an option cancellation agreement, to terminate the relevant individual option agreements and cancel the relevant options as necessary to effectuate the foregoing. Any cancellation offer by Pharmacopeia will be on such terms and conditions as are reasonably acceptable to Ligand and will comply in all material respects with applicable federal and state securities laws, including, if necessary, the rules applicable to tender offers.

In any case, at the effective time of merger 1, each option granted under the Amended and Restated 1994 Incentive Stock Plan of Pharmacopeia and the 1995 Director Option Plan of Pharmacopeia that is outstanding and unexercised immediately prior to the effective time of merger 1 and that is not the subject of an effective option cancellation agreement will not be assumed by the intermediate surviving corporation or Ligand, but shall instead be cancelled without any payment being made in respect of those options (each such option, a 1994/1995 option). As of the effective time of merger 1, all 1994/1995 options will no longer be outstanding and will automatically cease to exist, and each holder of a 1994/1995 option will cease to have any rights with respect thereto. Prior to the effective time of merger 1, Pharmacopeia agrees to take all necessary action to (i) effect the termination of all 1994/1995 options outstanding immediately prior to the effective time of merger 1 and (ii) effect the termination, as of the effective time of merger 1, of the Amended and Restated 1994 Incentive Stock Plan of Pharmacopeia and the 1995 Director Option Plan of Pharmacopeia and any other plan or agreement pursuant to which 1994/1995 options have been issued by Pharmacopeia. Each 1994/1995 option cancelled as described in this paragraph and each option cancelled pursuant to an effective option cancellation agreement under any of Pharmacopeia's existing equity compensation plans is referred to herein as a "cancelled option."

At the effective time of merger 1, each option that is not a 1994/1995 option or a cancelled option and that is outstanding and unexercised immediately prior to the effective time of merger 1 (whether vested or unvested) will be assumed by Ligand (each, an assumed option). Each assumed option will continue to have, and be subject to, the same terms and conditions set forth in the applicable assumed option (including any applicable stock option agreement or other document evidencing such assumed option) immediately prior to the effective time of merger 1 (including any repurchase rights or vesting provisions), except that such assumed option will be exercisable (or will become exercisable in accordance with its terms) for the applicable merger consideration that would have been receivable upon merger 1 by the holder of shares of Pharmacopeia common stock underlying the option, instead of shares of Pharmacopeia common stock. Each member of Pharmacopeia's board of directors, including Dr. Mollica, has agreed to forego the above cash consideration payable for each share of Pharmacopeia common stock subject to the stock options that such member holds, and at the effective time of merger 1, all such options will be cancelled. As of October 8, 2008, the members of Pharmacopeia's board of directors held 582,215 stock options in the aggregate.

Prior to the effective time of merger 1, Ligand has agreed to take all necessary action to assume and adopt, effective as of the effective time of merger 1, Pharmacopeia's Amended and Restated 2004 Stock Incentive Plan and Pharmacopeia's 2000 Stock Option Plan solely to the extent there are any assumed options granted thereunder. Following the effective time of merger 1, Ligand shall not issue any additional options under such plans, and the share reserve under each such plan shall be automatically reduced to the number of shares of Ligand common stock issuable pursuant to the assumed options granted under such plan.

Restricted Stock Units

Effective immediately prior to the effective time of merger 1, each then unvested Pharmacopeia restricted stock unit will become fully vested and all restrictions will lapse and each share of Pharmacopeia common stock issuable pursuant to Pharmacopeia restricted stock units will be converted into the right to receive the merger consideration.

Warrants

Effective as of immediately prior to the effective time of merger 1, each existing warrant to acquire shares of Pharmacopeia capital stock shall be converted into a new warrant entitling its holder to receive, at a total price not to exceed that payable upon the exercise or conversion of the existing warrant, and in lieu of the shares of Pharmacopeia capital stock theretofore issuable upon exercise or conversion of the existing warrant, the applicable merger consideration that would have been receivable upon merger 1 by the holder of the existing warrant if the existing warrant had been exercised immediately prior to the effective time of merger 1.

Representations and Warranties

The merger agreement contains customary representations and warranties of Pharmacopeia, Ligand and Margaux relating to, among other things, certain aspects of the respective businesses and assets of the parties and other matters. The representations and warranties expire at the effective time of merger 1.

Pharmacopeia's Conduct of Business Prior to Merger 1

During the period from the date of the merger agreement and continuing until the effective time of merger 1, Pharmacopeia and each of its subsidiaries has agreed to, except as otherwise expressly contemplated by the merger agreement, to the extent that Ligand shall otherwise consent in writing (including by electronic mail), or as required by applicable law:

- carry on its business in the usual, regular and ordinary course, in substantially the same manner as previously conducted;
- use commercially reasonable efforts to (i) preserve substantially intact its business organization, (ii) keep available the services of its executive officers and employees and (iii) preserve substantially intact its relationships with suppliers, licensors, licensees and others with which it has material business dealings; and
- pay its material debts and taxes when due and pay or perform other material obligations when due.

In addition, subject to specified exceptions, during the period from the date of the merger agreement and continuing until the effective time of merger 1, Pharmacopeia has agreed not do any of the following, and not to permit any of its subsidiaries to do any of the following, without the prior written consent of Ligand (including by electronic mail):

- enter into any new line of business;
- declare, set aside or pay any dividends on or make any other distributions (whether in cash, stock, equity securities or property) in respect of any capital stock or split, combine or reclassify any capital stock or issue or authorize the issuance of any other securities in respect of, in lieu of or in substitution for any capital stock, other than any such transaction by a wholly-owned subsidiary of Pharmacopeia that remains a wholly-owned subsidiary of Pharmacopeia after consummation of such transaction in the ordinary course of business;

purchase, redeem or otherwise acquire, directly or indirectly, any shares of Pharmacopeia capital stock or the capital stock of its subsidiaries, other than repurchases of unvested shares at cost or for *de minimis* consideration in connection with either the termination of the employment relationship with any employee or upon the resignation of any director or consultant, in each case, pursuant to stock option or purchase agreements in effect on the date of the merger agreement;

issue, deliver, sell, authorize, pledge or otherwise encumber any shares of capital stock, voting debt or any securities convertible into shares of capital stock or voting debt, or subscriptions, rights, warrants or options to acquire any shares of capital stock or voting debt or any securities convertible into shares of capital stock or voting debt, or enter into other agreements or commitments of any character obligating Pharmacopeia to issue any such securities or rights, other than issuances of Pharmacopeia common stock upon the exercise of options, warrants or other rights of Pharmacopeia existing on the date of the merger agreement in accordance with their present terms;

cause, permit or propose any amendments to its or any of its subsidiaries' certificate of incorporation, bylaws or other governing instruments;

acquire or agree to acquire by merging or consolidating with, or by purchasing any equity or voting interest in or a portion of the assets of, or by any other manner, any business or any person or division thereof, or otherwise acquire or agree to acquire any assets which are material, individually or in the aggregate, to the business of Pharmacopeia and its subsidiaries, taken as a whole;

enter into any binding agreement, agreement in principle, letter of intent, memorandum of understanding or similar agreement with respect to any material joint venture, strategic partnership, collaboration, license or alliance;

sell, lease, license, encumber or otherwise dispose of any properties or assets except (i) the sale, lease or disposition (other than through licensing) of property or assets that are not material, individually or in the aggregate to the business of Pharmacopeia and its subsidiaries, taken as a whole, or (ii) perpetual licenses of Pharmacopeia's products or product candidates in the ordinary course of business consistent with past practice having no material support, maintenance or service obligations other than those obligations that are terminable by Pharmacopeia or any of its subsidiaries upon no more than one (1) year notice without liability or financial obligation to Pharmacopeia or its subsidiaries;

make any loans, advances or capital contributions to, or investments in, any other person, other than: (i) loans or investments by it or a wholly-owned subsidiary of it to or in it or any wholly-owned subsidiary of it, or (ii) employee loans or advances made in the ordinary course of business consistent with past practices;

except as required by GAAP, make any material change in its methods or principles of accounting since June 30, 2008;

except as required by tax law or other applicable law, adopt or change any material tax accounting method, change any tax accounting period, make or change any material tax election, file any amended tax return, settle or compromise any material tax liability or claims, agree to an extension or waiver of the statute of limitations with respect to the assessment or determination of taxes, enter into any tax indemnity, tax allocation or tax sharing agreement, enter into any private letter ruling, closing agreement, or similar ruling or agreement with respect to any tax or surrender any right to claim a tax refund; provided, however, that if any of the foregoing actions is required by any tax law or other applicable law, Pharmacopeia shall promptly provide Ligand with written notification (including by electronic mail) of such action;

amend or modify, or propose to amend or modify, or otherwise take any action under, the Pharmacopeia rights agreement;

revalue any of its assets or make any change in accounting methods, principles or practices, other than as required by GAAP or by a court or governmental or regulatory authority;

(i) pay, discharge, settle or satisfy any material claims, liabilities or obligations (absolute, accrued, asserted or unasserted, contingent or otherwise), or litigation (whether or not commenced prior to the date of the merger agreement), other than the payment, discharge, settlement, or satisfaction for money, of claims, liabilities, obligations or litigation (x) to the extent subject to reserves on Pharmacopeia's financial statements existing as of the date of the merger agreement in accordance with GAAP, (y) that are accounts payable incurred in the ordinary course of business for goods and services or (z) otherwise in the ordinary course of business consistent with past practice or in accordance with their terms, of claims not in excess of $50,000 individually or $500,000 in the aggregate, provided, that with respect to any matter under this clause (i) that requires Ligand's consent, such consent shall not be unreasonably withheld, conditioned or delayed, or (ii) waive the benefits of, agree to modify in any manner materially adverse to Pharmacopeia, terminate, release any person from or knowingly fail to enforce any material confidentiality or similar agreement to which Pharmacopeia or any of its subsidiaries is a party or of which Pharmacopeia or any of its subsidiaries is a beneficiary;

subject to certain exceptions, (i) increase in any manner the amount of compensation or fringe benefits of, pay any bonus or special remuneration (cash, equity or otherwise) to or grant severance or termination pay to any employee, consultant or director of Pharmacopeia or any subsidiary of Pharmacopeia (other than salary increases and bonuses, in each case, made in the ordinary course of business consistent with past practice with respect to employees who are not executive officers or directors of Pharmacopeia), (ii) make any increase in or commitment to increase the benefits payable under or Pharmacopeia's obligations with respect to any Pharmacopeia employee plan or employee agreement (including any severance plan), adopt or amend or make any commitment to adopt or amend any Pharmacopeia employee plan or employee agreement or make any contribution, other than regularly scheduled contributions or contributions required by the terms of the Pharmacopeia employee plan as in effect as of the date of the merger agreement, to any Pharmacopeia employee plan, (iii) except as otherwise provided in the merger agreement, waive any stock repurchase rights, accelerate, amend or change the vesting terms or the period of exercisability of Pharmacopeia options, or reprice any Pharmacopeia options or authorize cash payments in exchange for any Pharmacopeia options, (iv) enter into any employment, severance, termination or indemnification agreement with any employee or enter into any collective bargaining agreement, (other than offer letters and letter agreements entered into in the ordinary course of business consistent with past practice with employees who are terminable "at will" without Pharmacopeia or its subsidiaries incurring any material liability or financial obligation and who are not executive officers), (v) make any material oral or written commitment with respect to any material aspect of any Pharmacopeia employee plan or employee agreement that is not in accordance with the existing written terms and provision of such Pharmacopeia employee plan or employee agreement, (vi) grant any stock appreciation right, phantom stock award, stock-related award or performance award (whether payable in cash, shares or otherwise) to any person (including any employee), or (vii) enter into any agreement with any employee the benefits of which are (in whole or in part) contingent or the terms of which are materially altered upon the occurrence of a transaction involving Pharmacopeia of the nature contemplated by the merger agreement;

grant any exclusive rights with respect to any material Pharmacopeia intellectual property;

enter into, or renew, any contracts containing, or otherwise subject the intermediate surviving corporation, the surviving entity or Ligand to, any non-competition, exclusivity or other material restrictions on Pharmacopeia, the intermediate surviving corporation, the surviving entity or Ligand, or any of their respective businesses following the closing;

enter into any agreement or commitment the effect of which would be to grant to a third party following merger 1 any actual or potential right of license to any material intellectual property owned by Ligand or any of its subsidiaries (excluding for the avoidance of doubt, Pharmacopeia and its subsidiaries);

take or fail to take, or agree to take or fail to take, any action that would prevent the mergers, taken together, from qualifying as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code;

hire employees other than in the ordinary course of business;

terminate any employees of Pharmacopeia or its subsidiaries or take actions that are reasonably calculated to cause any employees of Pharmacopeia or its subsidiaries to resign, in each case other than (x) in the ordinary course of business or (y) for cause or poor performance (in either case in accordance with Pharmacopeia's past practices);

make any representations or issue any communications (including electronic communications) to employees that are inconsistent with the merger agreement or the transactions contemplated thereby, including any representations regarding offers of employment or other benefits from Ligand;

incur any indebtedness for borrowed money or guarantee any such indebtedness of another person, issue or sell any debt securities or options, warrants, calls or other rights to acquire any debt securities of Pharmacopeia or any of its subsidiaries, guarantee any debt securities of another person, enter into any "keep well" or other agreement to maintain any financial statement condition of any other person (other than any wholly-owned subsidiary of it) or enter into any arrangement having the economic effect of any of the foregoing;

make any individual or series of related payments in excess of $50,000 outside of the ordinary course of business or make or commit to make any capital expenditures in excess of $25,000, except in each case as otherwise required by a pre-existing contractual obligation;

modify or amend in a manner adverse in any material respect to Pharmacopeia, or terminate any Pharmacopeia scheduled contract currently in effect, or waive, release or assign any material rights or claims thereunder, in each case, in a manner adverse in any material respect to Pharmacopeia, other than any modification, amendment or termination of any such Pharmacopeia scheduled contract in the ordinary course of business, consistent with past practice;

take any action to exempt or make not subject to (i) the provisions of Section 203 of the Delaware General Corporation Law; (ii) any other state takeover law or state law that purports to limit or restrict business combinations or the ability to acquire or vote shares or (iii) the Pharmacopeia rights agreement, any person (other than Ligand, Margaux and any other subsidiary of Ligand) or any action taken thereby, which person or action would have otherwise been subject to the restrictive provisions thereof and not exempt therefrom;

enter into any contract requiring Pharmacopeia or any of its subsidiaries to pay in excess of an aggregate of $100,000; or

agree in writing or otherwise to take any of the foregoing actions.

Covenants

Covenants of Pharmacopeia

Under the terms of the merger agreement, Pharmacopeia has agreed that it will, among other things, and subject to specified exceptions:

effective immediately before the effective time of merger 1, (i) terminate each Pharmacopeia employee plan (unless Ligand provides written notice to Pharmacopeia at least five (5) business days prior to the closing date that such Pharmacopeia employee plan shall not be terminated), including any 401(k) plan maintained by Pharmacopeia or any of its subsidiaries) and (ii) cause each then unvested Pharmacopeia restricted stock unit to become fully vested; provided, that in the event that distribution or rollover of assets from the trust or custodial account of a 401(k) plan that is terminated is reasonably anticipated to trigger liquidation charges, surrender charges, or other fees to be imposed upon the account of any participant or beneficiary of such terminated plan or upon Pharmacopeia or plan sponsor, then Pharmacopeia shall take such actions as are necessary to reasonably estimate the amount of such charges and/or fees and provide such estimate in writing to Ligand as soon as possible following the date of the merger agreement;

terminate the Pharmacopeia Executive Deferred Compensation Plan at or prior to the effective time of merger 1 and distribute all amounts owed to participants thereunder;

prior to the effective time of merger 1, take all such steps as may be required (to the extent permitted under applicable laws) to cause any dispositions of Pharmacopeia common stock (including derivative securities with respect to Pharmacopeia common stock) resulting from the transactions contemplated by merger 1 and the conversion of securities pursuant to the merger agreement by each individual who is subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to Pharmacopeia to be exempt under Rule 16b-3 promulgated under the Exchange Act;

use reasonable efforts to cause each director of Pharmacopeia and its subsidiaries to deliver to Ligand written resignations from such position as director, effective at or before the effective time of merger 1; and

comply with all notice or other obligations under the WARN Act or similar state or local law in connection with any terminations at or before the effective time of merger 1.

Covenants of Ligand

Under the terms of the merger agreement, Ligand has agreed that it will, among other things, and subject to specified exceptions:

use its reasonable efforts to authorize for listing on Nasdaq, prior to the effective time of merger 1, the shares of Ligand common stock issuable and those required to be reserved for issuance in connection with merger 1, subject to official notice of issuance;

take (i) all necessary action to cause two persons nominated by Pharmacopeia's board of directors to be appointed to its board of directors as of the close of business on the date on which the effective time of merger 1 occurs and (ii) all reasonable steps to cause its board of directors (or the appropriate committee thereof) to re-nominate such persons for election as directors of Ligand by the stockholders of Ligand at Ligand's 2009 annual meeting of stockholders and solicit proxies for their election at such annual meeting; and

not take any action that results in the purchase, redemption or other acquisition of any Ligand common stock, other than repurchases of unvested shares in connection with the termination of the employment relationship with any employee, or upon the resignation of any director or consultant, pursuant to stock purchase agreements.

Covenants of Ligand and Pharmacopeia

Under the terms of the merger agreement, Ligand and Pharmacopeia have agreed that they will, among other things, and subject to specified exceptions:

as promptly as practicable after the execution of the merger agreement, and in any event within thirty (30) days of such date, prepare and file with the SEC a registration statement in connection with the issuance of the shares of Ligand common stock in merger 1 and a proxy statement to solicit adoption of the merger agreement by the stockholders of Pharmacopeia, and use all reasonable efforts to have the registration statement declared effective under the Securities Act as promptly as practicable after such filing and to keep the registration statement effective as long as necessary to consummate merger 1 and the transactions contemplated thereby;

give prompt notice to the other party of any representation or warranty made by it contained in the merger agreement becoming untrue or inaccurate, or any failure of it to comply with or satisfy in any material respect any covenant, condition or agreement to be complied with or satisfied by it under the merger agreement, in each case, such that the closing conditions regarding such matters would not be satisfied with respect to such party;

except as would cause a waiver of the attorney-client privilege, permit Ligand and Ligand's accountants, counsel and other representatives reasonable access, upon reasonable prior notice, during normal business hours to its properties, books, contracts, records and personnel and other documents and data and furnish such other information concerning its business, properties, results of operations and personnel, as Ligand may reasonably request;

coordinate and cooperate with one another and each use reasonable efforts to (i) take, or cause to be taken, all appropriate actions, and do or cause to be done, all things necessary, proper or advisable under applicable laws or otherwise to consummate merger 1 and the transactions contemplated thereby as promptly as practicable, (ii) obtain from any court or governmental or regulatory authority any consents, licenses, permits, waivers, approvals, authorizations or orders required to be obtained or made to avoid any action or proceeding by any court or governmental or regulatory authority (including those in connection with the HSR Act) in connection with the authorization, execution and delivery of the merger agreement and the consummation of merger 1 and the transactions contemplated thereby, (iii) make, or cause to be made, the applications and filings required to be made under the HSR Act or any other applicable laws in connection with the authorization, execution and delivery of the merger agreement and the consummation of merger 1 and the transactions contemplated thereby (including under the Exchange Act and any other applicable federal or state laws), and to pay any fees due of it in connection with such applications or filings, as promptly as is reasonably practicable, and in any event within ten (10) business days after the date of the merger agreement, and (iv) comply at the earliest practicable date with any request under the HSR Act and any such other laws for additional information, documents or other materials received by Ligand or Pharmacopeia or any of their respective subsidiaries from the Federal Trade Commission or the Department of Justice or any other governmental or regulatory authority in connection with such applications or filings or merger 1 and the transactions contemplated thereby;

use reasonable efforts to (i) cause the expiration of the notice periods under the HSR Act and any other laws with respect to merger 1 and the transactions contemplated thereby as promptly as is reasonably practicable after the execution of the merger agreement, (ii) resolve such objections, if any, as may be asserted by any court or governmental or regulatory authority with respect to merger 1 and the transactions contemplated thereby and (iii) undertake any reasonable actions required to lawfully complete merger 1 and the transactions contemplated

thereby; provided, that neither Pharmacopeia nor Ligand shall be required to take any action which (x) is reasonably likely to have a material adverse effect on the condition (financial or otherwise), business, assets, liabilities or results of operations of Ligand (or any of its subsidiaries), Pharmacopeia (or any of its subsidiaries) or the intermediate surviving corporation, taken individually or in the aggregate, or (y) is not conditioned on the consummation of merger 1; provided, further that neither Pharmacopeia nor Ligand shall be required to contest through litigation any objection, action or proceeding by any court or governmental or regulatory authority;

consult with each other before issuing, and provide each other the opportunity to review, comment upon and concur with, and use all reasonable efforts to agree on any press release or public statement with respect to the merger agreement and the transactions contemplated thereby, including the mergers and any acquisition proposal and will not issue any such press release or make any such public statement prior to such consultation and (to the extent practicable) agreement, except as may be required by applicable laws, any listing agreement with Nasdaq or in connection with a change of recommendation by the board of directors of Pharmacopeia permitted by the merger agreement;

give (or cause their respective subsidiaries to give) any notices to third parties, and use, and cause their respective subsidiaries to use, commercially reasonable efforts to obtain any third party consents (i) necessary, proper or advisable to consummate the transactions contemplated in the merger agreement, (ii) required to be disclosed in the Pharmacopeia disclosure letter or the Ligand disclosure letter, as applicable, or (iii) required to prevent a Pharmacopeia material adverse effect from occurring prior to or after the effective time of merger 1 or a Ligand material adverse effect from occurring prior to or after the effective time of merger 1; provided, however, that Pharmacopeia and Ligand shall coordinate and cooperate in determining whether any actions, consents, approvals or waivers are required to be obtained from parties to any Pharmacopeia scheduled contracts in connection with the consummation of the mergers and seeking any such actions, consents, approvals or waivers; provided, further that in no event shall Pharmacopeia or any of its subsidiaries be required to pay prior to the effective time of merger 1, and shall not pay or commit to pay without Ligand's consent, a material amount in respect of, any fee, penalty or other consideration to any person to obtain any such consent, approval or waiver; and

not take, and not permit any of their respective subsidiaries to take, any action prior to or following the closing that would prevent the mergers, taken together, from qualifying as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code.

Treatment of Pharmacopeia Employees

For a period of one (1) year following the effective time of merger 1, Ligand has agreed to provide, or cause its affiliates to provide, each employee of Pharmacopeia or any of its subsidiaries as of the effective time of merger 1 base salary that is no less favorable than the base salary of such employees immediately before the effective time of merger 1. Immediately following the effective time of merger 1, Ligand or an affiliate of Ligand will either maintain, or cause to be maintained, the Pharmacopeia welfare plans or enroll the Pharmacopeia employees in the plans provided to similarly situated employees of Ligand. In addition, for a period of one (1) year following the effective time of merger 1, Ligand will, or will cause its affiliates to, provide Pharmacopeia employees with other employee benefits equal to those provided to similarly situated employees of Ligand, including severance benefits under Ligand's severance plan. For all purposes (including purposes of vesting, eligibility to participate, severance, benefit accrual and level of benefits) under the employee benefit plans of Ligand and its affiliates providing benefits to any Pharmacopeia employees after the effective time of merger 1, referred to as the new plans, each Pharmacopeia employee will be credited with his

or her years of service with Pharmacopeia and its subsidiaries and their respective predecessors before the effective time of merger 1, to the same extent as such employee was entitled, before the effective time of merger 1, to credit for such service under any similar Pharmacopeia employee plan in which such employee participated or was eligible to participate immediately prior to the effective time of merger 1; provided, however, that credit for prior service will not be automatically provided with respect to awards under Ligand's equity plans but will be given due consideration by Ligand's board of directors or its designee with authority to grant such awards to Pharmacopeia employees. In addition, for purposes of each new plan providing medical, dental, pharmaceutical or vision benefits, Ligand has agreed to cause all pre-existing condition exclusions and actively-at-work requirements of such new plan to be waived for each Pharmacopeia employee and his or her covered dependants (unless such conditions would not have been waived under the comparable plans of Pharmacopeia or its subsidiaries in which such employee participated immediately prior to the effective time of merger 1 (each, an old plan)) and Ligand has agreed to cause any eligible expenses incurred by such employee and his or her covered dependants during the portion of the plan year of the old plan ending on the date such employee's participation in the corresponding new plan begins to be taken into account under such new plan for purposes of satisfying all deductible, coinsurance and maximum out-of-pocket requirements applicable to such employee and his or her covered dependants for the applicable plan years if such amounts had been paid in accordance with such new plan. Without limiting the foregoing, the merger agreement does not confer upon any current or former Pharmacopeia employee any right to employment or continued employment for any specified period, of any nature or kind whatsoever.

Director and Officer Indemnification and Insurance

Subject to applicable Delaware law, from and after the effective time of merger 1, Ligand has agreed to cause the surviving entity to maintain and honor all indemnification arrangements in place for all past and present directors, officers, employees and agents of Pharmacopeia and its subsidiaries as of the date of the merger agreement under Pharmacopeia's certificate of incorporation and bylaws and the indemnification agreements disclosed to Ligand (or other agreements, on the same terms as those set forth in Pharmacopeia's standard form director and officer indemnification agreement, entered into by new officers or directors of Pharmacopeia appointed after the date of the merger agreement), for acts or omissions occurring at or prior to the effective time of merger 1; provided, further that Ligand has agreed to, and to cause the surviving entity to, indemnify and hold harmless such persons to the fullest extent permitted by applicable Delaware law for acts or omissions occurring in connection with the approval of the merger agreement and the consummation of the transactions contemplated thereby. The organizational documents of the surviving entity will contain provisions with respect to exculpation and indemnification that are at least as favorable to the past and present indemnified directors, officers, employees and agents of Pharmacopeia as those contained in Pharmacopeia's certificate of incorporation and bylaws as in effect on the date of the merger agreement, which provisions will not be amended, repealed or otherwise modified for a period of six (6) years from the effective time of merger 1 in any manner that would adversely affect the rights thereunder of such indemnified persons, unless such modification is required by law.

Ligand has agreed to cause the surviving entity to maintain a directors' and officers' insurance and indemnification policy that will cover those persons who are covered by Pharmacopeia's directors' and officers' insurance and indemnification policy as of the date of the merger agreement for events occurring prior to the effective time of merger 1 on terms no less favorable than those applicable to the current directors and officers of Pharmacopeia (from the same insurance carrier that provides Pharmacopeia's insurance policy or a comparable insurance carrier) for a period of six (6) years; provided, however, that in no event will the surviving entity be required to pay an annual premium in excess of two hundred fifty percent (250%) of the annual premium currently paid by Pharmacopeia for such coverage (and to the extent the annual premium payable by the surviving entity would exceed two hundred fifty percent (250%) of the annual premium currently paid by Pharmacopeia for such

coverage, the surviving entity shall cause to be maintained the maximum amount of coverage as is available for such two hundred fifty percent (250%) of such annual premium). The provisions of the immediately preceding sentence shall be deemed to have been satisfied if Pharmacopeia obtains, at or prior to the effective time of merger 1, prepaid, or tail, insurance covering each current officer and director on terms no less favorable than those of such policies in effect on the date of the merger agreement and Ligand or the surviving entity continue to maintain such policies; provided, however, that without the prior written consent of Ligand, Pharmacopeia may not expend in excess of 250% of the last annual premium paid by Pharmacopeia for coverage for the period of twelve (12) months most recently commenced prior to the date of the merger agreement.

Limitation on Pharmacopeia's Ability to Consider Other Acquisition Proposals

Pharmacopeia has agreed that neither it nor any of its subsidiaries shall, and that it shall not authorize or permit any of its and its subsidiaries' employees, agents and representatives (including any investment banker, attorney or accountant) to (and shall not authorize any of them to) directly or indirectly, subject to specified exceptions:

- solicit or initiate, or knowingly facilitate, encourage or induce, any inquiry with respect to, or the making, submission or announcement of, any acquisition proposal;
- participate in any discussions or negotiations with, or furnish any nonpublic information with respect to (i) an acquisition proposal or (ii) any inquiry or proposal that would be reasonably expected to result in an acquisition proposal;
- approve, endorse or recommend any acquisition proposal;
- withdraw or modify the recommendation of the board of directors of Pharmacopeia that Pharmacopeia stockholders vote to adopt the merger agreement in a manner adverse to Ligand; or
- enter into any letter of intent or similar document or any contract, agreement or commitment contemplating or otherwise relating to any acquisition proposal or transaction contemplated thereby.

The foregoing restrictions do not prohibit Pharmacopeia from furnishing nonpublic information regarding Pharmacopeia to, or entering into a confidentiality agreement or discussions or negotiations with, any person or group in response to a bona fide unsolicited written acquisition proposal submitted by such person or group if, among other things, (i) neither Pharmacopeia, nor any of its representatives, is in breach of any of the restrictions set forth above, (ii) Pharmacopeia's board of directors concludes in good faith (after consultation with its outside legal counsel and financial advisor) that such acquisition proposal is or would reasonably be expected to lead to a superior offer and (iii) Pharmacopeia's board of directors concludes in good faith after consultation with its outside legal counsel that the failure to do so would reasonably be expected to result in a breach of its fiduciary obligations under applicable law. In addition, these restrictions will not be deemed to prevent Pharmacopeia or its board of directors from complying with its legal obligations under Rule 14d-9 and Rule 14e-2 promulgated under the Exchange Act, provided the content of any disclosure made pursuant to those legal obligations shall be governed by the terms of the merger agreement.

Under the terms of the merger agreement, Pharmacopeia and its subsidiaries have agreed to (i) immediately cease any existing activities, discussions or negotiations with any person (other than Ligand) conducted prior to the date of the merger agreement with respect to any acquisition proposal and (ii) promptly request that each such person that has entered into a confidentiality agreement with Pharmacopeia in connection with the consideration of an acquisition proposal to return or destroy all confidential information previously furnished to such person.

In addition, within the greater of twenty-four hours or one business day of (i) the receipt of any acquisition proposal or (ii) any request for nonpublic information or inquiry (1) from any person that has informed Pharmacopeia (either directly or indirectly) that it is considering an acquisition proposal or (2) under circumstances where it would be reasonably expected that the non-public information being requested would be used for purposes of making an acquisition proposal, Pharmacopeia is required under the merger agreement to provide Ligand with oral and written notice of the material terms and conditions of such request or acquisition proposal, the identity of the person or group making any such request or acquisition proposal, a copy of all written materials provided in connection with any such request or acquisition proposal (other than any materials previously provided to Ligand) and a description of the material oral terms of any such request or acquisition proposal. Pharmacopeia has also agreed to keep Ligand informed as promptly as practicable on a current basis of the material developments with respect to any such request or acquisition proposal.

For purposes of the merger agreement, the term "acquisition proposal" means any offer or proposal, relating to any transaction or series of related transactions involving: (i) any purchase from Pharmacopeia or acquisition by any person or "group" (as defined under Section 13(d) of the Exchange Act and the rules and regulations thereunder) of a twenty percent (20%) or more interest in the total outstanding voting securities of Pharmacopeia, or any tender offer or exchange offer that if consummated would result in any person or group beneficially owning twenty percent (20%) or more of the total outstanding voting securities of Pharmacopeia, or any merger, consolidation, business combination, recapitalization or similar transaction involving Pharmacopeia that if consummated would result in the stockholders of Pharmacopeia immediately preceding such transaction holding less than eighty percent (80%) of the equity interests in the surviving or resulting entity of such transaction or the resulting direct or indirect parent or subsidiary entity as a result of such transaction, (ii) any sale, lease (other than in the ordinary course of business), exchange, transfer, license (other than in the ordinary course of business), or disposition of twenty percent (20%) or more of the assets of Pharmacopeia (including pursuant to the sale of equity in any subsidiary of Pharmacopeia), or (iii) any liquidation or dissolution of Pharmacopeia. The transactions contemplated by the merger agreement are expressly excluded from the definition of acquisition proposal.

For purposes of the merger agreement, the term "superior offer" means an unsolicited, bona fide written offer made by a third party to acquire, directly or indirectly, pursuant to a tender offer, exchange offer, merger, consolidation, business combination, recapitalization or similar transaction, all or substantially all of the assets of Pharmacopeia or a majority of the total outstanding voting securities of Pharmacopeia as a result of which the stockholders of Pharmacopeia immediately preceding such transaction would hold less than fifty percent (50%) of the equity interests in the surviving or resulting entity of such transaction or any resulting direct or indirect parent or subsidiary entity as a result of such transaction, on terms that the Pharmacopeia board of directors has in good faith concluded (after consultation with its outside legal counsel and its financial adviser), taking into account all aspects of the acquisition proposal, including, among other things, all legal, financial, regulatory and other aspects of the offer and the person making the offer, would if consummated result in a transaction that is more favorable from a financial point of view to Pharmacopeia's stockholders (in their capacities as stockholders) than the transactions contemplated by the merger agreement and is reasonably capable of being consummated on the terms proposed.

Obligations of the Pharmacopeia Board of Directors with Respect to its Recommendation and Holding a Meeting of Stockholders

After the registration statement of which this proxy statement/prospectus forms a part is declared effective by the SEC, Pharmacopeia has agreed to take all action necessary in accordance with Delaware law and Pharmacopeia's certificate of incorporation and bylaws to cause this proxy statement/prospectus (and any amendment or supplement thereto) to be mailed to its stockholders and to call,

hold and convene a special meeting of its stockholders to consider the adoption of the merger agreement to be held as promptly as practicable after the date upon which all of the following have occurred: (i) the registration statement has become effective and (ii) all waiting periods (and any extensions thereof) under the HSR Act and other applicable laws relating to the transactions contemplated by the merger agreement have expired or terminated early and any objections raised by any court or governmental or regulatory authority with respect to the transactions contemplated by the merger agreement have been resolved (it being the intent of the parties that such stockholders meeting shall be held not later than forty-five (45) days after satisfaction of both clauses (i) and (ii) except to the extent prohibited by applicable laws). Notwithstanding anything to the contrary contained in the merger agreement, Pharmacopeia may adjourn or postpone the stockholders meeting, to the extent necessary to ensure that any necessary supplement or amendment to this proxy statement/prospectus is provided to its stockholders in advance of the vote to be taken at such meeting or, if there are insufficient shares of Pharmacopeia common stock represented (either in person or by proxy) to constitute a quorum necessary to conduct the business of such stockholders meeting at the time the meeting is originally scheduled (as set forth in this proxy statement/prospectus).

Under the terms of the merger agreement, Pharmacopeia has also agreed that its board of directors will recommend that Pharmacopeia stockholders vote to adopt the merger agreement. However, at any time before the special meeting of Pharmacopeia stockholders is conducted, Pharmacopeia's board of directors is entitled to withdraw or modify its recommendation that Pharmacopeia stockholders vote to adopt the merger agreement if certain requirements, including the following, are satisfied:

A superior offer has been made and has not been withdrawn;

Pharmacopeia shall have given Ligand at least three (3) days' prior written notice advising Ligand that Pharmacopeia's board of directors has received a superior offer, specifying the material terms and conditions of such superior offer, identifying the person making such superior offer and stating that it intends to modify or withdraw its recommendation that Pharmacopeia stockholders adopt the merger agreement and the manner in which it intends to do so;

Pharmacopeia's board of directors shall have determined in good faith, after it has received a superior offer and after consultation with outside counsel, that the failure to withdraw or modify its recommendation would reasonably be expected to result in a breach of its fiduciary duties to Pharmacopeia stockholders under applicable law; and

Pharmacopeia shall not have materially breached any of the covenants and agreements regarding solicitation of acquisition proposals in the merger agreement with respect to obtaining the superior offer.

Under the terms of the merger agreement, Pharmacopeia's obligation to call, give notice of and hold the special meeting of Pharmacopeia stockholders will not be affected by the commencement, disclosure, announcement or submission to Pharmacopeia of an acquisition proposal or by any withdrawal or modification of the recommendation by Pharmacopeia's board of directors that Pharmacopeia stockholders vote to adopt the merger agreement. Pharmacopeia is also not permitted to submit to the vote of its stockholders any acquisition proposal unless the merger agreement has been terminated by Pharmacopeia pursuant to the superior offer termination. See " Termination of the Merger Agreement."

The merger agreement provides that, if Ligand terminates the merger agreement because Pharmacopeia's board of directors withdraws or modifies its recommendation that Pharmacopeia stockholders vote to adopt the merger agreement, Pharmacopeia will be required to pay Ligand the termination fee. See " Termination Fee."

Conditions to the Merger

Conditions to the Obligations of Each Party

The merger agreement provides that the obligations of Ligand, Margaux and Pharmacopeia to consummate and effect merger 1 are subject to the satisfaction, at or prior to the effective time of merger 1, of the following conditions, in addition to the additional conditions applicable to each of the parties set forth below:

- the merger agreement shall have been adopted by Pharmacopeia's stockholders;
- no court or governmental or regulatory authority of competent jurisdiction shall have enacted, issued, promulgated, enforced or entered any statute, rule, regulation, executive order, decree, injunction or other order (whether temporary, preliminary or permanent) that is in effect and has the effect of making merger 1 illegal or otherwise prohibiting consummation of merger 1;
- the registration statement on Form S-4 (of which this proxy statement/prospectus forms a part) shall have been declared effective by the SEC, and shall not be subject to a stop order or any proceeding initiated or threatened by the SEC for that purpose;
- all waiting periods under the HSR Act shall have expired or been terminated early and all other material foreign antitrust approvals or requirements required by applicable law to be obtained or satisfied prior to the effective time of merger 1 shall have been obtained or satisfied; and
- the shares of Ligand common stock issuable pursuant to merger 1 shall have been authorized for listing on Nasdaq, subject only to official notice of issuance.

Additional Conditions to the Obligations of Ligand and Margaux

The merger agreement provides that the obligations of Ligand and Margaux to consummate and effect merger 1 are subject to the satisfaction, at or prior to the effective time of merger 1, of the following conditions, in addition to the conditions set forth above in the section entitled " Conditions to the Obligations of Each Party":

- as of the date of the merger agreement and the closing date (except for representations and warranties which address matters only as of a particular date or only with respect to a particular period, the accuracy of which shall be determined as of that particular date or with respect to such period), the representations and warranties of Pharmacopeia set forth in the merger agreement shall be true and correct, without regard to any materiality or material adverse effect qualifications contained therein (other than the material adverse effect qualification used in the representation and warranty concerning the absence of certain changes or events), except, in each case or in the aggregate, as does not constitute a material adverse effect on Pharmacopeia at the effective time of merger 1; provided, that the representations and warranties with respect to (i) the capitalization of Pharmacopeia, (ii) Pharmacopeia's authority to enter into the merger agreement and CVR agreement and (iii) the approval of the merger agreement and merger 1 by the board of directors of Pharmacopeia, shall be true and correct in all material respects as of the effective time of merger 1;
- Pharmacopeia shall have performed or complied in all material respects with all agreements and covenants required to be performed by it under the merger agreement prior to the effective time of merger 1;
- there shall not have occurred any change, circumstance, event or effect that has or is reasonably likely to have a material adverse effect on Pharmacopeia since the date of the merger agreement and that is continuing;

there shall not be any pending suit, action or proceeding asserted by any court or governmental or regulatory authority (i) challenging or seeking to restrain or prohibit the consummation of merger 1 or any of the other transactions contemplated by the merger agreement, the effect of which restraint or prohibition if obtained would cause the mutual condition regarding the absence of governmental action described above to not be satisfied or (ii) seeking to require Ligand or Pharmacopeia or any subsidiary or affiliate to effect or agree to take any action that is reasonably likely to have a material adverse effect on the condition (financial or otherwise), business, assets, liabilities or results of operations of Ligand, Pharmacopeia, or any of their respective affiliates, or the intermediate surviving corporation, taken individually or in the aggregate;

Ligand shall have received an opinion from its tax counsel that the mergers, taken together, constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code; and

Ligand shall have received from Pharmacopeia (i) a certification dated as of the closing date and signed by a responsible corporate officer of Pharmacopeia, that Pharmacopeia is not, and has not been at any time during the applicable period, a United States real property holding corporation, as defined in Section 897(c)(2) of the Internal Revenue Code, and (ii) proof reasonably satisfactory to Ligand that Pharmacopeia has provided notice of such certification to the Internal Revenue Service.

Additional Conditions to the Obligations of Pharmacopeia

The merger agreement provides that the obligation of Pharmacopeia to consummate and effect merger 1 is subject to the satisfaction, at or prior to the effective time of merger 1, of the following conditions, in addition to the conditions set forth above in the section entitled " Conditions to the Obligations of Each Party":

as of the date of the merger agreement and the closing date (except for representations and warranties which address matters only as of a particular date or only with respect to a particular period, the accuracy of which shall be determined as of that particular date or with respect to such period), the representations and warranties of Ligand and Margaux set forth in the merger agreement shall be true and correct, without regard to any materiality or material adverse effect qualifications contained therein, except, in each case or in the aggregate, as does not constitute a material adverse effect on Ligand at the effective time of merger 1; provided, that the representations and warranties with respect to (i) the capitalization of Ligand, (ii) Ligand's and Margaux's authority to enter into the merger agreement and the CVR agreement and (iii) the approval of the merger agreement and the mergers, by the board of directors of Ligand, shall be true and correct in all material respects as of the effective time of merger 1;

Ligand and Margaux shall have performed or complied in all material respects with all agreements and covenants required to be performed by Ligand or Margaux under the merger agreement prior to the effective time of merger 1;

there shall not have occurred any change, circumstance, event or effect that has or is reasonably likely to have a material adverse effect on Ligand since the date of the merger agreement and that is continuing; and

Pharmacopeia shall have received an opinion from its tax counsel that the mergers, taken together, constitute a reorganization within the meaning of Section 368(a) of the Internal Revenue Code.

As used with respect to Pharmacopeia in the merger agreement, "material adverse effect" means any change, circumstance, event or effect that (i) is materially adverse to the business, financial

condition or results of operations of Pharmacopeia and its subsidiaries, taken as a whole, including without limitation, failure of either of (1) the p38 kinase inhibitor program with Bristol-Myers Squibb in rheumatoid arthritis or (2) the CXCR2 antagonist program with Schering Plough in chronic obstructive pulmonary disease to meet its primary Phase 2 clinical endpoints (outcome measures), or a clinical hold imposed by the FDA or other comparable governmental or regulatory authority with respect to either of such programs as evidenced by general public disclosure or formal written notification to Pharmacopeia of any such change, circumstance, event or effect (either (1) or (2), the program triggers); or (ii) materially impedes the consummation of the transactions contemplated by the merger agreement in accordance with the terms hereof and all applicable law; provided, however, that none of the following shall be deemed in themselves, either alone or in combination, to constitute, and that none of the following shall be taken into account in determining whether there has been or will be, a material adverse effect with respect to Pharmacopeia:

any adverse change, circumstance, event or effect to the extent attributable in whole or in part to the announcement or pendency of merger 1;

any adverse change, circumstance, event or effect attributable to conditions generally affecting the biotechnology or pharmaceutical industries or the United States or international economy or the United States or international financial markets that do not materially disproportionately affect Pharmacopeia or its applicable subsidiaries;

any adverse change, circumstance, event or effect arising from or relating to compliance with the terms of the merger agreement;

changes in GAAP or regulatory accounting principles after the date of the merger agreement;

changes in law after the date of the merger agreement;

earthquakes, fires, floods, hurricanes, tornadoes or similar catastrophes, or acts of war, sabotage, terrorism, military action or any escalation or worsening thereof after the date of the merger agreement, and whether or not pursuant to the declaration of national emergency or war;

any adverse data resulting from pre-clinical activities;

the failure of Pharmacopeia to meet analysts' projections, in and of itself (it being understood that any change, circumstance, event or effect that may have caused or contributed to any such failure may be deemed to constitute, in and of itself, a material adverse effect and may be taken into consideration when determining whether a material adverse effect has occurred);

any action taken by Pharmacopeia with Ligand's written consent or the taking of any action expressly required by the merger agreement;

a decline in Pharmacopeia's stock price, in and of itself (it being understood that any change, circumstance, event or effect that may have caused or contributed to any such decline may be deemed to constitute, in and of itself, a material adverse effect and may be taken into consideration when determining whether a material adverse effect has occurred); or

the changes, circumstances, events or effects upon Pharmacopeia's business, financial condition and/or results of operations as contemplated in Pharmacopeia's forecast plan delivered to Ligand by Pharmacopeia prior to the date of the merger agreement (provided that for the purposes of this clause, "contemplated" means the forecasts related to the business, financial condition and results of operations of Pharmacopeia that are contained in the forecast plan and any variances from such forecasts which are not material to Pharmacopeia).

As used with respect to Ligand in the merger agreement, "material adverse effect" means any change, circumstance, event or effect that is (i) materially adverse to the business, financial condition or results of operations of Ligand and its subsidiaries, taken as a whole or (ii) materially impedes the consummation of the transactions contemplated by the merger agreement in accordance with the terms thereof and all applicable laws; provided, however, that none of the following shall be deemed in themselves, either alone or in combination, to constitute, and that none of the following shall be taken into account in determining whether there has been or will be, a material adverse effect with respect to Ligand:

- any adverse change, circumstance, event or effect to the extent attributable in whole or in part to the announcement or pendency of merger 1 (provided that the exception in this clause shall not apply to the use of the term "material adverse effect" in Section 6.2(a) of the merger agreement with respect to the representations and warranties contained in Section 3.3 (Authority; Non-Contravention; Necessary Consents) and Section 3.7(a) (Litigation);

- any adverse change, circumstance, event or effect attributable to conditions generally affecting the biotechnology industry or the United States economy in any locations where Ligand or any of its subsidiaries has material operations that do not materially disproportionately affect Ligand or the applicable Ligand subsidiaries;

- any adverse change, circumstance, event or effect arising from or relating to compliance with the terms of the merger agreement;

- changes in GAAP or regulatory accounting principles after the date of the merger agreement;

- changes in law after the date of the merger agreement;

- earthquakes, fires, floods, hurricanes, tornadoes or similar catastrophes, or acts of war, sabotage, terrorism, military action or any escalation or worsening thereof after the date of the merger agreement, and whether or not pursuant to the declaration of national emergency or war;

- any adverse data resulting from pre-clinical activities;

- the failure of Ligand to meet analysts' projections, in and of itself (it being understood that any change, circumstance, event or effect that may have caused or contributed to any such failure may be deemed to constitute, in and of itself, a material adverse effect and may be taken into consideration when determining whether a material adverse effect has occurred);

- any action taken by Ligand with Pharmacopeia's consent or the taking of any action expressly required by the merger agreement; or

- a decline in Ligand's stock price, in and of itself (it being understood that any change, circumstance, event or effect that may have caused or contributed to any such decline may be deemed to constitute, in and of itself, a material adverse effect and may be taken into consideration when determining whether a material adverse effect has occurred).

Termination of the Merger Agreement

The merger agreement provides that the boards of directors of Ligand and Pharmacopeia can agree by mutual written consent to terminate the merger agreement at any time prior to the effective time of merger 1. In addition, if authorized by its board of directors, either Ligand or Pharmacopeia may terminate the merger agreement:

if merger 1 has not been consummated by February 2, 2009, or the end date (subject to an (i) automatic sixty (60) day extension if the applicable waiting period under the HSR Act shall not have expired or been earlier terminated as of such date or (ii) automatic extension to the date that is two (2) business days following the scheduled date of the special meeting of

Pharmacopeia stockholders, but in no event later than February 28, 2009, in the event this proxy statement/prospectus has been mailed to Pharmacopeia's stockholders on or prior to the end date), except that the right to terminate the merger agreement under this clause shall not be available to a party (x) whose action or failure to act has been a principal cause of or primarily resulted in the failure of merger 1 to occur on or before such date and such action or failure to act constitutes a breach of the merger agreement or (y) that is in material breach of the merger agreement;

if a court or governmental or regulatory authority of competent jurisdiction shall have issued any order, decree or ruling or taken any other action (including the failure to have taken an action), in any case having the effect of permanently restraining, enjoining or otherwise prohibiting merger 1, which order, decree, ruling or other action is final and nonappealable; or

if the approval of a majority of the stockholders of Pharmacopeia to adopt the merger agreement is not obtained at a special meeting of Pharmacopeia stockholders duly convened to consider adoption of the merger agreement.

In addition, the merger agreement provides that if authorized by its board of directors, Ligand may terminate the merger agreement, at any time prior to the effective time of merger 1, if any of the following events occurs:

prior to the adoption of the merger agreement by Pharmacopeia's stockholders: (i) Pharmacopeia's board of directors shall for any reason have withdrawn or shall have amended or modified in a manner adverse to Ligand its recommendation that Pharmacopeia stockholders vote to adopt the merger agreement or shall have resolved to do the same, (ii) Pharmacopeia shall have failed to include in the proxy statement the recommendation of its board of directors that Pharmacopeia stockholders vote to approve the merger agreement, (iii) Pharmacopeia's board of directors fails to reaffirm (publicly, if so requested) its recommendation that Pharmacopeia stockholders vote to approve the merger agreement within ten (10) calendar days after Ligand requests in writing that such recommendation be reaffirmed, (iv) Pharmacopeia's board of directors shall have approved or recommended any acquisition proposal or publicly proposed to submit to the vote of Pharmacopeia stockholders any acquisition proposal, (v) Pharmacopeia shall have entered into any letter of intent or similar document or any agreement, contract or commitment accepting any acquisition proposal; or (vi) a tender or exchange offer relating to Pharmacopeia's securities shall have been commenced by a person unaffiliated with Ligand and Pharmacopeia shall not have published, sent or given to its security holders pursuant to Rule 14e-2 promulgated under the Securities Act, within ten (10) business days after such tender or exchange offer is first published, sent or given, a statement disclosing that the board of directors of Pharmacopeia recommends rejection of such tender or exchange offer (each of the events set forth in clauses (i) through (vi), a triggering event); or

(i) any representation or warranty of Pharmacopeia set forth in the merger agreement shall have been breached or become untrue or Pharmacopeia shall have breached any covenant or agreement of Pharmacopeia set forth in the merger agreement, (ii) such breach or misrepresentation is not cured within thirty (30) days after receipt by Pharmacopeia of written notice from Ligand (provided, however, that such thirty (30) day period shall not apply if such breach or misrepresentation is not curable), and (iii) such breach or misrepresentation would cause the closing conditions relating to accuracy of its representations and warranties or compliance with covenants and agreements incapable of being satisfied by the end date; provided that Ligand is not then in breach of its respective warranties, covenants or agreements set forth in the merger agreement such that the closing conditions relating to accuracy of its representations and warranties or compliance with covenants and agreements would not be satisfied.

In addition, the merger agreement provides that if authorized by its board of directors, Pharmacopeia may terminate the merger agreement, at any time prior to the effective time of merger 1, if any of the following events occurs:

(i) any representation or warranty of Ligand or Margaux set forth in the merger agreement shall have been breached or become untrue or Ligand or Margaux shall have breached any covenant or agreement of Ligand or Margaux set forth in the merger agreement, (ii) such breach or misrepresentation is not cured within thirty (30) days after receipt by Ligand of written notice from Pharmacopeia (provided, however, that such thirty (30) day period shall not apply if such breach or misrepresentation is not curable), and (iii) such breach or misrepresentation would cause the closing conditions relating to accuracy of their respective representations and warranties or compliance with covenants and agreements incapable of being satisfied by the end date; provided that Pharmacopeia is not then in breach of its respective warranties, covenants or agreements set forth in the merger agreement such that the closing conditions relating to accuracy of its representations and warranties or compliance with covenants and agreements would not be satisfied;

within five (5) business days of the date of termination, the closing price of Ligand common stock, as reported on Nasdaq, is less than or equal to $1.65 per share; or

(i) Pharmacopeia has not breached (other than any immaterial breach) the covenant against solicitation of acquisition proposals contained in the merger agreement with respect to the superior offer at issue; (ii) Pharmacopeia's board of directors has received a superior offer; (iii) in light of such superior offer, Pharmacopeia's board of directors shall have determined in good faith, after consultation with outside counsel, that the failure of Pharmacopeia's board of directors to withdraw or modify its approval or recommendation of the merger agreement or merger 1 would reasonably be expected to result in a breach of its fiduciary obligations; (iv) Pharmacopeia has notified Ligand in writing (which shall include written electronic communication) of the determinations described in clause (iii) above on the date such determinations are made; (v) at least three (3) business days following delivery to Ligand of the notice referred to in clause (iv) above (or, if such notice is delivered fewer than three (3) business days prior to the effective time of merger 1, then for the period remaining up to immediately prior to the effective time of merger 1), and taking into account any revised proposal that is binding and irrevocable for such three (3) business day (or, as applicable, shorter) period made by Ligand, such superior offer remains a superior offer and Pharmacopeia's board of directors has again made the determinations referred to in clause (iii) above; (vi) at or before the effective time of the termination of the merger agreement, Pharmacopeia pays to Ligand a termination fee in an amount equal to $3,375,000, or the termination fee; and (vii) Pharmacopeia's board of directors concurrently approves, and Pharmacopeia concurrently enters into, a definitive agreement providing for the implementation of such superior offer (the foregoing is referred to collectively as the superior offer termination).

If the merger agreement is terminated, then it will be of no further effect, and there will be no liability or obligation on the part of Ligand or Pharmacopeia or their respective subsidiaries, officers or directors, except (i) certain confidentiality obligations, (ii) liabilities relating to reimbursement of expenses and payment of the termination fee, if applicable, and (iii) liabilities or damages incurred or suffered by a party as a result of the willful and material breach by the other party of any of its representations, warranties, covenants or other agreements set forth in the merger agreement.

Fees and Expenses

The merger agreement provides that, regardless of whether merger 1 is consummated, each party will pay its own costs and expenses incurred in connection with the merger agreement and the transactions contemplated by the merger agreement, except that Ligand and Pharmacopeia shall share

equally all fees and expenses, other than attorneys' and accountants' fees and expenses (which fees shall be paid for by the party incurring such expense), incurred in relation to the printing, mailing and filing (with the SEC) of the registration statement and this proxy statement/prospectus (including financial statements and exhibits) and any amendments or supplements thereto.

Termination Fee

Pharmacopeia must pay the termination fee of $3,375,000 to Ligand if the merger agreement is terminated after the occurrence of any of the following events:

if Ligand terminates the merger agreement as a result of a triggering event (as described above under " Termination of the Merger Agreement") having occurred with respect to Pharmacopeia, then the termination fee is due within three (3) business days of such termination;

if (i) Ligand or Pharmacopeia terminates the merger agreement as a result of merger 1 not being consummated by the end date (as it may be extended) (except if the failure to consummate merger 1 prior to the end date was caused by the actions of any court or governmental or regulatory authority), (ii) an acquisition proposal had been made publicly to Pharmacopeia after the date of the merger agreement and not withdrawn prior to the date of such termination and (iii) within twelve (12) months of such termination, Pharmacopeia enters into a definitive agreement for, or consummates, any acquisition, then the termination fee is due upon consummation of such acquisition;

if (i) Ligand terminates the merger agreement as a result of a willful and knowing breach by Pharmacopeia of any of its representations, warranties, covenants or agreements under the merger agreement (except that the requirement of willful and knowing shall not apply to a breach of the covenants and agreements regarding solicitation of acquisition proposals contained in Section 5.3 of the merger agreement), (ii) an acquisition proposal had been made publicly or privately to Pharmacopeia prior to the occurrence of the breach giving rise to the right to terminate and not withdrawn prior to the date of such termination and (iii) within twelve (12) months of such termination, Pharmacopeia enters into a definitive agreement for, or consummates, any acquisition, then the termination fee is due upon consummation of such acquisition; or

if Pharmacopeia terminates the merger agreement as a result of the superior offer termination, then the termination fee is due at or before the effective time of such termination.

In the event that (i) the merger agreement is terminated by Ligand because of the failure of Pharmacopeia's stockholders to adopt the merger agreement at a special meeting of Pharmacopeia stockholders duly convened to consider adoption of the merger agreement, (ii) an acquisition proposal is made publicly to Pharmacopeia within twelve (12) months of such termination, and (iii) Pharmacopeia within twelve (12) months of such termination enters into a definitive agreement for and within eighteen (18) months of such termination consummates an acquisition resulting from such acquisition proposal , then Pharmacopeia will pay Ligand concurrently upon consummation of such acquisition, an amount equal to Ligand's actual documented reasonable out-of-pocket expenses in connection with the transactions contemplated under the merger agreement, up to a maximum of $1,400,000.

For purposes of this "Termination Fee" section only, "acquisition," with respect to Pharmacopeia, shall mean any of the following transactions (other than the transactions contemplated by the merger agreement): (i) a merger, consolidation, business combination, recapitalization, liquidation, dissolution or similar transaction involving Pharmacopeia pursuant to which the stockholders of Pharmacopeia immediately preceding such transaction hold less than fifty percent (50%) of the aggregate equity interests in the surviving or resulting entity of such transaction or any resulting direct or indirect parent

or subsidiary entity thereof, as a result of such transaction, (ii) a sale or other disposition by Pharmacopeia of assets representing in excess of fifty percent (50%) of the aggregate fair market value of Pharmacopeia's business immediately prior to such sale, or (iii) the acquisition by any person or group (including by way of a tender offer or an exchange offer or issuance by Pharmacopeia or such person or group), directly or indirectly, of beneficial ownership or a right to acquire beneficial ownership of shares representing in excess of fifty percent (50%) of the voting power of the then outstanding shares of capital stock of Pharmacopeia.

Amendment

Subject to applicable law, the merger agreement may be amended by the parties thereto, by action taken or authorized by their respective boards of directors, at any time prior to the effective time of merger 1; provided, however, after the adoption of the merger agreement by Pharmacopeia's stockholders, no amendment shall be made which by law or in accordance with the rules of any relevant stock exchange requires further approval by the stockholders of Pharmacopeia, without such further stockholder approval.

CVR Agreement

In connection with the closing of the mergers, Ligand, Pharmacopeia and a rights agent to be determined will enter into a separate contingent value rights agreement relating to Pharmacopeia's DARA program, of which the lead clinical product candidate is PS433540, substantially in the form of the contingent value rights agreement included in this proxy statement/prospectus as *Annex B*, which is incorporated by reference into this proxy statement/prospectus. The following summary describes the material provisions of the contingent value rights agreement. This summary may not contain all of the information about the contingent value rights agreement that is important to you. You are encouraged to read the form of contingent value rights agreement carefully in its entirety because when entered into among Ligand, Pharmacopeia and the rights agent, this document will be the legal document governing the contingent value rights to be issued to former Pharmacopeia securityholders in connection with the mergers. Although the definitive version of the contingent value rights agreement negotiated and entered into with the chosen rights agent is not expected to differ from the form of contingent value rights agreement included with this proxy statement/prospectus in any respect that would be material to holders of contingent value rights, there can be no assurance that any changes will not, in fact, be material to holders.

At the closing of the mergers, Ligand, Pharmacopeia and a rights agent, will enter into the contingent value rights, or CVR, agreement, the form of which is attached as *Annex B* to this proxy statement/prospectus. The CVR agreement sets forth the rights that former Pharmacopeia securityholders will have with respect to each CVR to be held by them after the closing of the mergers. The CVRs provide each holder the right to receive a proportionate share of an aggregate of $15 million if Ligand enters into a license, sale, development, marketing or option agreement with respect to any product candidate from Pharmacopeia's DARA program (other than any agreement with Bristol-Myers Squibb or any of its affiliates) on or prior to December 31, 2011.

CVRs Non-transferable

The CVRs may not be sold, assigned, transferred, pledged, encumbered or in any other manner transferred or disposed of, in whole or in part, other than through a permitted transfer and, in the case of a permitted transfer, only in accordance with the provisions of the CVR agreement regarding procedures for transfer and in compliance with applicable United States federal and state securities laws. For purposes of the CVR agreement, a permitted transfer means:

the transfer of any or all of the CVRs on death by will or intestacy;

transfer by instrument to an inter vivos or testamentary trust in which the CVRs are to be passed to beneficiaries upon the death of the trustee;

transfers made pursuant to a court order of a court of competent jurisdiction (such as in connection with divorce, bankruptcy or liquidation);

if the holder is a partnership or limited liability company, a distribution by the transferring partnership or limited liability company to its partners or members, as applicable; or

a transfer made by operation of law (such as a merger or consolidation), or in connection with the dissolution, liquidation or termination of any corporation, limited liability company, partnership or other entity.

Sole Discretion and Decision Making Authority

The CVR agreement provides that Ligand shall have sole discretion and decision making authority over whether to continue to invest, how much to invest in the DARA program and whether and on what terms, if any, to enter into (i) a license or sale agreement related to DARA, (ii) any other agreement for the development, marketing or sale of DARA, or (iii) any option to enter into any such agreements.

Achievement and Non-Achievement Certificates

The CVR agreement provides that the rights agent shall promptly deliver a copy of an achievement or non-achievement certificate (reflecting, respectively, satisfaction or non-satisfaction of the condition to payment described above), as applicable, to each holder of CVRs after it is received by the rights agent. Upon receipt of a non-achievement certificate, any holder or holders of at least 20% in the aggregate of the outstanding CVRs may, within 45 days of receipt of the non-achievement certificate, require that the rights agent deliver a notice specifying that such holder or holders object to the non-achievement certificate. Such notice shall include a statement of the reason upon which such holder or holders have determined that the condition to payment was satisfied on or prior to December 31, 2011.

If Ligand does not agree with any or all of the objections to the non-achievement certificate, Ligand, the rights agent and any available holder or holders of at least 5% in the aggregate of the outstanding CVRs shall negotiate in good faith for a period of 30 days to resolve the dispute. After expiration of the 30-day period, any remaining objections will be settled by binding arbitration pursuant to the terms of the CVR agreement.

If Ligand delivers to the rights agent an achievement certificate (or if the CVR payment amount is otherwise determined to be payable pursuant to the arbitration provisions in the CVR agreement), Ligand shall establish a CVR payment date that is within 15 calendar days of the date of the achievement certificate (or the date of final determination pursuant to the arbitration provisions in the CVR agreement). At least five business days prior to such CVR payment date, Ligand shall cause the CVR payment amount to be delivered to the rights agent, who will in turn, on such CVR payment date, distribute the CVR payment amount on a pro rata basis to the CVR holders.

Rights of CVR Holder

The rights of a CVR holder are limited to those expressed in the CVR agreement. The CVRs will not entitle the holders thereof, by virtue of their ownership of CVRs, to any of the rights of a Ligand stockholder.

Treatment of Option and Warrant Holders

The holders of any outstanding options to purchase Pharmacopeia common stock that are not cancelled prior to the effective time of the mergers and the holders of any outstanding warrants to purchase Pharmacopeia stock shall be entitled to receive CVRs, subject to the terms and conditions of the CVR agreement, upon exercise of such options or warrants by the holder thereof and following the receipt by Ligand of the applicable exercise price thereof.

Amendment of CVR Agreement

Without the consent of the CVR holders or the rights agent, Ligand, at any time and from time to time, may enter into one or more amendments to the CVR agreement, for any of the following purposes:

- to evidence the succession of another person to Ligand and the assumption by any successor of the covenants of Ligand in the CVR agreement; or
- to evidence the termination of the CVR registrar and the succession of another person as a successor CVR registrar and the assumption by any successor of the obligations of the CVR registrar.

Without the consent of the holders, Ligand and the rights agent, at any time and from time to time, may enter into one or more amendments to the CVR agreement, for any of the following purposes:

- to evidence the succession of another person as a successor rights agent and the assumption by any successor of the covenants and obligations of the rights agent;
- to add to the covenants of Ligand any further covenants, restrictions, conditions or provisions as Ligand and the rights agent consider to be for the protection of CVR holders; provided that in each case, the provisions do not adversely affect the rights of CVR holders;
- to cure any ambiguity, to correct or supplement any provision in the CVR agreement that may be defective or inconsistent with any other provision, or to make any other provisions with respect to matters or questions arising under the CVR agreement; provided that in each case, the provisions do not adversely affect the rights of CVR holders; or
- to add, eliminate or change any provision in the CVR agreement unless such addition, elimination or change is adverse to the rights of CVR holders.

With the written consent of holders of not less than a majority of the CVRs then outstanding, Ligand may enter into one or more amendments to the CVR agreement for the purpose of adding, eliminating or changing any provision of the CVR agreement, even if the addition, elimination or change is in any way adverse to the rights of CVR holders.

Consolidation, Merger, Sale or Conveyance of Ligand

Under the terms of the CVR agreement, Ligand may not consolidate with or merge into any other person or convey, transfer or lease its properties and assets substantially as an entirety to any person, unless (i) such person expressly assumes payment of amounts on all the CVRs and the performance of every duty and covenant of the CVR agreement on the part of Ligand to be performed or observed and (ii) Ligand has delivered to the rights agent a certificate of one of its officers, stating that such consolidation, merger, conveyance, transfer or lease complies with the CVR agreement and that all conditions provided for relating to such transaction have been complied with.

Termination of CVR Agreement

The CVR agreement terminates upon the earlier to occur of (x) the payment of the CVR payment amount, (y) in the event that an objection notice regarding the non-achievement certificate is not delivered within the required 45-day period following the distribution of the rights agent to CVR holders of such non-achievement certificate, the expiration of such period or (z) in the event of the delivery of an objection notice regarding the non-achievement certificate, either (i) the final determination in accordance with the CVR agreement that the condition to payment has not been satisfied or (ii) the fulfillment of any payment or other obligation required pursuant to a final determination made in accordance

with the CVR agreement.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS OF PHARMACOPEIA

The following table indicates beneficial ownership of Pharmacopeia common stock as of October 8, 2008:

- by each person or entity known by Pharmacopeia to be the beneficial owners of more than 5% of the outstanding shares of Pharmacopeia common stock;
- by each of Pharmacopeia's named executive officers (as defined under Item 402 of Regulation S-K promulgated under the Securities Act) and directors; and
- by all of Pharmacopeia's executive officers and directors as a group.

Unless otherwise indicated, the address of each beneficial owner listed below is c/o Pharmacopeia, Inc., P.O. Box 5350, Princeton, NJ 08543-5350. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Shares of Pharmacopeia common stock subject to options or warrants exercisable within 60 days from the date of this table are deemed to be outstanding and beneficially owned for purposes of computing the percentage ownership of such person but are not treated as outstanding for purposes of computing the percentage ownership of others. Unless otherwise indicated, each person or entity named in the table has sole voting power and investment power with respect to all shares of Pharmacopeia common stock listed as owned by that person or entity. Percentage of beneficial ownership is based on 29,834,494 shares of Pharmacopeia common stock issued and outstanding as of October 8, 2008.

Name of Beneficial Owner(1)	Number of Shares	Approximate Percentage of Total Voting Power(2)
El Coronado Holdings, L.L.C. Josiah T. Austin	4,109,964(3)	13.77%
4673 Christopher Place Dallas, TX 75204		
BVF Inc. Biotechnology Value Fund, L.P. Biotechnology Value Fund II, L.P. BVF Investments, L.L.C. Investment 10, L.L.C. BVF Partners L.P.	2,519,890(4)	7.92%
900 North Michigan Avenue, Suite 1100 Chicago, IL 60611		
Special Situations Fund III, L.P. Special Situations Fund III Q.P., L.P. Special Situations Private Equity Fund, L.P. Special Situations Life Sciences Fund, L.P. Austin W. Marxe David M. Greenhouse	2,337,600(5)	7.81%
527 Madison Avenue New York, NY 10022		

Name of Beneficial Owner(1)	Number of Shares	Approximate Percentage of Total Voting Power(2)
OZ Management L.P. Och-Ziff Holding Corporation Och-Ziff Capital Management Group L.L.C. OZ Master Fund, Ltd. Daniel S. Och 9 West 57th Street, 39th Floor New York, NY10019	1,901,788(6)	6.37%
Federated Investors, Inc. John F. Donahue Rhodora J. Donahue J. Christopher Donahue Federated Investors Tower Pittsburgh, PA 15222-3779	1,576,600(7)	5.28%
Merlin BioMed Private Equity Advisors, L.L.C. Dominique Sémon 230 Park Avenue, Suite 928 New York, NY 10169	1,526,750(8)	5.12%
Joseph A. Mollica	355,080(9)	1.18%
Maria L. Webb	178,972(10)	*
Stephen C. Costalas	163,557(11)	*
Brian M. Posner	157,550(12)	*
Paul A. Bartlett	79,291(13)	*
Rene Belder	55,231(14)	*
Frank Baldino, Jr.	46,971(15)	*
Bruce A. Peacock	31,572(16)	*
Steven J. Burakoff	25,572(17)	*
Carol A. Ammon	25,572(18)	*
Martin H. Soeters	7,548(19)	*
Dennis H. Langer	5,048(20)	*
All Current Directors and Executive Officers as a group (12 persons)	1,132,589(21)	3.67%

* Less than one percent.

(1) This table is based upon information supplied by officers, directors and principal stockholders, including in particular reports filed on Schedule 13D, Schedule 13G, Form 4 and Form 5 with the Securities and Exchange Commission as more specifically detailed in the following footnotes.

(2)

Each percentage is based upon 29,834,474 shares of Common Stock outstanding on October 8, 2008 and gives effect to the shares of Pharmacopeia's common stock issuable within 60 days of October 8, 2008 (but without giving effect to any such shares issuable solely as a result of the consummation of the mergers) upon the exercise of all options, warrants and other rights beneficially owned by the indicated stockholder on that date and with respect to the group, all

such stockholders. Unless otherwise indicated, the persons named in the table have sole voting and sole investment power with respect to all shares shown as being beneficially owned. Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and includes voting and investment power with respect to shares.

(3)

El Coronado Holdings, L.L.C., or ECH, and Josiah T. Austin, or Austin, filed a Schedule 13D with respect to Pharmacopeia's common stock on December 10, 2007, and filed three subsequent Amendments to that Schedule 13D on June 23, 2008, August 13, 2008, and September 22, 2008, respectively. In addition, Austin filed a Form 4 with respect to Pharmacopeia's common stock on September 26, 2008. As reported in said Schedule 13D as amended and said Form 4, ECH is deemed beneficial owner of and has shared voting and dispositive power for 2,859,792 of the indicated shares, and Austin is deemed beneficial owner of 4,109,964 of the indicated shares in his capacity as Trustee for certain family trusts and as sole managing member of ECH. As Trustee for certain family trusts, Austin has sole voting and dispositive power for 1,250,172 of the indicated shares, and as sole managing member of ECH, Austin has shared voting and dispositive power for 2,859,792 of the indicated shares. All data in this proxy statement/prospectus regarding such ownership is based on said Schedule 13D as amended and said Form 4.

(4)

BVF Inc., Biotechnology Value Fund, L.P., or BVF, Biotechnology Value Fund II, L.P., or BVF2, BVF Investments, L.L.C., or Investments, Investment 10, L.L.C., or ILL10, and BVF Partners L.P. , or Partners, filed an amended Schedule 13G with respect to Pharmacopeia's common stock on February 14, 2008. All data in this proxy statement/prospectus regarding such ownership is based on such Schedule 13G, which reported: (i) BVF has shared voting and dispositive power for 545,690 of the indicated shares, of which 31,200 shares are attributable to warrants; (ii) BVF2 has shared voting and dispositive power for 375,580 of the indicated shares, of which 21,500 shares are attributable to warrants; (iii) Investments has shared voting and dispositive power for 1,437,020 of the indicated shares, of which 83,000 shares are attributable to warrants; (iv) ILL10 has shared voting and dispositive power for 161,600 of the indicated shares, of which 9,300 shares are attributable to warrants; and (v) BVF Inc. and Partners each have shared voting and dispositive power for 2,519,890 of the indicated shares, of which 145,000 shares are attributable to warrants. None of BVF, BVF2, Investments, ILL10, BVF Inc. and Partners has sole voting or dispositive power with respect to any of the indicated shares.

(5)

Austin W. Marxe, or Marxe, and David M. Greenhouse, or Greenhouse, filed a Schedule 13G with respect to Pharmacopeia's common stock on February 11, 2008. All data in this proxy statement/prospectus regarding such ownership is based on such Schedule 13G. Marxe and Greenhouse are controlling principals of AWM Investment Company, Inc., or AWM. AWM serves as investment advisors to Special Situations Fund III, L.P., or SSF3, Special Situations Fund III QP, L.P., or SSFQP, Special Situations Private Equity Fund, L.P., or SSPE, and Special Situations Life Sciences Fund, L.P., or Life Sciences. As reported in said Schedule 13G, Marxe and Greenhouse share sole voting and investment power over 125,000 shares owned by SSF3, 1,425,000 shares owned by SSFQP, 175,000 shares and 43,750 warrants owned by SSPE, and 525,100 shares and 43,750 warrants to purchase shares owned by Life Sciences.

(6)

OZ Management L.P. , or OZ, Och-Ziff Holding Corporation, or OZHC, Och-Ziff Capital Management Group L.L.C., or OZM, OZ Master Fund, Ltd., or OZMD, and Daniel S. Och filed an amended Schedule 13G with respect to Pharmacopeia's common stock on February 14, 2008. All data in this proxy statement/prospectus regarding such ownership is based on such Schedule 13G. As reported in said Schedule 13G, OZ, OZHC, OZM, OZMD and Mr. Och each disclaim beneficial ownership of such shares, which are beneficially owned as follows: (i) OZHC has sole dispositive and voting power for 1,841,598 of the indicated shares, (ii) OZM has sole dispositive and voting power for 1,901,788 of the indicated shares, (iii) OZMD has sole dispositive and voting power for 1,841,598 of the indicated shares, (iv) OZ has sole dispositive and voting

power for 1,841,598 of the indicated shares, which it owns for investment purposes on behalf of investment funds and discretionary accounts, including OCHC, OCM, and OZMD, and (iii) Mr. Och, as the senior managing member of OZ, has sole dispositive and voting power for 1,901,788 of the indicated shares.

(7) Federated Investors, Inc., John F. Donahue, Rhodora J. Donahue and J. Christopher Donahue filed an amended Schedule 13G with respect to Pharmacopeia's common stock on February 12, 2008. All data in this proxy statement/prospectus regarding such ownership is based on such Schedule 13G. Federated Investors, Inc. has sole voting and dispositive power with respect to 1,576,600 of the indicated shares, and Messrs. Donahue and Ms. Donahue each have shared voting and dispositive power with respect to 1,576,600 of the indicated shares.

(8) Merlin BioMed Private Equity Advisors, L.L.C., or Merlin, and Dominique Sémon, or Sémon, filed a Schedule 13G with respect to Pharmacopeia's common stock on June 13, 2008. All data in this proxy statement/prospectus regarding such ownership is based on such Schedule 13G. Sémon is the Managing Member of Merlin. As reported in said Schedule 13G, Merlin and Sémon share voting and dispositive power over the same 1,526,750 shares owned by Merlin.

(9) Includes 269,168 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(10) Includes 170,033 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(11) Includes 157,550 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(12) Includes 148,421 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(13) Includes 48,072 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(14) Includes 51,823 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(15) Includes 46,971 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(16) Includes 31,572 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(17) Includes 25,572 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(18) Includes 25,572 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(19) Includes 5,048 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(20) Includes 5,048 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

(21) Includes 984,850 shares of Pharmacopeia's common stock subject to options exercisable within 60 days of October 8, 2008.

UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

The following unaudited pro forma condensed combined balance sheet is based on historical balance sheets of Ligand and Pharmacopeia and has been prepared to reflect merger 1 as if it had been completed on the balance sheet date of June 30, 2008. The following unaudited pro forma condensed combined statements of operations give effect to merger 1 as if it had taken place on January 1, 2007, the beginning of the earliest period presented, in accordance with SEC guidance.

Merger 1 will be accounted for under the purchase method of accounting in accordance with Statement of Financial Accounting Standards No. 141, "Business Combinations." Under the purchase method of accounting, the total estimated purchase price, calculated as described in Note 2 to these unaudited pro forma condensed combined financial statements, is allocated to the net tangible and intangible assets of Pharmacopeia based on their estimated fair values. Management has made a preliminary allocation of the estimated purchase price to the tangible and intangible assets acquired and liabilities assumed based on various preliminary estimates. A final determination of these estimated fair values, which cannot be made prior to the completion of merger 1, will be based on the actual net tangible and intangible assets of Pharmacopeia that exist as of the date of completion of merger 1, and upon the final purchase price.

The unaudited pro forma condensed combined financial statements assume merger 1 is completed on or before December 31, 2008 and are based on the estimates and assumptions which are preliminary and have been made solely for purposes of developing such pro forma information. They do not include liabilities that may result from integration activities which are not presently estimable. The management of Ligand and Pharmacopeia are in the process of making these assessments, and estimates of these costs are not currently known. However, liabilities ultimately may be recorded for severance costs for Pharmacopeia employees, costs of vacating some facilities of Pharmacopeia, or other costs associated with exiting activities of Pharmacopeia that would affect the pro forma condensed combined financial statements. Any such liabilities would be recorded as an adjustment to the purchase price and an increase in goodwill. In addition, the pro forma condensed combined financial statements do not include any potential operating efficiencies or cost savings from expected synergies. The unaudited pro forma condensed combined financial statements are not necessarily an indication of the results that would have been achieved had merger 1 been completed as of the dates indicated or that may be achieved in the future.

Pursuant to the merger agreement, Ligand has agreed to exchange approximately 0.58 of a share of Ligand common stock for each share of Pharmacopeia common stock Ligand expected to be outstanding on the closing date. Pharmacopeia stockholders will not receive any fractional shares of Ligand common stock as part of the stock consideration. Instead, each Pharmacopeia stockholder otherwise entitled to a fractional share of Ligand common stock (after aggregating all fractional shares of Ligand common stock that otherwise would be received by such stockholder) will receive cash, without interest, in an amount (rounded to the nearest whole cent) equal to such fractional share multiplied by the Ligand Common Stock Value. This exchange ratio is based on the assumption that the closing price of Ligand shares is between $3.00 and $3.75. Ligand also agreed to a potential payment of approximately $0.50 per share or an aggregate of $15 million related to the CVRs and to permit Pharmacopeia's offer to cancel, effective immediately prior to the effective time of merger 1, any options granted under Pharmacopeia's existing equity compensation plans in exchange for the payment of up to $0.20 per share of Pharmacopeia common stock subject to such options, but in no event will the option cancellation payments exceed $1,000,000 in the aggregate.

These unaudited pro forma condensed combined financial statements should be read in conjunction with the historical consolidated financial statements and notes thereto of Ligand and Pharmacopeia and other financial information pertaining to Ligand and Pharmacopeia, including "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors" incorporated by reference or included herein.

Balance Sheet

As of June 30, 2008

(Amounts in thousands, except share data)

	Ligand	Pharmacopeia	Pro Forma Adjustments	Pro Forma Combined
ASSETS				
Current assets:				
Cash and cash equivalents	$ 29,177	$ 30,955	$ (11,189)a	$ 48,943
Short-term investments	55,819	13,485		69,304
Current portion of co-promote termination payments receivable	8,682			8,682
Other current assets	2,434	2,396		4,830
Total current assets	96,112	46,836	(11,189)	131,759
Restricted investments	1,411	0		1,411
Property and equipment, net	2,024	14,860		16,884
Long-term portion of co-promote termination payments receivable	50,298			50,298
Restricted indemnity account	10,178			10,178
Deferred compensation plan assets		1,838		1,838
Goodwill and other identifiable intangible assets			15,402 b	15,402
Other assets		144		144
Total assets	$ 160,023	$ 63,678	$ 4,213	$ 227,914
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	$ 10,290	$ 2,506	$	$ 12,796
Accrued liabilities	22,698	8,440		31,138
Current portion of deferred gain	1,964			1,964
Current portion of deferred revenue		21,042		21,042
Current portion of co-promote termination liability	8,682			8,682
Current portion of equipment financing obligations	978	1,228		2,206
Warrant liability		2,744		2,744
Total current liabilities	44,612	35,960		80,572
Long-term portion of co-promote termination liability	50,298			50,298
Long-term portion of equipment financing obligations	266	2,749		3,015
Deferred revenue, net	2,546	25,192		27,738
Long-term portion of deferred gain	24,274			24,274
Other long-term liabilities	6,661	348		7,009
Deferred compensation plan liabilities		1,838		1,838
Total liabilities	128,657	66,087		194,744
Commitments and contingencies				
Common stock subject to conditional redemption; 997,568 shares issued and outstanding at June 30, 2008 and December 31, 2007	12,345			12,345
Stockholders' equity:				

Common stock	101	297	(279)c	119
Additional paid-in capital	652,956	123,608	(68,626)d	707,938
Accumulated other comprehensive income (loss)	(28)			(28)
Accumulated deficit	(591,874)	(126,314)	73,118 e	(645,070)
	61,155	(2,409)	4,213	62,959
Treasury stock, at cost; 6,607,905 shares	(42,134)			(42,134)
Total stockholders' equity	19,021	(2,409)	4,213	20,825
Total liabilities and stockholders' equity	$ 160,023	$ 63,678	$ 4,213	$ 227,914

See Notes to Unaudited Pro Forma Condensed Combined Financial Statements.

Statement of Operations

For the Six Months Ended June 30, 2008

(Amounts in thousands, except share and per share data)

	Ligand	Pharmacopeia	Pro Forma Adustments	Pro Forma Combined
Revenues:				
Royalties	$ 9,678	$	$	$ 9,678
Collaborative research and development and other revenues		12,086		12,086
Total revenues	9,678	12,086		21,764
Operating costs and expenses:				
Collaborative research and development expense		15,135		15,135
Proprietary research and development expense	13,542	17,952		31,494
General and administrative	14,650	7,464		22,114
Restructuring expense		1,695		1,695
Total operating costs and expenses	28,192	42,246		70,438
Accretion of deferred gain on sale leaseback	(982)			(982)
Loss from operations	(17,532)	(30,160)		(47,692)
Other income (expense):				
Interest income	1,478	887	(112)f	2,253
Interest expense	(91)	(203)		(294)
Other, net	(1,272)	700		(572)
Decrease in warrant liability		1,461		1,461
Total other income (expense), net	115	2,845	(112)	2,848
Loss before income taxes	(17,417)	(27,315)	(112)	(44,844)
Income tax benefit (expense)	2,811	(2)	(2,811)g	(2)
Loss from continuing operations	$ (14,606)	$ (27,317)	$ (2,923)	$ (44,846)
Basic and diluted per share amounts:				
Loss from continuing operations	$ (0.15)	$ (0.92)	$	$ (0.40)
Weighted average number of common shares	95,051,672	29,688,000	(12,088,000)h	112,651,672

See Notes to Unaudited Pro Forma Condensed Combined Financial Statements.

Statement of Operations

For the Year Ended December 31, 2007

(Amounts in thousands, except share and per share data)

	Ligand	Pharmacopeia	Pro Forma Adustments	Pro Forma Combined
Revenues:				
Royalties	$ 11,409	$	$	$ 11,409
Collaborative research and development and other revenues	1,485	21,406		22,891
Total revenues	12,894	21,406		34,300
Operating costs and expenses:				
Research and development	44,623			44,623
Collaborative research and development expense		23,735		23,735
Proprietary research and development expense		39,273		39,273
General and administrative	30,410	10,991		41,401
Total operating costs and expenses	75,033	73,999		149,032
Accretion of deferred gain on sale leaseback	(1,964)			(1,964)
Loss from operations	(60,175)	(52,593)		(112,768)
Other income (expense):				
Interest income	8,655	3,721	(224)f	12,152
Interest expense	(735)	(78)		(813)
Other, net	(1,201)	94		(1,107)
Decrease in warrant liability		173		173
Total other income (expense), net	6,719	3,910	(224)	10,405
Loss before income taxes	(53,456)	(48,683)	(224)	(102,363)
Income tax benefit	18,697	823	(18,697)	823
Loss from continuing operations	$ (34,759)	$ (47,860)	$ (18,921)g	$ (101,540)
Basic and diluted per share amounts:				
Loss from continuing operations	$ (0.35)	$ (1.79)	$	$ (0.88)
Weighted average number of common shares	98,124,731	26,738,853	(9,138,853)h	115,724,731

See Notes to Unaudited Pro Forma Condensed Combined Financial Statements.

Notes to Unaudited Pro Forma Condensed

Combined Financial Statements

(1) Description of Transaction

On September 24, 2008, Ligand and Pharmacopeia entered into the merger agreement under which, upon completion, Pharmacopeia will become a wholly-owned subsidiary of Ligand in a transaction to be accounted for using the purchase method of accounting for business combinations. Under the terms of the merger agreement, at the effective time of merger 1, each outstanding share of Pharmacopeia common stock will be converted into the right to receive approximately 0.58 of a share of Ligand common stock. However, this exchange ratio is fixed only if the Ligand Common Stock Value falls in the range of $3.00 and $3.75. Otherwise, the following will apply:

- if the Ligand Common Stock Value is greater than $3.75 but not greater than $4.50, the overall transaction value will be fixed at $66 million, and the exchange ratio will decrease as prices increase within the range;

- if the Ligand Common Stock Value is greater than $4.50, then the exchange ratio will be approximately 0.49;

- if the Ligand Common Stock Value is equal to or greater than $2.38 but less than $3.00, then the exchange ratio will increase as prices decrease within the range (provided that if the Ligand Common Stock Value is less than $2.93, the exchange ratio will not exceed approximately 0.60), subject to specified limitations in the merger agreement. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive cash consideration for an overall transaction value fixed at $52.8 million; or

- if the Ligand Common Stock Value is less than $2.38, then the exchange ratio will be approximately 0.60. Under this scenario, in addition to receiving shares of Ligand common stock, Pharmacopeia stockholders will be entitled to receive a proportionate share of $10 million in cash.

The unaudited pro forma condensed combined financial statements included herein assume an exchange ratio of 0.58 of a share of Ligand common stock for each share of Pharmacopeia common stock.

Additionally, Pharmacopeia shareholders may be entitled to approximately $0.50 per share or an aggregate of $15 million related to the CVRs. The CVRs provide each holder the right to receive a proportionate share of an aggregate of $15 million if Ligand enters into a license, sale, development, marketing or option agreement with respect to any product candidate from Pharmacopeia's DARA program (other than any agreement with Bristol-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 estimated purchase price as Ligand management has deemed, based on currently available information, that the likelihood of payment is not probable.

(2) Purchase Price

Total estimated purchase price is summarized as follows:

	(in thousands)
Estimated fair value of shares of Ligand common stock to be issued	$ 55,000
Estimated Ligand transaction fees	4,200
Total preliminary estimated purchase price	$ 59,200

Notes to Unaudited Pro Forma Condensed

Combined Financial Statements (Continued)

(2) Purchase Price (Continued)

For purposes of this pro forma analysis, the above estimated purchase price has been allocated based on a preliminary estimate of the fair value of assets acquired and liabilities assumed:

	(in thousands)
Assets Acquired:	
Cash & cash equivalents	$ 30,955
Marketable Securities	13,485
Accounts receivable	1,000
Prepaid expenses & other	1,396
Property & equipment	14,860
Deferred compensation plan assets	1,838
Other assets	144
Goodwill and other identifiable intangible assets	15,402
In-process research and development	46,207
Total Assets	125,287
Liabilities Assumed:	
Accounts payable	2,506
Accrued & other liabilities	8,440
Deferred revenue	46,234
Deferred Compensation Plan Liabilities	1,838
Notes Payable	3,977
Warranty Liability	2,744
Other non-current liabilities	348
Total Liabilities	66,087
Total Purchase Price	$ 59,200

(3) Pro Forma Adjustments

Adjustments included in the column under the heading "Pro "Forma Adjustments" are related to the following:

(a)

Cash and cash equivalents adjustments consist of the following (in thousands):

	(in thousands)
Estimated Ligand transaction fees	$ 4,200
Estimated Pharmacopeia transaction fees	3,000
Estimated payment to repurchase Pharmacopeia stock options	1,000
Estimated separation payments made to Pharmacopeia management at closing	2,989
Total	$ 11,189

(b)

To record the estimated fair value of goodwill and other identifiable intangible assets, which is primarily related to Pharmacopeia's workforce. No amortizable intangible assets have been identified in the preliminary analysis. The value of

identifiable intangible assets is based upon a preliminary valuation. The final valuation will be performed as of the date of completion of the mergers. Differences between the preliminary and final valuation could have a material impact on the accompanying unaudited pro forma condensed combined financial statement information and Ligand's future results of operations and financial position.

Notes to Unaudited Pro Forma Condensed

Combined Financial Statements (Continued)

(3) Pro Forma Adjustments (Continued)

(c)

To record the following adjustments to common stock:

	(in thousands)
Elimination of Pharmacopeia common stock	$ (297)
Issuance of Ligand common stock	18
Total	$ (279)

(d)

To record the following adjustments to additional paid-in capital:

	(in thousands)
Elimination of Pharmacopeia paid-in capital	$ (123,608)
Issuance of Ligand common stock	54,982
Total	$ (68,626)

(e)

To record the following adjustments to accumulated deficit:

	(in thousands)
Elimination of Pharmacopeia accumulated deficit	$ 126,314
Adjustment for Pharmacopeia transaction related fees that are expensed, including separation payments to Pharmacopeia management	(6,989)
Adjustment for acquired in-process research and development	(46,207)
Total	$ 73,118

The value of the acquired in-process research and development is based upon a preliminary valuation using a benchmarking analysis, the Cost Approach and an Excess Earnings method. The final valuation will be performed as of the date of completion of the mergers. Differences between the preliminary and final valuation could have a material impact on the accompanying unaudited pro forma condensed combined financial statement information and Ligand's future results of operations and financial position.

(f)

To eliminate interest income foregone on net cash and cash equivalents used to pay transaction related costs.

(g)

To remove the income tax benefit to continuing operations in accordance with SFAS 109, which resulted from a net gain on sale of discontinued operations. Ligand does not record a tax benefit from continuing operations as Ligand retains a full valuation allowance with respect to its net deferred tax assets.

(h)

For purposes of these unaudited pro forma condensed combined financial statements, the unaudited pro forma combined basis and diluted net income per share amounts are based on the historical weighted average number of shares of Ligand common stock outstanding, adjusted to reflect the issuance of shares of Ligand common stock as a result of the acquisition as follows:

For the six months ended June 30, 2008:

Eliminate Pharmacopeia common stock	(29,688,000)
Issue Ligand common stock	17,600,000
	(12,088,000)

For the twelve months ended December 31, 2007:

Eliminate Pharmacopeia common stock	(26,738,853)
Issue Ligand common stock	17,600,000
	(9,138,853)

COMPARATIVE RIGHTS OF LIGAND STOCKHOLDERS AND PHARMACOPEIA STOCKHOLDERS

The following is a summary of the material differences between the rights of Pharmacopeia stockholders and Ligand stockholders. This section does not include a complete description of all differences between the rights of Pharmacopeia stockholders and Ligand stockholders, nor does it include a complete description of the specific rights of such holders. This summary is qualified in its entirety by reference to the Delaware General Corporation Law as well as to the respective certificate of incorporation and bylaws of Pharmacopeia and Ligand, which are available upon request. See the section entitled "Where You Can Find More Information" beginning on page 130 of this proxy statement/prospectus.

Pharmacopeia and Ligand are both Delaware corporations governed by the Delaware General Corporation Law, or the DGCL. Any differences, therefore, between the rights of the stockholders of Pharmacopeia and Ligand arise primarily from differences in their respective certificates of incorporation and bylaws. Upon completion of the mergers, the rights of former Pharmacopeia stockholders who receive Ligand common stock in connection with the mergers will be determined by reference to the provisions of Ligand's certificate of incorporation and bylaws.

Authorized Capital Stock

Pharmacopeia. The authorized capital stock of Pharmacopeia consists of 100,000,000 shares of common stock, having a par value of $0.01 per share, and 2,500,000 shares of preferred stock, having a par value of $0.01 per share, of which 10,000 shares have been designated as Series A Junior Participating Preferred Stock.

Ligand. The authorized capital stock of Ligand consists of 200,000,000 shares of common stock, having a par value of $0.001 per share, and 5,000,000 shares of preferred stock, having a par value of $0.001 per share, of which 1,600,000 shares have been designated as Series A Participating Preferred Stock.

Outstanding Shares of Capital Stock

Pharmacopeia. As of October 8, 2008, there were 29,834,494 shares of Pharmacopeia common stock, and no shares of Pharmacopeia preferred stock, outstanding. Pharmacopeia common stock is traded on Nasdaq under the symbol "PCOP."

Ligand. As of October 8, 2008, there were 95,079,885 shares of Ligand common stock, and no shares of Ligand preferred stock, outstanding. Ligand common stock is traded on Nasdaq under the symbol "LGND."

Classification of Board of Directors

Pharmacopeia. Pharmacopeia's certificate of incorporation and by-laws provide for a staggered board of directors. Pharmacopeia's board of directors is divided into three classes, with the directors in each class serving for a three-year term and until their successors have been elected and qualified. Currently, the Class II directors will serve until the 2009 annual meeting, the Class III directors will serve until the 2010 annual meeting and the Class I directors will serve until the 2011 annual meeting.

Ligand. Ligand's certificate of incorporation and by-laws provide for the election of all of the directors at each annual meeting of stockholders, with each director serving until the next succeeding annual meeting of stockholders.

Size of Board of Directors

The DGCL provides that a corporation's board of directors must consist of one or more individuals, with the number fixed by, or in the manner provided in, the bylaws, unless the certificate of incorporation fixes the number, in which case a change in the number of directors shall be made only by amendment of the certificate of incorporation. The DGCL further provides that directors need not be stockholders of the corporation unless the corporation's certificate of incorporation or bylaws so provide. The certificate of incorporation and bylaws may also prescribe other qualifications for directors.

Pharmacopeia. Pharmacopeia's certificate of incorporation provides that the number of directors of Pharmacopeia must not be less than five nor more than ten, with the exact number of directors to be determined by a majority vote of Pharmacopeia's board of directors.

Ligand. Ligand's bylaws provide that the number of directors of Ligand must not be less than seven nor more than eleven, with the exact number of directors to be determined by Ligand's board of directors.

Special Meetings

The DGCL provides that a special meeting of stockholders may be called only by the board of directors or by any persons authorized in the certificate of incorporation or bylaws of the corporation.

Pharmacopeia. Pharmacopeia's certificate of incorporation provides that special meetings of the stockholders may be called only by the Pharmacopeia board of directors acting pursuant to a resolution adopted by a majority thereof.

Ligand. Ligand's bylaws provide that special meetings of the stockholders for any purpose may be called by the president and shall be called by the president or secretary at the request in writing of a majority of Ligand's board of directors, or at the request in writing of stockholders owning at least 10% of the issued and outstanding capital stock of Ligand.

Stockholder Rights Plan

Pharmacopeia. In April 2004, Pharmacopeia adopted a stockholder rights plan. Pursuant to the plan, preferred stock purchase rights were distributed as a dividend at the rate of one right for each share of common stock outstanding as of the close of business on April 6, 2004 and automatically attach to shares issued thereafter. Each right entitles the holder to purchase one ten-thousandth of a share of Pharmacopeia's Series A Junior Participating Preferred Stock at an exercise price of $75.00 per right. In general, the rights will be exercisable if a person or group becomes the beneficial owner of 15% or more of Pharmacopeia's outstanding common stock or announces a tender offer for 15% or more of Pharmacopeia common stock. On September 24, 2008, Pharmacopeia amended its stockholder rights plan to exclude Ligand and its merger subsidiaries from the definition of acquiring person under the plan.

Ligand. In October 2006, Ligand adopted a stockholder rights plan and its board of directors declared a dividend of one right to purchase one one-thousandth share of Ligand's Series A Participating Preferred Stock for each outstanding share of common stock as of the close of business on October 31, 2006, at an exercise price of $100 per right. In general, the rights will be exercisable if a person or group becomes the beneficial owner of 20% or more of Ligand's outstanding common stock or announces a tender offer for 20% or more of Ligand common stock.

EXPERTS

The consolidated financial statements and schedule and management's report on the effectiveness of internal control over financial reporting of Ligand Pharmaceuticals Incorporated as of December 31, 2007 incorporated by reference in this S-4 Registration Statement and Proxy Statement have been audited by BDO Seidman, LLP, an independent registered public accounting firm, to the extent and for the periods set forth in their reports incorporated herein by reference, and are included in reliance upon such reports given upon the authority of said firm as experts in auditing and accounting.

The consolidated financial statements of Pharmacopeia appearing in Pharmacopeia's annual report on Form 10-K for the year ended December 31, 2007, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

LEGAL MATTERS

The validity of the shares of common stock offered hereby and certain federal income tax consequences of the mergers will be passed upon for Ligand by Latham & Watkins LLP, San Diego, California. Certain federal income tax consequences of the mergers will be passed upon for Pharmacopeia by Dechert LLP, Philadelphia, Pennsylvania.

STOCKHOLDER PROPOSALS

Inclusion in Next Year's Proxy Statement

If the mergers are not consummated, the Pharmacopeia 2009 annual meeting of stockholders will be held on or about April 30, 2009, unless the date is changed by Pharmacopeia's board of directors. As set forth in Pharmacopeia's definitive proxy statement filed with the SEC on March 24, 2008, which is referred to as Pharmacopeia's last proxy statement, Pharmacopeia stockholders wishing to have a proposal included in the Pharmacopeia board of directors' 2009 proxy statement must submit the proposal so that Pharmacopeia's Corporate Secretary receives it no later than November 24, 2008. Such proposals should be sent to Corporate Secretary, Pharmacopeia, Inc., P.O. Box 5350, Princeton, New Jersey 08543-5350.

Presentation at Meeting

As set forth in Pharmacopeia's last proxy statement, SEC rules establish a different deadline with respect to discretionary voting for stockholder proposals that are not intended to be included in Pharmacopeia's proxy statement. The deadline for submission of these proposals for the Pharmacopeia 2009 annual meeting of stockholders is February 7, 2009 (45 calendar days prior to the anniversary of the mailing date of Pharmacopeia's last proxy statement). If a stockholder gives notice of such a proposal after this deadline, Pharmacopeia's proxy holders will be allowed to use their discretionary authority to vote on the stockholder proposal when and if the proposal is raised at the Pharmacopeia 2009 annual meeting of stockholders.

WHERE YOU CAN FIND MORE INFORMATION

Ligand and Pharmacopeia each file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any reports, statements or other information that the companies file at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Ligand's and Pharmacopeia's public filings are also available in electronic format to the public from commercial document retrieval services and at the Internet Web site maintained by the SEC at *http://www.sec.gov*. You can also review Ligand's SEC filings on its web site at *http://www.ligand.com* and Pharmacopeia's SEC filings on its web site at *http://www.pharmacopeia.com*. Information included on Ligand's or Pharmacopeia's web site is not a part of this proxy statement/prospectus.

Ligand has filed a registration statement on Form S-4 to register with the SEC the offering and sale of the shares of Ligand common stock to be issued to Pharmacopeia stockholders and other securityholders in merger 1. You should rely only on the information contained in this proxy statement/prospectus or on information to which Ligand or Pharmacopeia has incorporated by reference into this proxy statement/prospectus. This proxy statement/prospectus is a part of such registration statement and constitutes a prospectus of Ligand and a proxy statement of Pharmacopeia for the special meeting of Pharmacopeia stockholders. This proxy statement/prospectus does not contain all of the information set forth in the registration statement because certain parts of the registration statement are omitted as provided by the rules and regulations of the SEC. You may inspect and copy the registration statement at the SEC's reference room or web addresses listed above.

INCORPORATION BY REFERENCE

The SEC allows Ligand and Pharmacopeia to "incorporate by reference" information into this proxy statement/prospectus, which means that they can disclose important information to you by referring you to another document filed separately with the SEC. The information incorporated by reference is deemed to be part of this proxy statement/prospectus, except for any information superseded by information contained directly in this proxy statement/prospectus. This proxy statement/prospectus incorporates by reference the documents described below that Ligand and Pharmacopeia have previously filed with the SEC, as well as the annexes to this proxy statement/prospectus. These documents contain important information about Ligand and its financial condition.

The following documents listed below that Ligand has previously filed with the SEC are incorporated by reference:

- the description of Ligand's common stock contained in Ligand's Registration Statement on Form 8-A filed on November 21, 1994, and any amendment or report filed for the purpose of updating such description;
- the description of Ligand's preferred shares purchase rights contained in Ligand's Registration Statement on Form 8-A filed on October 17, 2006, and any amendment or report filed for the purpose of updating such description;
- Ligand's definitive proxy statement on Schedule 14A filed with the SEC on April 29, 2008;
- Ligand's annual report on Form 10-K for the fiscal year ended December 31, 2007;
- Ligand's quarterly reports on Form 10-Q for the fiscal quarters ended March 31, 2008 and June 30, 2008;
- Ligand's current reports on Form 8-K filed with the SEC on April 7, 2008, August 4, 2008, September 5, 2008, September 24, 2008, September 25, 2008, September 26, 2008 and October 14, 2008; and
- Ligand's current report on Form 8-K/A filed with the SEC on September 25, 2008.

The following documents listed below that Pharmacopeia has previously filed with the SEC are incorporated by reference:

- the description of Pharmacopeia's common stock contained in Pharmacopeia's Form 10 Registration Statement filed on April 9, 2004, and any amendment or report filed for the purpose of updating such description;
- Pharmacopeia's definitive proxy statement on Schedule 14A filed with the SEC on March 24, 2008;
- Pharmacopeia's annual report on Form 10-K for the fiscal year ended December 31, 2007;
- Pharmacopeia's quarterly reports on Form 10-Q for the fiscal quarters ended March 31, 2008 and June 30, 2008;
- Pharmacopeia's current reports on Form 8-K filed with the SEC on February 11, 2008, March 25, 2008, April 10, 2008, May 6, 2008, May 13, 2008, May 16, 2008, May 30, 2008, August 5, 2008, September 23, 2008, September 25, 2008, September 26, 2008, October 3, 2008 and October 14, 2008; and
- Pharmacopeia's current report on Form 8-K/A filed with the SEC on September 25, 2008.

All documents that Ligand and Pharmacopeia file pursuant to Sections 13(a), 13(c), 14 or 15(d) under the Exchange Act from the date of this proxy statement/prospectus to the date on which the

special meeting is held, including any adjournments or postponements, shall also be deemed to be incorporated by reference in this proxy statement/prospectus. Notwithstanding anything herein to the contrary, any information furnished under Item 2.02 or Item 7.01 of Ligand's or Pharmacopeia's Current Reports on Form 8-K and any other information which is furnished, but not filed with the SEC, is not incorporated herein by reference.

Ligand has supplied all information contained in this proxy statement/prospectus relating to Ligand, Margaux and Latour, and Pharmacopeia has supplied all information contained in this proxy statement/prospectus relating to Pharmacopeia.

You may obtain any of the documents incorporated by reference from the SEC's public reference room or the SEC's Internet web site described above in the section entitled "Where You Can Find More Information." Documents incorporated by reference in this proxy statement/prospectus are also available from Ligand or Pharmacopeia, as applicable, without charge, excluding all exhibits unless specifically incorporated by reference in such documents. Stockholders may obtain documents incorporated by reference in this proxy statement/prospectus by requesting them in writing or by telephone from Ligand or Pharmacopeia at the following address:

Ligand Pharmaceuticals Incorporated
Attention: Investor Relations
10275 Science Center Drive
San Diego, California 92121
Telephone: (858) 550-7500

Pharmacopeia, Inc.
Attention: Corporate Secretary
P.O. Box 5350
Princeton, New Jersey 08543-5350
Telephone: (609) 452-3600

In order to receive timely delivery of the documents, you must make your request no later than , 2008. If you request any incorporated documents, Ligand or Pharmacopeia, as applicable, will strive to mail them to you by first class mail, or another equally prompt means, within one business day of receipt of your request.

You should rely only on the information contained in this proxy statement/prospectus to vote your shares at the special meeting of Pharmacopeia stockholders. Neither Ligand nor Pharmacopeia has authorized anyone to provide you with information that differs from that contained in this proxy statement/prospectus. This proxy statement/prospectus is dated , 2008. You should not assume that the information contained in this proxy statement/prospectus is accurate as of any date other than that date, and neither the mailing of this proxy statement/prospectus to stockholders nor the issuance of shares of Ligand common stock in merger 1 shall create any implication to the contrary.

This proxy statement/prospectus does not constitute an offer to sell, or a solicitation of an offer to purchase, the securities offered by this proxy statement/prospectus, or the solicitation of a proxy, in any jurisdiction to or from any person to whom or from whom it is unlawful to make such offer, solicitation of an offer or proxy solicitation in such jurisdiction.

Ligand Pharmaceuticals Incorporated's trademarks, trade names and service marks referenced in this proxy statement/prospectus include Ligand. Pharmacopeia, Inc.'s trademarks, trade names and service marks referenced in this proxy statement/prospectus include Pharmacopeia and the Pharmacopeia logo. All other trademarks, trade names or service marks are owned by their respective owners.

Annex A

EXECUTION COPY

AGREEMENT AND PLAN OF MERGER

BY AND AMONG

LIGAND PHARMACEUTICALS INCORPORATED,

MARGAUX ACQUISITION CORP.,

LATOUR ACQUISITION, LLC

AND

PHARMACOPEIA, INC.

Dated as of September 24, 2008

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AGREEMENT AND PLAN OF MERGER

This AGREEMENT AND PLAN OF MERGER (this "**Agreement**") is made and entered into as of September 24, 2008, by and among Ligand Pharmaceuticals Incorporated, a Delaware corporation ("**Parent**"), Margaux Acquisition Corp., a Delaware corporation and direct wholly-owned subsidiary of Parent ("**Merger Sub 1**"), Latour Acquisition, LLC, a Delaware limited liability company and direct wholly-owned subsidiary of Parent ("**Merger Sub 2**," and together with Parent and Merger Sub 1, the "**Parent Parties**"), and Pharmacopeia, Inc., a Delaware corporation (the "**Company**").

RECITALS

A. The respective Boards of Directors of Parent, Merger Sub 1 and the Company have each deemed it advisable and in the best interests of their respective companies and stockholders that Parent, Merger Sub 1 and the Company consummate the business combination and other transactions provided for herein in order to advance their respective long-term strategic business interests.

B. The Board of Directors of Parent, on behalf of Parent, in its capacity as the sole managing member of Merger Sub 2, has deemed it advisable and in the best interests of Merger Sub 2 and its sole member that Merger Sub 2 consummate the business combination and other transactions provided for herein in order to advance its long-term strategic business interests.

C. The respective Boards of Directors of Parent, Merger Sub 1 and the Company have each approved, in accordance with the applicable provisions of the laws of the state of Delaware ("**Delaware Law**"), this Agreement and the transactions contemplated hereby, including the Mergers (as defined herein).

D. The Board of Directors of Parent, on behalf of Parent, in its capacity as the sole managing member of Merger Sub 2, has approved in accordance with the applicable provisions of Delaware Law, this Agreement and the transactions contemplated hereby, including the Mergers.

E. The Board of Directors of the Company has resolved to recommend to its stockholders the adoption of this Agreement.

F. Parent, as the sole stockholder of Merger Sub 1 and the sole managing member of Merger Sub 2, has adopted this Agreement and authorized the issuance of shares of Common Stock of Parent, par value $0.0001 per share (the "**Parent Common Stock**") pursuant to the terms of this Agreement (the "**Share Issuance**").

G. Parent, Merger Sub 1, Merger Sub 2 and the Company desire to make certain representations, warranties and agreements in connection with the Mergers and also to prescribe certain conditions to the Mergers.

H. For United States federal income tax purposes, the parties intend that the Mergers, taken together, shall qualify as a reorganization under the provisions of Section 368(a) of the Internal Revenue Code of 1986, as amended (the "**Code**"), and the parties intend, by executing this Agreement, to adopt a plan of reorganization within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3(a).

NOW, THEREFORE, in consideration of the covenants, promises and representations set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I
THE MERGERS

1.1 *The Mergers.*

(a) *Merger 1.* Upon the terms and subject to the conditions hereof, at the Merger 1 Effective Time, Merger Sub 1 shall be merged with and into the Company ("**Merger 1**") and the separate corporate existence of Merger Sub 1 shall thereupon cease, and the Company shall continue as the surviving corporation (the "**Intermediate Surviving Corporation**") in accordance with the General Corporation Law of the State of Delaware (the "**DGCL**"). Merger 1 shall become effective upon the filing of the certificate of merger with respect to Merger 1 (the "**Certificate of Merger 1**") with the Secretary of State of the State of Delaware in accordance with the provisions of the DGCL, or at such other time as Merger Sub 1 and the Company shall agree should be specified in the Certificate of Merger 1, which filing shall be made as soon as practicable on the Closing Date. When used in this Merger Agreement, the term "**Merger 1 Effective Time**" shall mean the time at which the Certificate of Merger 1 is accepted for filing by the Secretary of State of the State of Delaware or such time as otherwise specified in the Certificate of Merger 1. Merger 1 shall, from and after the Merger 1 Effective Time, have all the effects provided herein, in the Certificate of Merger 1 and in the applicable provisions of the DGCL.

(b) *Merger 2.* Immediately following the consummation of Merger 1, upon the terms and subject to the conditions hereof, at the Merger 2 Effective Time, the Intermediate Surviving Corporation shall be merged with and into Merger Sub 2 ("**Merger 2**" and, together with Merger 1, the "**Mergers**") and the separate corporate existence of the Intermediate Surviving Corporation shall thereupon cease, and Merger Sub 2 shall continue as the surviving entity (the "**Surviving Entity**") in accordance with the Limited Liability Company Act of the State of Delaware (the "**LLC Act**"). Merger 2 shall become effective upon the filing of the certificate of merger with respect to Merger 2 (the "**Certificate of Merger 2**" and, together with the Certificate of Merger 1, the "**Certificates of Merger**") with the Secretary of State of the State of Delaware in accordance with the provisions of the LLC Act, or at such other time as Merger Sub 2 and the Intermediate Surviving Corporation shall agree should be specified in the Certificate of Merger 2, which filing shall be made as soon as practicable on the Closing Date following the Merger 1 Effective Time. When used in this Merger Agreement, the term "**Merger 2 Effective Time**" shall mean the time at which the Certificate of Merger 2 is accepted for filing by the Secretary of State of the State of Delaware or such time as otherwise specified in the Certificate of Merger 2. Merger 2 shall, from and after the Merger 2 Effective Time, have all the effects provided herein, in the Certificate of Merger 2 and in the applicable provisions of the LLC Act.

1.2 *Closing.* The closing of the transactions contemplated by this Agreement (the "**Closing**") shall take place at the offices of Latham & Watkins LLP ("**LW**"), located at 12636 High Bluff Drive, Suite 400, San Diego, California, at a time and date to be specified by the parties, which shall be no later than the second business day after the satisfaction or waiver of the conditions set forth in **Article VI** (other than those that by their terms are to be satisfied or waived at the Closing, it being understood that the occurrence of the Closing shall remain subject to the satisfaction or waiver of such conditions at the Closing), or at such other time, date and location as the parties hereto agree in writing. The date on which the Closing occurs is referred to herein as the "**Closing Date**."

1.3 *Effect of the Mergers.* At the Merger 1 Effective Time and Merger 2 Effective Time, the effect of Merger 1 and Merger 2, respectively, shall be as provided in this Agreement and the

applicable provisions of Delaware Law, including Section 259 of the DGCL. Without limiting the generality of the foregoing, and subject thereto, (i) at the Merger 1 Effective Time, all the property, rights, privileges, powers and franchises of the Company and Merger Sub 1 shall vest in the Intermediate Surviving Corporation, and all debts, liabilities and duties of the Company and Merger Sub 1 shall become the debts, liabilities and duties of the Intermediate Surviving Corporation, and (ii) at the Merger 2 Effective Time, all the property, rights, privileges, powers and franchises of the Intermediate Surviving Corporation and Merger Sub 2 shall vest in the Surviving Entity, and all debts, liabilities and duties of the Intermediate Surviving Corporation and Merger Sub 2 shall become the debts, liabilities and duties of the Surviving Entity.

1.4 *Organizational Documents.*

(a) At the Merger 1 Effective Time, the certificate of incorporation of Merger Sub 1, as in effect immediately prior to the Merger 1 Effective Time, shall be the certificate of incorporation of the Intermediate Surviving Corporation. At the Merger 2 Effective Time, the limited liability company agreement of Merger Sub 2, as in effect immediately prior to the Merger 2 Effective Time, shall become the limited liability company agreement of the Surviving Entity except that Parent may provide for the amendment of the name of the Surviving Entity to Pharmacopeia, LLC.

(b) At the Merger 1 Effective Time, the bylaws of Merger Sub 1, as in effect immediately prior to the Merger 1 Effective Time, shall be the bylaws of the Intermediate Surviving Corporation.

1.5 *Managing Member, Directors and Officers.* The directors and officers of Merger Sub 1 immediately prior to the Merger 1 Effective Time shall be the directors and officers of the Intermediate Surviving Corporation. The managing member and officers of Merger Sub 2 immediately prior to the Merger 2 Effective Time shall be the managing member and officers of the Surviving Entity, each to hold office in accordance with the limited liability company agreement of the Surviving Entity, until the earlier of their resignation or removal or until their respective successors are duly elected and qualified, in any case in the manner provided in the limited liability company agreement of the Surviving Entity and in accordance with applicable Legal Requirements.

1.6 *Effect of Merger 1 on Capital Stock of the Company.* Subject to the terms and conditions of this Agreement and the DGCL, at the Merger 1 Effective Time, by virtue of Merger 1 and without any action on the part of Parent, Merger Sub 1, the Company or the holders of any shares of capital stock of the following securities, the following shall occur:

(a) *Company Common Stock.* Each share of the Common Stock, par value $0.01 per share, of the Company (the "**Company Common Stock**"), including the associated preferred share purchase rights (the "**Company Rights**") issued pursuant to the Rights Agreement between Pharmacopeia Drug Discovery, Inc. and American Stock Transfer & Trust Company, dated April 30, 2004 ("**Company Rights Agreement**") (the Company Rights, together with the shares of the Company Common Stock, are hereinafter referred to as the "**Shares**"), issued and outstanding immediately prior to the Merger 1 Effective Time and each Share issuable pursuant to the Company Restricted Stock Units (as defined below) (other than (i) any Shares to be canceled pursuant to Section 1.6(b) and (ii) Dissenting Shares (as defined below)), will be canceled and extinguished and automatically converted (subject to **Section 1.6(f)**) into the right to receive:

(i) a portion of a validly issued, fully paid and nonassessable share of Parent Common Stock equal to the Exchange Ratio (the "**Per Share Stock Consideration**") upon surrender of the certificate representing such Share of Company Common Stock in the manner provided in **Section 1.7** (or in the case of a lost, stolen or destroyed certificate, upon delivery of an affidavit (and bond, if required) in the manner provided in **Section 1.9**). "**Exchange Ratio**" means an amount equal to (A) (i) 17,600,000, minus (ii) the quotient of the aggregate Option

Cancellation Payments made by the Company in accordance with **Section 1.6(d)** hereof divided by the Parent Common Stock Value and rounded to the nearest whole number (the "**Option Cancellation Amount**") (the "**Numerator**"), divided by (B) an amount equal to the sum of (x) the aggregate number of Shares of Company Common Stock issued and outstanding immediately prior to the Merger 1 Effective Time, (y) the aggregate number of Shares of Company Common Stock issuable pursuant to restricted stock units issued under the Company Stock Plans issued and outstanding immediately prior to the Merger 1 Effective Time (the "**Company Restricted Stock Units**") (after giving effect to any accelerated vesting as a result of the transactions contemplated by this Agreement), and (z) the aggregate number of Shares of Company Common Stock into which the Company Options issued and outstanding immediately prior to the Merger 1 Effective Time, if any, would be exercisable (after giving effect to any accelerated vesting as a result of the transactions contemplated by this Agreement), but without counting (1) the Company Options which will be canceled in accordance with **Section 1.6(d)** hereof prior to the Merger 1 Effective Time and (2) the aggregate number of Shares of Company Common Stock issuable upon exercise of Company Options which are excluded pursuant to the final paragraph of this subsection (a), (collectively, the "**Denominator**"); *provided*, *however*, that notwithstanding the foregoing, (1) if the Parent Common Stock Value is greater than $3.75 but not greater than $4.50, then the Numerator shall be equal to an amount that is the quotient of (I)(a) $66,000,000 minus (b) the aggregate Option Cancellation Payments divided by (II) such Parent Common Stock Value, (2) if the Parent Common Stock Value is greater than $4.50, then the Numerator shall be equal to 14,700,000 minus the Option Cancellation Amount, or (3) if the Parent Common Stock Value is less than $3.00, then the Numerator shall be equal to an amount that is the quotient of (A)(x) $52,800,000 minus (y) the aggregate Option Cancellation Payments divided by (B) such Parent Common Stock Value, but in no event shall the Numerator exceed 18,000,000. "**Parent Common Stock Value**" means the volume weighted average of the per share daily closing prices of a share of Parent Common Stock on The Nasdaq Global Market, as reported in The Wall Street Journal during the 20 consecutive trading days ending on the fifth trading day prior to the date that the Company Stockholders' Meeting is held. The Exchange Ratio shall be calculated to the nearest one-ten thousandth of a share of Parent Common Stock and the Parent Common Stock Value shall be calculated to the nearest one-tenth of a cent;

(ii) (A) if the Parent Common Stock Value is equal to or greater than $2.38, but less than $3.00, per share cash consideration, if any, in an amount equal to the quotient obtained by dividing (1) an amount equal to (x) $52,800,000 minus the aggregate Option Cancellation Payments less (y) an amount equal to the product of such Parent Common Stock Value multiplied by the Numerator, by (2) the Denominator; and (B) if the Parent Common Stock Value is less than $2.38, per share cash consideration in an amount equal to the quotient obtained by dividing (x) $10,000,000 minus the aggregate Option Cancellation Payment by (y) the Denominator. Any cash consideration payable pursuant to this **Section 1.6(a)(ii)** shall be made without interest and herein referred to as the "**Additional Per Share Cash Consideration**"; and

(iii) one contingent value right (a "**CVR**") which shall be subject to the terms and conditions of a contingent value rights agreement (the "**CVR Agreement**") substantially in the form attached hereto as **Exhibit 1.6**, and providing for an aggregate of $15 million in cash payable to the holders of the CVRs under certain circumstances. Any Merger Consideration payable pursuant to this clause (iii) relating to the Assumed Company Options and New Warrants will be paid by Parent upon exercise of such Assumed Company Option or New Warrant by the holder thereof and following the receipt by Parent of the applicable exercise price therefor.

The Per Share Stock Consideration, Additional Per Share Cash Consideration, if any, and CVR to be received in respect of each Share of Company Common Stock pursuant to this **Section 1.6(a)** are collectively referred to herein as the "**Merger Consideration**." In calculating the Denominator in clauses (i) and (ii) above, the Shares of Company Common Stock issuable upon exercise of Company Options not cancelled pursuant to **Section 1.6(d)** hereof shall be included in the calculation, except to the extent their exclusion would not conflict with the provisions of the following sentence and such Company Common Stock so issuable shall be excluded from the Denominator. Notwithstanding the foregoing, in no event will the aggregate number of shares of Parent Common Stock payable as Merger Consideration (including the Parent Common Stock which may be issuable with respect to the Company Restricted Stock Units, the Company Options which will not be cancelled in accordance with **Section 1.6(d)** hereof and the Existing Warrants) exceed 19.99% of the number of issued and outstanding shares of Parent Common Stock on the date of execution of this Agreement.

(b) *Cancellation of Treasury and Parent Owned Stock.* Each Share of Company Common Stock, if any, held by the Company or Parent or any direct or indirect wholly-owned Subsidiary of Parent immediately prior to the Merger 1 Effective Time shall be canceled and extinguished without any conversion thereof. Each Share of Company Common Stock, if any, held by any direct or indirect Subsidiary of the Company shall remain outstanding and shall become that number of shares of the Intermediate Surviving Corporation that bear the same ratio to the aggregate number of outstanding shares of the Intermediate Surviving Corporation as the number of shares held by such Subsidiary bore to the aggregate number of outstanding Shares of Company Common Stock immediately prior to the Merger 1 Effective Time.

(c) *Capital Stock of Merger Sub 1.* Each share of common stock, par value $0.001, of Merger Sub 1 (the "**Merger Sub 1 Common Stock**") issued and outstanding immediately prior to the Merger 1 Effective Time shall be converted into one validly issued, fully paid and nonassessable share of common stock, par value $0.001 per share, of the Intermediate Surviving Corporation. Following the Merger 1 Effective Time, each certificate evidencing ownership of shares of Merger Sub 1 Common Stock shall evidence ownership of such shares of capital stock of the Intermediate Surviving Corporation.

(d) *Stock Options.*

(i) Prior to the Merger 1 Effective Time, the Company shall offer to cancel, effective immediately prior to the Merger 1 Effective Time, any of the Company Options granted under the Company Stock Plans (a "**Cancellation Offer**") in exchange for the payment of an amount to be determined by the Company up to $0.20 per share of Company Common Stock subject to such Company Options (each such payment, an "**Option Cancellation Payment**"); *provided*, *however*, that in no event shall the Option Cancellation Payments exceed $1,000,000 in the aggregate. To facilitate the foregoing, an option cancellation agreement (and other appropriate and customary information and transmittal materials) in such form as Parent and the Company shall mutually agree (an "**Option Cancellation Agreement**") shall be distributed to each holder of a Company Option to whom a Cancellation Offer is made. The Option Cancellation Agreements shall provide that, upon execution by the holder of such Company Option and delivery of such Option Cancellation Agreement to the Company in accordance with the provisions set forth herein, such Company Option shall be cancelled in accordance with its terms, effective immediately prior to the Merger 1 Effective Time, and the holder of such Company Option, in cancellation and settlement therefor, shall be entitled to an Option Cancellation Payment reduced by any applicable withholding Taxes. The Option Cancellation Agreement will include a release of claims against the Company with respect to such Company Options. The Board of Directors of the Company shall adopt all appropriate resolutions and take all other actions necessary with respect to the Company Options subject to an Option Cancellation Agreement, to terminate the relevant individual option agreements

and cancel the relevant Company Options as necessary to effectuate the provisions of this **Section 1.6(d)(i)**. Any Cancellation Offer by the Company shall be on such terms and conditions as are reasonably acceptable to Parent and shall comply in all material respects with applicable federal and state securities laws, including, if necessary, the rules applicable to tender offers.

(ii) At the Merger 1 Effective Time, each Company Option granted under the Amended and Restated 1994 Incentive Stock Plan of the Company and the 1995 Director Option Plan of the Company that is outstanding and unexercised immediately prior to the Merger 1 Effective Time and that is not subject to an effective Option Cancellation Agreement shall not be assumed by the Intermediate Surviving Corporation or Parent, but shall instead be cancelled (each such Company Option, a "**1994/1995 Company Option**"). As of the Merger 1 Effective Time, all 1994/1995 Company Options shall no longer be outstanding and shall automatically cease to exist, and each holder of a 1994/1995 Company Option shall cease to have any rights with respect thereto. Prior to the Merger 1 Effective Time, the Company agrees to take all necessary action to (i) effect the termination of all 1994/1995 Company Options outstanding immediately prior to the Merger 1 Effective Time pursuant to this **Section 1.6(d)(ii)** and (ii) effect the termination, as of the Merger 1 Effective Time, of the Amended and Restated 1994 Incentive Stock Plan of the Company and the 1995 Director Option Plan of the Company and any other plan or agreement pursuant to which 1994/1995 Company Options have been issued by the Company. Each 1994/1995 Company Option cancelled pursuant to this **Section 1.6(d)(ii)** and each Company Option cancelled pursuant to an effective Option Cancellation Agreement pursuant to **Section 1.6(d)(i)** above, is referred to herein as a "**Cancelled Company Option**").

(iii) At the Merger 1 Effective Time, each Company Option that is not a Cancelled Company Option and that is outstanding and unexercised immediately prior to the Merger 1 Effective Time (whether vested or unvested) will be assumed by Parent (each, an "**Assumed Company Option**"). Each Assumed Company Option will continue to have, and be subject to, the same terms and conditions set forth in the applicable Assumed Company Option (including any applicable stock option agreement or other document evidencing such Assumed Company Option) immediately prior to the Merger 1 Effective Time (including any repurchase rights or vesting provisions), except that such Assumed Company Option will be exercisable (or will become exercisable in accordance with its terms) for the applicable Merger Consideration instead of shares of Company Common Stock.

(iv) Prior to the Merger 1 Effective Time, Parent shall take all necessary action to assume and adopt, effective as of the Merger 1 Effective Time, the Company's Amended and Restated 2004 Stock Incentive Plan and the Company's 2000 Stock Option Plan solely to the extent there are any Assumed Company Options granted thereunder. Following the Merger 1 Effective Time, Parent shall not issue any additional options under such plans, and the share reserve under each such plan shall be automatically reduced to the number of shares of Parent Common Stock issuable pursuant to the Assumed Company Options granted under such plan.

(e) *Warrants.* Subject to the consummation of Merger 1, effective as of immediately prior to the Merger 1 Effective Time, each warrant to acquire Shares of the capital stock of the Company (each, an "**Existing Warrant**") shall be converted into a new warrant (each, a "**New Warrant**") entitling its holder to receive, at a total price not to exceed that payable upon the exercise or conversion of the Existing Warrant, and in lieu of the Shares of the capital stock of the Company theretofore issuable upon exercise or conversion of the Existing Warrant, the applicable Merger Consideration that would have been receivable upon Merger 1 by the holder of the Existing Warrant if the Existing Warrant had been exercised immediately prior to the Merger 1 Effective Time.

(f) *Fractional Shares; Additional Per Share Cash Consideration.* No fraction of a share of Parent Common Stock will be issued by virtue of Merger 1, but in lieu thereof each holder of record of Shares of Company Common Stock who would otherwise be entitled to receive a fraction of a share of Parent Common Stock (after aggregating all fractional shares of Parent Common Stock that otherwise would be received by such holder of record) shall, upon surrender of such holder's Certificate(s), receive from Parent an amount of cash (rounded to the nearest whole cent), without interest, equal to the product of (i) such fraction, multiplied by (ii) the Parent Common Stock Value. As promptly as practicable after the determination of the amount of cash, if any, to be paid to holders of fractional share interests, the Exchange Agent shall so notify Parent and Parent shall, or shall cause the Surviving Entity to, deposit such amount with the Exchange Agent and shall cause the Exchange Agent to forward payments to such holders of fractional share interests subject to and in accordance with the terms hereof. The aggregate Additional Per Share Cash Consideration, if any, included in the Merger Consideration to which a holder of Shares of Company Common Stock would otherwise be entitled for all of such holder's shares shall be rounded to the nearest cent.

(g) *Adjustments to Exchange Ratio.* The Exchange Ratio shall be adjusted to reflect fully the appropriate effect of any stock split, reverse stock split, subdivision, stock dividend (including any dividend or distribution of securities convertible into Parent Common Stock or Company Common Stock), reorganization, recapitalization, reclassification, combination or exchange of shares or other like change with respect to Parent Common Stock or Company Common Stock having a record date on or after the date hereof and prior to the Merger 1 Effective Time.

1.7 *Surrender of Certificates.*

(a) *Exchange Agent.* Parent shall select an institution reasonably satisfactory to the Company to act as the exchange agent (the "**Exchange Agent**") with respect to Merger 1.

(b) *Parent to Provide Common Stock and Cash.* Prior to the Merger 1 Effective Time, Parent shall enter into an agreement with the Exchange Agent which shall provide that Parent shall make available to the Exchange Agent for exchange in accordance with this **Article I**, the applicable Merger Consideration payable pursuant to **Section 1.6** in exchange for outstanding Shares of Company Common Stock. In addition, Parent shall make available as necessary from time to time after the Merger 1 Effective Time as needed, cash in an amount sufficient for payment in lieu of fractional shares pursuant to **Section 1.6(f)** and any dividends or distributions to which holders of Shares of Company Common Stock may be entitled pursuant to **Section 1.7(d)**. Any cash and Parent Common Stock deposited with the Exchange Agent shall hereinafter be referred to as the "**Exchange Fund**."

(c) *Exchange Procedures.* Promptly after the Merger 1 Effective Time, Parent shall cause the Exchange Agent to mail to each holder of record (as of the Merger 1 Effective Time) of a certificate or certificates (the "**Certificates**") which immediately prior to the Merger 1 Effective Time represented outstanding Shares of Company Common Stock or non-certificated Shares of Company Common Stock represented by book-entry ("**Book-Entry Shares**") whose shares were converted into the right to receive the Merger Consideration pursuant to **Section 1.6(a)**, cash in lieu of any fractional shares pursuant to **Section 1.6(f)** and any dividends or other distributions pursuant to **Section 1.7(d)**: (i) a letter of transmittal (which shall specify that delivery shall be effected, and risk of loss and title to the Certificates or Book-Entry Shares shall pass, only upon delivery of the Certificates or Book-Entry Shares to the Exchange Agent and shall be in customary form and (ii) instructions for use in effecting the surrender of the Certificates or Book-Entry Shares in exchange for certificates representing whole shares of Parent Common Stock, CVRs and the cash, if any, constituting the Merger Consideration, cash in lieu of any fractional shares pursuant to **Section 1.6(f)** and any dividends or other distributions pursuant to **Section 1.7(d)**.

Upon surrender of Certificates or Book-Entry Shares for cancellation to the Exchange Agent, together with such letter of transmittal, duly completed and validly executed in accordance with the instructions thereto and such other documents as may reasonably be required by the Exchange Agent, the holder of record of such Certificates or Book-Entry Shares shall be entitled to receive in exchange therefor the number of whole shares of Parent Common Stock (after taking into account all Certificates and Book-Entry Shares surrendered by such holder of record) to which such holder is entitled pursuant to **Section 1.6(a)** (which, at the election of Parent, may be in uncertificated book entry form unless a physical certificate is requested by the holder of record or is otherwise required by applicable Legal Requirements or regulation), the portion of the cash, if any, constituting the Merger Consideration to which such holder is entitled pursuant to **Section 1.6(a)**, the CVRs to which such holder is entitled pursuant to **Section 1.6(a)**, the payment in lieu of fractional shares which such holder has the right to receive pursuant to **Section 1.6(f)** and any dividends or distributions payable pursuant to **Section 1.7(d)**, and the Certificates and Book-Entry Shares so surrendered shall forthwith be canceled. In the event of a transfer of ownership of Shares of Company Common Stock which is not registered in the transfer records of the Company, the Merger Consideration to which such holder is entitled pursuant to **Section 1.6(a)**, the payment in lieu of fractional shares which such holder has the right to receive pursuant to **Section 1.6(f)** and any dividends or distributions payable pursuant to **Section 1.7(d)** , may be paid to a transferee if the Certificates or Book-Entry Shares representing such shares of Company Common Stock are presented and surrendered to the Exchange Agent, accompanied by all documents required to evidence and effect such transfer, such other documents and guarantees as may be required by the Exchange Agent and by evidence that any applicable stock transfer taxes have been paid, and any such Certificates or Book-Entry Shares so presented and surrendered shall be forthwith canceled. Until so surrendered, outstanding Certificates and Book-Entry Shares will be deemed from and after the Merger 1 Effective Time, for all corporate purposes, to evidence (i) the ownership of the number of full shares of Parent Common Stock into which such Shares of Company Common Stock shall have been so converted pursuant to **Section 1.6(a)**, (ii) the right to receive the cash portion, if any, constituting the Merger Consideration to which such holder is entitled pursuant to **Section 1.6(a)**, (iii) the CVRs to which such holder is entitled pursuant to **Section 1.6(a),** (iv) the right to receive an amount in cash in lieu of the issuance of any fractional shares in accordance with **Section 1.6(f)** and (v) any dividends or distributions payable pursuant to **Section 1.7(d)**.

(d) *Distributions With Respect to Unexchanged Shares.* No dividends or other distributions with respect to Parent Common Stock with a record date after the Merger 1 Effective Time and no payment in lieu of fractional shares pursuant to **Section 1.6(f)** will be paid to the holders of any unsurrendered Certificates or Book-Entry Shares with respect to the shares of Parent Common Stock represented thereby until the holders of such Certificates or Book-Entry Shares shall surrender such Certificates or Book-Entry Shares in the manner provided in this **Section 1.7**. Subject to applicable Legal Requirements, following surrender of any such Certificates or Book-Entry Shares in the manner provided in this **Section 1.7**, the Exchange Agent shall deliver to the holders thereof, without interest (i) promptly after such surrender, the number of whole shares of Parent Common Stock issued in exchange therefor, pursuant to **Section 1.6(a),** the CVRs to which such holder(s) is entitled pursuant to **Section 1.6(a)**, the cash, if any, constituting the Merger Consideration payable in exchange therefor pursuant to **Section 1.6(a)** along with payment in lieu of fractional shares pursuant to **Section 1.6(f)** and the amount of any such dividends or other distributions with a record date after the Merger 1 Effective Time and theretofore paid with respect to such whole shares of Parent Common Stock and (ii) at the appropriate payment date, the amount of dividends or other distributions with a record date after the Merger 1 Effective Time and a payment date subsequent to such surrender payable with respect to such whole shares of Parent Common Stock.

(e) *Transfers of Ownership.* If shares of Parent Common Stock are to be issued in a name other than that in which the Certificates or Book-Entry Shares surrendered in exchange therefor are registered, it will be a condition of the issuance thereof that the Certificates so surrendered will be properly endorsed and otherwise in proper form for transfer and that the Persons requesting such exchange will have paid to Parent or any agent designated by it any transfer or other Taxes required by reason of the issuance of shares of Parent Common Stock in any name other than that of the registered holder of the Certificates or Book-Entry Shares surrendered, or established to the reasonable satisfaction of Parent or any agent designated by it that such Tax has been paid or is not payable.

(f) *Required Withholding.* Each of Parent, the Intermediate Surviving Corporation, the Surviving Entity, and the Exchange Agent, as applicable, shall be entitled to deduct and withhold from any consideration payable or otherwise deliverable pursuant to this Agreement such amounts as may be required to be deducted or withheld therefrom under the Code, under any provision of state, local or foreign Tax law, or under any other applicable Legal Requirement. To the extent such amounts are so deducted or withheld, the amount of such consideration shall be treated for all purposes under this Agreement as having been paid to the Person to whom such consideration would otherwise have been paid.

(g) *No Liability.* Notwithstanding anything to the contrary in this **Section 1.7**, neither the Exchange Agent, the Intermediate Surviving Corporation, the Surviving Entity, nor any party hereto shall be liable to a holder of shares of Parent Common Stock or Company Common Stock for any amount paid to a public official pursuant to any applicable abandoned property, escheat or similar law.

(h) *Investment of Exchange Fund.* The Exchange Agent shall invest any cash included in the Exchange Fund as directed by Parent on a daily basis; *provided* that no gain or loss thereon or income or loss generated thereby shall affect the amounts payable to Company stockholders pursuant to this **Article I**. Any interest and other income resulting from such investment shall become a part of the Exchange Fund, and any amounts in excess of the amounts payable to Company stockholders pursuant to this **Article I** shall promptly be paid to Parent.

(i) *Termination of Exchange Fund.* Any portion of the Exchange Fund which remains undistributed to the holders of Certificates or Book-Entry Shares one (1) year after the Merger 1 Effective Time shall, at the request of Parent, be delivered to Parent or otherwise according to the instruction of Parent, and any holders of the Certificates or Book-Entry Shares who have not surrendered such Certificates or Book-Entry Shares in compliance with this **Section 1.7** shall after such delivery to Parent look only to Parent for the shares of Parent Common Stock, CVRs and cash, if any, constituting the Merger Consideration pursuant to **Section 1.6(a)**, cash in lieu of any fractional shares pursuant to **Section 1.6(f)** and any dividends or other distributions pursuant to **Section 1.7(d)** with respect to the Shares of Company Common Stock formerly represented thereby. If any Certificate or Book-Entry Share shall not have been surrendered prior to three (3) years after the Merger 1 Effective Time (or immediately prior to such earlier time as such amounts would otherwise escheat to or become property of any Governmental Entity), any such portion of the Exchange Fund (including amounts held by Parent after the distribution to it of the Exchange Fund) remaining unclaimed by holders of Shares of Company Common Stock immediately prior to such time shall, to the extent permitted by law, become the property of Parent free and clear of any claims or interest of any Person previously entitled thereto.

1.8 *No Further Ownership Rights in Company Common Stock.* The Merger Consideration issued and paid upon the surrender for exchange of Shares of Company Common Stock in accordance with the terms hereof (including any cash paid in respect thereof pursuant to **Sections 1.6(a) and 1.6(f)** and any dividends or distributions paid in respect thereof pursuant to **Section 1.7(d)**) shall be deemed to

have been issued and paid in full satisfaction of all rights pertaining to such Shares of Company Common Stock, and there shall be no further registration of transfers on the records of the Intermediate Surviving Corporation of Shares of Company Common Stock which were outstanding immediately prior to the Merger 1 Effective Time. On or after the Merger 1 Effective Time, any Certificates or Book-Entry Shares presented to the Exchange Agent, Parent, the Intermediate Surviving Corporation or the Surviving Entity for any reason shall, subject to compliance with **Section 1.7**, be converted into the Merger Consideration to which such holder is entitled pursuant to **Section 1.6(a)**, any cash in lieu of any fractional shares to which such holder is entitled pursuant to **Section 1.6(f)** and any dividends or other distributions to which such holder is entitled pursuant to **Section 1.7(d)**, in each case without any interest thereon.

1.9 *Lost, Stolen or Destroyed Certificates.* In the event any Certificates shall have been lost, stolen or destroyed, the Exchange Agent shall issue in exchange for such lost, stolen or destroyed Certificates, upon the making of an affidavit of that fact by the holder thereof, such shares of Parent Common Stock, CVRs and cash, if any, constituting the Merger Consideration as to which such holder is entitled pursuant to **Section 1.6**, cash for fractional shares, if any, as may be required pursuant to **Section 1.6(f)** and any dividends or distributions payable pursuant to **Section 1.7(d)**; *provided*, *however*, that the Exchange Agent may, as a condition precedent to the issuance and payment thereof, require the owner of such lost, stolen or destroyed Certificates to deliver a bond in such sum as it may reasonably direct as indemnity against any claim that may be made against Parent, the Company, the Intermediate Surviving Corporation, the Surviving Entity, or the Exchange Agent with respect to the Certificates alleged to have been lost, stolen or destroyed.

1.10 *[Intentionally Omitted].*

1.11 *Effect of Merger 2 on Capital Stock of the Intermediate Surviving Corporation and on the Membership Units of Merger Sub 2.* As of the Merger 2 Effective Time, by virtue of Merger 2 and without any action on the part of the holder of any shares of capital stock of the Intermediate Surviving Corporation or any membership units of Merger Sub 2:

(a) All of the issued and outstanding shares of capital stock of the Intermediate Surviving Corporation shall be converted into and become 50% of the issued and outstanding membership interests of the Surviving Entity; and

(b) All of the issued and outstanding membership interests of Merger Sub 2 shall be converted into and become 50% of the issued and outstanding membership interests of the Surviving Entity.

1.12 *Tax Consequences.* It is intended by the parties hereto that, for United States federal income tax purposes, the Mergers, taken together, shall constitute a reorganization within the meaning of Section 368(a) of the Code. The parties hereto adopt this Agreement as a plan of reorganization within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3(a).

1.13 *Further Action.* The parties hereto shall execute and deliver such certificates and other documents and take such other actions as may be reasonably necessary or appropriate in order to effect the Mergers, including, but not limited to, making filings, recordings or publications required under the DGCL and the LLC Act. If at any time after the Merger 2 Effective Time any further action is necessary to vest in the Surviving Entity the title to all property or rights of Merger Sub 1, Merger Sub 2 or the Company, the managing member and authorized officers of the Surviving Entity are fully authorized in the name of Merger Sub 1, Merger Sub 2 or the Company, as the case may be, to take, and shall take, any and all such lawful action.

1.14 *Dissenter's Rights.* Notwithstanding anything in this Agreement to the contrary, Shares of Company Common Stock issued and outstanding immediately prior to the Merger 1 Effective Time held by a holder who is entitled to demand and properly demands appraisal of such Shares of

Company Common Stock ("**Dissenting Shares**"), pursuant to, and who complies in all respects with, Section 262 of the DGCL (the "**Appraisal Rights**"), shall not be converted into the right to receive the Merger Consideration, but shall be converted into the right to receive such consideration as may be due such holder pursuant to Section 262 of Delaware Law unless such holder fails to perfect, withdraws or otherwise loses such holder's right to such payment or appraisal. From and after the Merger 1 Effective Time, a holder of Dissenting Shares shall not have and shall not be entitled to exercise any of the voting rights or other rights of a stockholder of the Company or the Intermediate Surviving Corporation. If, after the Merger 1 Effective Time, such holder fails to perfect, withdraws or otherwise loses any such Appraisal Rights, each such share of such holder shall no longer be considered a Dissenting Share and shall be deemed to have converted as of the Merger 1 Effective Time into the right to receive the Merger Consideration in accordance with **Section 1.6(a)**, cash in lieu of any fractional shares pursuant to **Section 1.6(f)** and any dividends or other distributions pursuant to **Section 1.7(d)**. The Company shall give prompt notice to Parent of any demands received by the Company for appraisal of Shares of Company Common Stock, withdrawals of such demands and any other instruments served pursuant to Delaware Law received by the Company, and Parent shall have the right to control all negotiations and proceedings with respect to such demands. Prior to the Merger 1 Effective Time, the Company shall not, except with the prior written consent of Parent, voluntarily make any payment with respect to, or settle or offer to settle, any such demands or agree to do or commit to do any of the foregoing.

ARTICLE II
REPRESENTATIONS AND WARRANTIES OF THE COMPANY

Except as disclosed in writing in the disclosure letter (which letter shall in each case specifically identify by reference to sections of this Agreement any exceptions to each of the representations, warranties and covenants contained in this Agreement) supplied by the Company to Parent dated as of the date hereof and certified by a duly authorized executive officer of the Company (the "**Company Disclosure Letter**"), the Company represents and warrants to Parent and Merger Sub 1 as follows:

2.1 *Organization; Standing and Power; Charter Documents; Subsidiaries.*

(a) *Organization; Standing and Power.* The Company and each of its Subsidiaries (i) is a corporation or other organization duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, (ii) has the requisite power and authority to own, lease and operate its properties and to carry on its business as now being conducted, and (iii) is duly qualified or licensed and in good standing to do business in each jurisdiction in which the nature of its business or the ownership or leasing of its properties makes such qualification or licensing necessary, other than in such jurisdictions where the failure to so qualify or to be in good standing, individually or in the aggregate, would not reasonably be expected to have a Company Material Adverse Effect. For purposes of this Agreement, "**Subsidiary**," when used with respect to any party, shall mean any corporation or other organization, whether incorporated or unincorporated, at least a majority of the securities or other interests of which having by their terms ordinary voting power to elect a majority of the Board of Directors or others performing similar functions with respect to such corporation or other organization is directly or indirectly owned or controlled by such party or by any one or more of its Subsidiaries, or by such party and one or more of its Subsidiaries.

(b) *Charter Documents.* The Company has delivered or made available to Parent: (i) a true and correct copy of its Certificate of Incorporation (including any Certificate of Designations) and its Bylaws, each as amended or amended and restated to date (collectively, the "**Company Charter Documents**") and (ii) the certificate of incorporation and bylaws, or like organizational documents (collectively, "**Subsidiary Charter Documents**"), of each of its Subsidiaries, and each such instrument is in full force and effect. The Company is not in violation of any of the provisions of

the Company Charter Documents and each Subsidiary is not in material violation of its respective Subsidiary Charter Documents.

(c) *Minutes.* The Company has made available to Parent and its representatives true and complete copies of the minutes (or, in the case of minutes that have not yet been finalized, a brief summary of the meeting, including in each case a summary of any resolutions adopted by the Board of Directors of the Company) of all meetings of the stockholders, the Board of Directors and each committee of the Board of Directors of the Company and each of its Subsidiaries held since September 30, 2005.

(d) *Subsidiaries.* **Section 2.1(d)** of the Company Disclosure Letter sets forth each Subsidiary of the Company. All the outstanding shares of capital stock of, or other equity or voting interests in, each such Subsidiary have been duly authorized, validly issued and are fully paid and nonassessable and are owned by the Company, a wholly-owned Subsidiary of the Company, or the Company and another wholly-owned Subsidiary of the Company, free and clear of all pledges, claims, liens, charges, encumbrances, options and security interests of any kind or nature whatsoever (collectively, "**Liens**"), including any restriction on the right to vote, possess, use, sell, transfer or otherwise dispose of such capital stock or other ownership interests, except for restrictions imposed by applicable securities laws. Other than the Subsidiaries of the Company, neither the Company nor any of its Subsidiaries owns any capital stock of, or other equity or voting interests of any nature in, or any interest convertible, exchangeable or exercisable for, capital stock of, or other equity or voting interests of any nature in, any other Person.

2.2 *Capital Structure.*

(a) *Capital Stock.*

(i) The authorized capital stock of the Company consists of: (1) 100,000,000 Shares of Company Common Stock, par value $0.01 per share and (2) 2,500,000 shares of preferred stock, par value $0.01 per share (the "**Company Preferred Stock**"). At the close of business on September 19, 2008: (i) 29,775,543 Shares of Company Common Stock were issued and outstanding, and (ii) no shares of Company Preferred Stock were issued and outstanding. Since the close of business on September 19, 2008 through the execution of this Agreement, the Company has not issued any Shares of Company Common Stock, other than pursuant to the exercise of Company Options outstanding as of September 19, 2008 and granted pursuant to the Company Stock Plans. No Shares of Company Common Stock are owned or held by the Company or any Subsidiary of the Company. For purposes of this Agreement, "**Company Stock Plans**" shall mean the Company's Amended and Restated 2004 Stock Incentive Plan, the Amended 1994 Incentive Stock Plan of the Company, the 1995 Director Option Plan of the Company, the 2000 Stock Option Plan of the Company and any other plan or agreement pursuant to which Company Options have been issued by the Company.

(ii) All of the outstanding shares of capital stock of the Company are, and all shares of capital stock of the Company which may be issued as contemplated or permitted by this Agreement will be, when issued, duly authorized and validly issued, fully paid and nonassessable and not subject to any preemptive rights. For purposes of this Agreement, "**Contract**" shall mean any written, oral or other agreement, contract, subcontract, settlement agreement, lease, binding understanding, instrument, note, option, warranty, purchase order, license, sublicense, insurance policy, benefit plan or other legally binding commitment or undertaking of any nature, as in effect as of the date hereof or as may hereinafter be in effect.

(b) *Stock Options, Warrants and Restricted Stock Units.*

(i) As of the close of business on September 19, 2008: (i) 4,157,353 Shares of Company Common Stock were subject to issuance pursuant to outstanding options to purchase Company Common Stock under the Company Stock Plans (the "**Company Options**"), (ii) 2,680,119 Shares of Company Common Stock were reserved for future issuance pursuant to Company Options or other equity-based awards available for grant under the Company Stock Plans, (iii) 232,000 Shares of Company Common Stock were subject to issuance pursuant to outstanding Company Restricted Stock Units, and (iv) 1,626,063 Shares of Company Common Stock were subject to issuance pursuant to the Existing Warrants. Since the close of business on September 19, 2008 through the execution of this Agreement, no Company Options or Company Restricted Stock Units have been granted and no Shares of Company Common Stock have been reserved for future issuance pursuant to Company Options, Company Restricted Stock Units or other equity-based awards available for grant under the Company Stock Plans. There are no outstanding or authorized stock appreciation, phantom stock, stock-based performance units, agreements, understandings, claims or other commitments or other similar rights (whether payable in stock, cash or other property) of any type granted or entered into by the Company or any of its Subsidiaries relating to the issuance, sale, repurchase or transfer of any securities of the Company or that give any person the right to receive any economic benefit or right similar to or derived from the economic benefits and rights of securities of the Company.

(ii) **Section 2.2(b)** of the Company Disclosure Letter sets forth a list of each outstanding Company Option issued and (a) the particular Company Stock Plan pursuant to which such Company Option was granted, (b) the name and last known state of domicile of the holder of such Company Option, (c) the number of Shares of Company Common Stock subject to such Company Option, (d) the exercise price of such Company Option (and whether such option is subject to Section 409A of the Code), (e) the date on which such Company Option was granted, (f) the applicable vesting schedule (including any acceleration provisions with respect thereto), and the extent to which such Company Option is vested and exercisable as of the date hereof, (g) the date on which such Company Option expires, and (h) whether such Company Option is intended to qualify as an incentive stock option as defined in Section 422 of the Code. All Shares of Company Common Stock subject to issuance under any Company Stock Plan or otherwise, upon issuance on the terms and conditions specified in the instruments pursuant to which they are issuable, would be duly authorized, validly issued, fully paid and nonassessable. True and complete copies of the forms of all agreements relating to Company Options issued under the Company Stock Plans have been provided to Parent, such forms of agreements are not materially different from the agreements evidencing such Company Options (other than with respect to the name of the holder, the per share exercise price, the number of Shares subject to such Company Options and the applicable vesting schedule), and such agreements and instruments have not been amended, modified or supplemented, and the Company has no obligations under any Contract to amend, modify or supplement such agreements in any case from the forms provided to Parent (or the actual agreements evidencing such Company Options).

(iii) **Section 2.2(b)** of the Company Disclosure Letter sets forth a list of each outstanding Company Restricted Stock Unit issued and (a) the particular Company Stock Plan pursuant to which such Company Restricted Stock Unit was granted, (b) the name and last known state of domicile of the holder of such Company Restricted Stock Unit, (c) the number of Shares of Company Common Stock subject to such Company Restricted Stock Unit, (d) the exercise price of such Company Restricted Stock Unit (and whether such Company Restricted Stock Unit is subject to Section 409A of the Code), (e) the date on which such Company Restricted

Stock Unit was granted, and (f) the applicable vesting schedule (including any acceleration provisions with respect thereto). True and complete copies of the forms of all agreements relating to Company Restricted Stock Units issued under the Company Stock Plans have been provided to Parent, such forms of agreements are not materially different from the agreements evidencing such Company Restricted Stock Units (other than with respect to the name of the holder, the number of Shares subject to such Company Restricted Stock Units and the applicable vesting schedule), and such agreements and instruments have not been amended, modified or supplemented, and the Company has no obligations under any Contract to amend, modify or supplement such agreements in any case from the forms provided to Parent (or the actual agreements evidencing such Company Restricted Stock Units).

(iv) **Section 2.2(b)** of the Company Disclosure Letter sets forth a list of each outstanding Existing Warrant issued and (a) the name of the original holder of such Existing Warrant, (b) the number of Shares of Company Common Stock subject to such Existing Warrant, (c) the exercise price of such Existing Warrant, and (d) the date on which such Existing Warrant expires. True and complete copies of the forms of all agreements relating to each Existing Warrant have been provided to Parent, such forms of agreements are substantially the same as the agreements evidencing such Existing Warrants (other than with respect to the name of the holder and the number of Shares subject to such Existing Warrant), and such agreements have not been amended, modified or supplemented, and the Company has no obligations under any Contract to amend, modify or supplement such agreements.

(c) *Voting Debt.* No bonds, debentures, notes or other indebtedness of the Company or any of its Subsidiaries (i) having the right to vote on any matters on which stockholders may vote (or which are convertible into, or exchangeable for, securities having such right) or (ii) the value of which is in any way based upon or derived from capital or voting stock of the Company or its Subsidiaries, are issued or outstanding as of the date hereof (collectively, "**Voting Debt**").

(d) *Other Securities.*

(i) As of the date hereof, there are no securities, options, warrants, calls, rights, contracts, commitments, agreements, instruments, arrangements, understandings, obligations or undertakings of any kind to which the Company or any of its Subsidiaries is a party or by which any of them is bound obligating the Company or any of its Subsidiaries to (including on a deferred basis) issue, deliver or sell, or cause to be issued, delivered or sold, additional shares of capital stock, Voting Debt or other voting securities of the Company or any of its Subsidiaries, or obligating the Company or any of its Subsidiaries to issue, grant, extend or enter into any such security, option, warrant, call, right, commitment, agreement, instrument, arrangement, understanding, obligation or undertaking.

(ii) All outstanding Shares of Company Common Stock, all outstanding Company Options, outstanding warrants of the Company, and all outstanding shares of capital stock of each Subsidiary of the Company have been issued and granted in compliance in all material respects with (i) all applicable federal, state and foreign securities laws and all other applicable Legal Requirements and (ii) all requirements set forth in applicable material Contracts. There are not any outstanding Contracts of the Company or any of its Subsidiaries to (i) repurchase, redeem or otherwise acquire any shares of capital stock of, or other equity or voting interests in, the Company or any of its Subsidiaries or (ii) dispose of any shares of the capital stock of, or other equity or voting interests in, any of its Subsidiaries. The Company is not a party to any voting agreement with respect to shares of the capital stock of, or other equity or voting interests in, the Company or any of its Subsidiaries and, to the Knowledge of the Company, there are no irrevocable proxies and no voting agreements, voting trusts, rights plans, anti-takeover plans or registration rights agreements with respect to

any shares of the capital stock of, or other equity or voting interests in, the Company or any of its Subsidiaries. For purposes of this Agreement, "**Legal Requirements**" shall mean any federal, state, local, municipal, foreign or other law, statute, constitution, principle of common law, resolution, ordinance, code, order, edict, decree, rule, regulation, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Entity.

2.3 *Authority; Non-Contravention; Necessary Consents.*

(a) *Authority.* The Company has all requisite corporate power and authority to enter into this Agreement and the CVR Agreement, subject to the adoption and approval of Merger 1 by the Required Company Stockholders (as defined below), to consummate the transactions contemplated hereby and thereby. The execution and delivery of this Agreement and the CVR Agreement and the consummation of the transactions contemplated hereby and thereby have been duly authorized by all necessary corporate action on the part of the Company and no other corporate proceedings on the part of the Company are necessary to authorize the execution and delivery of this Agreement and the CVR Agreement or to consummate Merger 1 and the other transactions contemplated hereby and thereby, subject only to the adoption of this Agreement by the Required Company Stockholders and the filing of the Certificate of Merger 1 as required by the DGCL. The affirmative vote of the holders of a majority of the outstanding Shares of Company Common Stock (the "**Required Company Stockholders**") is the only vote of the holders of any class or series of Company capital stock necessary to approve this Agreement, the consummation of Merger 1 and the other transactions contemplated hereby. This Agreement has been duly executed and delivered by the Company and, assuming due authorization, execution and delivery by Parent, Merger Sub 1 and Merger Sub 2, constitutes a valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting creditors generally and by general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(b) *Non-Contravention.* The execution and delivery of this Agreement and the CVR Agreement by the Company does not, and the performance of this Agreement and the CVR Agreement by the Company will not: (i) assuming the Required Company Stockholders adopt this Agreement, conflict with or violate the Company Charter Documents or any Subsidiary Charter Documents of any Subsidiary of the Company, (ii) subject to obtaining the adoption of this Agreement by the Company's stockholders as contemplated in **Section 5.2** and compliance with the requirements set forth in **Section 2.3(d)**, conflict with or violate any material Legal Requirements applicable to the Company or any of its Subsidiaries or by which the Company or any of its Subsidiaries or any of their respective properties is bound or affected, or (iii) result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or materially impair the Company's or any of its Subsidiaries rights or materially alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a Lien on any of the properties or assets of the Company or any of its Subsidiaries pursuant to, any Company Scheduled Contract, except, as to clauses (ii) and (iii), respectively, for any such conflicts, violations, breaches, defaults or other occurrences which would not be material to the Company and its Subsidiaries, taken as a whole. **Section 2.3(b)** of the Company Disclosure Letter lists all consents, waivers and approvals under any of the Company Scheduled Contracts required to be obtained in connection with the consummation of the transactions contemplated hereby, which, if individually or in the aggregate not obtained, would result in a loss of benefits to the Company or any of its Subsidiaries that would be material to the Company and its Subsidiaries, taken as a whole.

(c) **Section 2.3(c)** of the Company Disclosure Letter lists all consents, waivers and approvals under any of the Company's or its Subsidiaries' Contracts required to be obtained in connection with the consummation of the transactions contemplated hereby (including Merger 1), which, if individually not obtained, would reasonably be expected to result in a Company Material Adverse Effect.

(d) *Necessary Consents.* No consent, approval, order or authorization of, or registration, declaration or filing with any supranational, national, state, municipal, local or foreign government, any instrumentality, subdivision, court, administrative agency or commission or other governmental authority or instrumentality, or any quasi-governmental or private body exercising any regulatory, taxing, importing or other governmental or quasi-governmental authority (a "**Governmental Entity**") is required to be obtained or made by the Company in connection with the execution and delivery of this Agreement or the CVR Agreement or the consummation of Merger 1 and other transactions contemplated hereby or thereby, except for: (i) the filing of the Certificate of Merger 1 with the Secretary of State of the State of Delaware and appropriate documents with the relevant authorities of other states in which the Company and/or Parent are qualified to do business, (ii) the filing of the Proxy Statement with the Securities and Exchange Commission (the "**SEC**") in accordance with the Securities Exchange Act of 1934, as amended (the "**Exchange Act**") and the effectiveness of the Registration Statement, in which the Proxy Statement will be included, (iii) such consents, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable federal, foreign and state securities (or related) laws and the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "**HSR Act**") and satisfaction of such other requirements of the comparable applicable laws of other jurisdictions, (iv) such consents, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable state securities or "blue sky" laws and the securities laws of any foreign country, and (v) such other consents, orders, authorizations, filings, declarations, approvals and registrations which if not obtained or made would materially adversely affect the ability of the parties hereto to consummate Merger 1 within the time frame in which Merger 1 would otherwise be consummated in the absence of the need for such consent, approval, order, authorization, registration, declaration or filings.

2.4 *SEC Filings; Financial Statements; Internal Controls.*

(a) *SEC Filings.* The Company has filed all required registration statements, prospectuses, reports, schedules, forms, statements and other documents (including exhibits and all other information incorporated by reference) required to be filed by it with the SEC since September 30, 2005. All such required registration statements, prospectuses, reports, schedules, forms, statements and other documents are referred to herein as the "**Company SEC Reports**." As of their respective dates or, if amended or supplemented prior to the date of this Agreement, as of the date of such amendment or supplement, each Company SEC Report (i) complied in all material respects with the requirements of the Securities Act of 1933, as amended (the "**Securities Act**"), or the Exchange Act, as the case may be, and the rules and regulations of the SEC promulgated thereunder applicable to such Company SEC Reports and (ii) did not at the time such Company SEC Report was filed (or became effective in the case of a registration statement), or if amended, supplemented or superseded by a filing prior to the date of this Agreement then on the date of such superseding filing, amendment or supplement, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. None of the Company's Subsidiaries is required to file any forms, reports or other documents with the SEC. The Company has not prepared any amendments or modifications, which have not yet been filed with the SEC but which are required to be filed, to agreements, documents or other

instruments which previously had been filed by the Company with the SEC pursuant to the Securities Act or the Exchange Act.

(b) *Financial Statements.* Each of the consolidated financial statements (including, in each case, any related notes thereto) contained in the Company SEC Reports (the "**Company Financials**") (as amended or supplemented prior to the date of this Agreement, if applicable): (i) was prepared in accordance with United States generally accepted accounting principles ("**GAAP**") applied on a consistent basis throughout the periods involved (except as may be indicated in the notes thereto or, in the case of unaudited interim financial statements, as may be permitted by the SEC on Form 10-Q, 8-K or any successor forms under the Exchange Act), and (ii) fairly presented in all material respects the consolidated financial position of the Company and its consolidated Subsidiaries as at the respective dates thereof and the consolidated results of the Company's operations and cash flows for the periods indicated except that the unaudited interim financial statements were or are subject to normal year end adjustments which were not, or are not expected to be, material in amount to the Company and its Subsidiaries, taken as a whole. The Company does not intend to correct or restate, nor to the Company's Knowledge, is there any basis for any correction or restatement of, in any material respect, any aspect of the Company Financials. The balance sheet of the Company dated as of June 30, 2008 contained in the Company SEC Report filed with the SEC on July 31, 2008 is hereinafter referred to as the "**Company Balance Sheet**." Except as disclosed in the Company Financials, neither the Company nor any of its Subsidiaries has any liabilities (absolute, accrued, contingent or otherwise) of a nature required to be reflected or reserved against on a consolidated balance sheet or in the related notes to the consolidated financial statements prepared in accordance with GAAP, except for liabilities or obligations (1) under this Agreement or incurred in connection with the transactions contemplated hereby, (2) incurred in the ordinary course of business since June 30, 2008, or (3) which are not, individually or in the aggregate, material to the business, results of operations or financial condition of the Company and its Subsidiaries, taken as a whole.

(c) *Internal Controls.* The Company has established and maintains disclosure controls and procedures and internal control over financial reporting, as such terms are defined in, and as required by, Rules 13a-15 and 15d-15 under the Exchange Act. The Company's disclosure controls and procedures are reasonably designed to ensure that all material information required to be disclosed by the Company in the reports that it files or furnishes under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that all such material information is accumulated and communicated to the Company's management as appropriate to allow timely decisions regarding required disclosure and to make the certifications required pursuant to Sections 302 and 906 of the Sarbanes-Oxley Act of 2002 (the "**Sarbanes-Oxley Act**"). The Company's management has completed an assessment of the effectiveness of the Company's system of internal control over financial reporting in compliance with the requirements of Section 404 of the Sarbanes-Oxley Act for the fiscal year ended December 31, 2007, and such assessment concluded that such controls were effective and the Company's independent registered accountant has issued (and not subsequently withdrawn or qualified) an attestation report concluding that the Company maintained effective internal control over financial reporting as of December 31, 2007. Since December 31, 2007 and through the date hereof, to the Knowledge of the Company, no events, facts or circumstances have occurred, or exist, such that management would not be able to complete its assessment of the effectiveness of the Company's system of internal control over financial reporting in compliance with the requirements of Section 404 of the Sarbanes-Oxley Act for the fiscal year ended December 31, 2007, and conclude, after such assessment, that such controls were effective. The principal executive officer and principal financial officer of the Company have made all certifications required by the Sarbanes-Oxley Act and any related rules and regulations promulgated by the SEC since December 31, 2005. The Company and each of its Subsidiaries has established and maintains

and adheres to and enforces in all material respects a system of internal control over financial reporting, which is sufficient in all material respects to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements (including the Company Financials) for external purposes in accordance with GAAP. To the Knowledge of the Company, since the date of the Company's most recent quarterly report on Form 10-Q filed with the SEC, neither the Company nor any of its Subsidiaries (including any Employee), nor the Company's independent auditors has identified or been made aware of (A) any significant deficiency or material weakness in the design or operation of internal control over financial reporting utilized by the Company and its Subsidiaries, (B) any fraud, whether or not material, that involves the Company's management or other Employees, or (C) any claim or allegation regarding any of the foregoing. In connection with the periods covered by the Company Financials since January 1, 2008, the Company has disclosed in the Company SEC Reports all significant deficiencies and material weaknesses identified in writing by the Company or the Company's independent auditors (whether current or former) in the design or operation of the internal control over financial reporting utilized by the Company and its Subsidiaries. The Company is in compliance in all material respects with (i) the applicable provisions of the Sarbanes-Oxley Act and (ii) the applicable listing and corporate governance rules and regulations of The Nasdaq Stock Market, Inc. ("**Nasdaq**").

2.5 *Absence of Certain Changes or Events.* Since the date of the Company Balance Sheet, there has not been any Company Material Adverse Effect. Except as set forth in **Section 2.5** of the Company Disclosure Letter, during the period from the date of the Company Balance Sheet to the date hereof, there has not been: (i) any declaration, setting aside or payment of any dividend on, or other distribution (whether in cash, stock or property) in respect of, any of the Company's or any of its Subsidiaries' capital stock, or any purchase, redemption or other acquisition by the Company or any of its Subsidiaries of any of the Company's capital stock or any other securities of the Company or its Subsidiaries or any options, warrants, calls or rights to acquire any such shares or other securities, other than repurchases of unvested shares in connection with the termination of the employment relationship with any employee, or upon the resignation of any director or consultant, pursuant to stock option or purchase agreements and, in each case, at no cost or for a *de minimis* cost, (ii) any split, combination or reclassification of any of the Company's or any of its Subsidiaries' capital stock; (iii) any granting by the Company or any of its Subsidiaries of any increase in compensation or fringe benefits, except for normal increases in the ordinary course of business consistent with past practice, or any payment by the Company or any of its Subsidiaries of any bonus, except for bonuses made in the ordinary course of business consistent with past practice, or any granting by the Company or any of its Subsidiaries of any increase in severance or termination pay or any entry by the Company or any of its Subsidiaries into any currently effective employment, severance, termination, change of control or indemnification agreement (other than offer letters and letter agreements entered into in the ordinary course of business consistent with past practice with employees who are not officers and are terminable "at will" without the Company or its Subsidiaries incurring any material liability or financial obligation), (iv) entry by the Company or any of its Subsidiaries into any licensing or other agreement with regard to the acquisition or disposition of any material Intellectual Property other than licenses, distribution agreements, advertising agreements, sponsorship agreements or merchant program agreements entered into in the ordinary course of business consistent with past practice, (v) any amendment or consent with respect to any Company Scheduled Contract in effect since the date of the Company Balance Sheet, (vi) any material change by the Company in its accounting methods, principles or practices, except as required by concurrent changes in GAAP, (vii) any change in any Tax accounting method, Tax accounting period or Tax election, any amended Tax Return filed, any settlement or compromise with respect to any Tax liability or claims, any agreement to extend or waive the statute of limitations with respect to the assessment or determination of Taxes, any Tax indemnity, Tax allocation or Tax sharing agreement entered into, any private letter ruling, closing agreement or similar ruling or agreement

entered into with respect to any Tax, or any surrender of any right to claim a Tax refund, in each case by the Company or any of its Subsidiaries, or (viii) any material revaluation by the Company or any of its Subsidiaries of any of its assets, including, without limitation, writing down the value of capitalized inventory or writing off notes or accounts receivable other than in the ordinary course of business consistent with past practice.

2.6 *Taxes.*

(a) *Definitions.* For the purposes of this Agreement, the term "**Tax**" or, collectively, "**Taxes**" shall mean any and all U.S. federal, state, local and non-U.S. taxes, assessments and other governmental charges, duties, impositions and liabilities, including taxes based upon or measured by gross receipts, income, profits, sales, use and occupation, and value added, ad valorem, transfer, franchise, withholding, payroll, recapture, employment, excise and property taxes, together with all interest, penalties and additions imposed with respect to such amounts; and "**Tax Return**" shall mean any report, return (including information return), claim for refund, election, estimated tax filing or declaration relating to Taxes, including any schedule or attachment thereto, and including any amendments thereof.

(b) *Tax Matters.*

(i) The Company and each of its Subsidiaries have prepared or caused to be prepared and timely filed or caused to be filed all required material Tax Returns relating to any and all Taxes concerning or attributable to the Company, its Subsidiaries or their respective operations, taking into account any extensions of time within which to file such Tax Returns, and such Tax Returns, in all material respects, are true and correct and have been completed in accordance with applicable Legal Requirements. Neither the Company nor any of its Subsidiaries is currently the beneficiary of any extension of time within which to file any Tax Return.

(ii) The Company and each of its Subsidiaries have timely paid all material Taxes required to be paid, and paid or withheld with respect to their Employees and other third parties (and paid over to the appropriate Taxing authority) all income taxes, Federal Insurance Contribution Act, Federal Unemployment Tax Act and other Taxes required to be paid or withheld. No claim has ever been made by any Taxing authority in a jurisdiction where the Company and its Subsidiaries do not file Tax Returns that the Company or any of its Subsidiaries is or may be subject to Tax in that jurisdiction.

(iii) Neither the Company nor any of its Subsidiaries has been delinquent in the payment of any material Tax, nor is there any material Tax deficiency outstanding, assessed or proposed in writing against the Company or any of its Subsidiaries, nor has the Company or any of its Subsidiaries executed any waiver of any statute of limitations on or extending the period for the assessment or collection of any Tax.

(iv) No audit or other examination of any Tax Return of the Company or any of its Subsidiaries is pending or presently in progress, nor has the Company or any of its Subsidiaries been notified in writing of any request for such an audit or other examination.

(v) Neither the Company nor any of its Subsidiaries has any material liabilities for unpaid Taxes as of the date of the Company Balance Sheet which have not been accrued or reserved on the Company Balance Sheet in accordance with GAAP, and neither the Company nor any of its Subsidiaries has incurred any liability for Taxes since the date of the Company Balance Sheet other than in the ordinary course of business.

(vi) The Company has made available to Parent or its legal counsel, copies of all material Tax Returns for the Company and each of its Subsidiaries filed since the fiscal year ended December 31, 2004.

(vii) There are no Tax liens upon any property or assets of the Company or any of its Subsidiaries except for liens for current Taxes not yet due and payable or Taxes which are being contested in good faith and for which adequate reserves have been established on the Company Balance Sheet in accordance with GAAP.

(viii) Neither the Company nor any of its Subsidiaries is, or has been during the applicable period specified in Section 897(c)(1)(A)(ii) of the Code, a "United States Real Property Holding Corporation" within the meaning of Section 897(c)(2) of the Code.

(ix) Except as set forth in **Section 2.6(b)** of the Company Disclosure Letter, neither the Company nor any of its Subsidiaries has (a) ever been a member of an affiliated group (within the meaning of Code Section 1504(a)) filing a consolidated U.S. federal income Tax Return (other than a group the common parent of which was the Company), (b) ever been a party to any Tax sharing, indemnification or allocation agreement, nor does the Company or any of its Subsidiaries owe any amount under any such agreement and (c) any liability for the Taxes of any Person (other than the Company or any of its Subsidiaries) under Treasury Regulations Section 1.1502-6 (or any similar provision of state, local or foreign law, including any arrangement for group or consortium relief or similar arrangement), as a transferee or successor, by operation of law, by contract, or otherwise.

(x) Neither the Company nor any of its Subsidiaries has constituted either a "distributing corporation" or a "controlled corporation" in a distribution of stock intended to qualify for tax-free treatment under Section 355 of the Code during the four-year period immediately preceding the Closing Date.

(xi) Neither the Company nor any of its Subsidiaries has engaged in a reportable transaction under Treasury Regulations Section 1.6011-4(b), including any transaction that is the same as or substantially similar to one of the types of transactions that the Internal Revenue Service has determined to be a tax avoidance transaction and identified by notice, regulation, or other form of published guidance as a listed transaction.

(xii) Neither the Company nor any of its Subsidiaries (i) is or was a "surrogate foreign corporation" within the meaning of Section 7874(a)(2)(B) of the Code or is treated as a U.S. corporation under Section 7874(b) of the Code; and (ii) was created or organized both in the United States and in a foreign jurisdiction such that such entity would be taxable in the United States as a domestic entity pursuant to Treasury Regulations Section 301.7701-5(a).

(xiii) None of the Company or any of its Subsidiaries or, to the Knowledge of the Company, any of the Company's affiliates has taken or agreed to take any action that would prevent the Mergers, taken together, from qualifying as a reorganization within the meaning of Section 368(a) of the Code. The Company is not aware of any agreement, plan or other circumstance that would prevent the Mergers, taken together, from qualifying as a reorganization within the meaning of Section 368(a) of the Code.

2.7 *Intellectual Property.* (a) **Section 2.7(a)** of the Company Disclosure Letter sets forth a true and complete list of all Registered (i) trademarks, service marks, certification marks, collective marks, d/b/a's, Internet domain names, logos, symbols, trade dress, assumed names, fictitious names, trade names, and other indicia of origin, all applications and registrations for the foregoing, and all goodwill associated therewith and symbolized thereby, including all renewals of same; (ii) inventions and discoveries, whether patentable or not, and all patents, registrations, invention disclosures and applications therefor, including divisions, continuations, continuations-in-part and renewal applications, and including renewals, extensions and reissues; (iii) confidential information, trade secrets and know-how, and similar proprietary rights in inventions, discoveries, analytic models, improvements, products, product candidates, processes, schematics, business methods, formulae, drawings, prototypes,

designs and supplier lists (collectively, "**Trade Secrets**"); (iv) published and unpublished works of authorship, whether copyrightable or not (including without limitation databases and other compilations of information), copyrights therein and thereto, and registrations and applications therefor, and all renewals, extensions, restorations and reversions thereof; and (v) all other material intellectual property or proprietary rights ((i) through (v) collectively, "**Intellectual Property**"), in each case that are currently owned or co-owned by the Company or its Subsidiaries, except for Intellectual Property that the Company or its Subsidiaries intentionally abandoned by the Company or its Subsidiaries, indicating for each registered item the registration or application number and the applicable filing jurisdiction (collectively, the "**Scheduled Intellectual Property**"). The Company and/or its Subsidiaries exclusively or jointly own with third parties (beneficially, and of record where applicable) or has the valid right to use all Scheduled Intellectual Property, and to the Knowledge of the Company, free and clear of all Liens (excluding licenses, covenants not to sue and related restrictions). To the Knowledge of the Company, the Scheduled Intellectual Property is valid, subsisting and enforceable, and is not subject to any outstanding order, judgment, decree or agreement adversely affecting the Company's and its Subsidiaries' use thereof or its rights thereto, except as would not reasonably be expected to have a Company Material Adverse Effect. "**Registered**" means issued by, registered with, renewed by or the subject of a pending application before any Governmental Entity or Internet domain name registrar.

(b) **Section 2.7(b)** of the Company Disclosure Letter sets forth a true and complete list of all agreements to which the Company or its Subsidiaries are a party that grant the Company and its Subsidiaries rights to use any material Intellectual Property owned or held by any other Person (the "**Licensed Intellectual Property**"), material non-assertion agreements, agreements granting rights to any third party to use any material Intellectual Property owned or co-owned by the Company or any of its Subsidiaries, material trademark coexistence agreements and material trademark consent agreements (the "**Intellectual Property Contracts**") (other than licenses for commercial "off-the-shelf" or "shrink-wrap" software and other than agreements granting non-exclusive licenses to distributors, marketing agents, contract manufacturers and other contractors, consultants or agents). To the Company's Knowledge, the Licensed Intellectual Property is valid, subsisting and enforceable and is not subject to any outstanding order, judgment, decree or agreement adversely affecting the Company's or its Subsidiaries' use thereof or their rights thereto, except as would not reasonably be expected to have a Company Material Adverse Effect. Consummation of the transactions contemplated by this Agreement will not place the Company or its Subsidiaries in breach or default of any Intellectual Property Contract, or trigger any modification, termination or acceleration thereunder, or create any license under or Lien on Intellectual Property owned or held by Parent, except as would not reasonably be expected to have a Company Material Adverse Effect.

(c) To the Knowledge of the Company, the Company and its Subsidiaries have sufficient rights to use all Intellectual Property used in their business as presently conducted and to be used in their business as proposed to be conducted, all of which rights shall survive unchanged the consummation of the transactions contemplated by this Agreement, except as would not reasonably be expected to have a Company Material Adverse Effect. The Company and its Subsidiaries do not and have not in the past five (5) years knowingly infringed or otherwise violated the Intellectual Property rights of any third party, except as would not reasonably be expected to have a Company Material Adverse Effect. Except as set forth in **Section 2.7(c)** of the Company Disclosure Letter, there is no litigation, opposition, cancellation, proceeding, objection or claim pending, or to the Knowledge of the Company, asserted or threatened in writing in the past two (2) years against the Company or its Subsidiaries concerning the ownership, validity, registerability, enforceability, infringement or use of, or licensed right to use, any material Intellectual Property (other than in the ordinary course of prosecution of the Company's and its Subsidiaries' Intellectual Property before any Governmental Entity). To the Company's Knowledge, no valid basis for any such litigation, opposition, cancellation, proceeding, objection or claim exists. To the Company's

Knowledge, no Person is violating any Scheduled Intellectual Property right or other Intellectual Property right that the Company or its Subsidiaries hold exclusively, except as would not reasonably be expected to have a Company Material Adverse Effect.

(d) The Company and its Subsidiaries have taken reasonable measures to protect the confidentiality and value of all material Trade Secrets that are owned, used or held by the Company and its Subsidiaries, including entering into licenses and contracts that require employees, licensees, consultants employed or engaged by the Company or its Subsidiaries, and other third Persons who have contributed to the creation and development of such Trade Secrets to keep such Trade Secrets confidential. In the case of employees and consultants who have contributed to the creation and development of Intellectual Property intended to be owned by the Company or its Subsidiaries, such employees or consultants are required to assign to the Company all Intellectual Property created by such employee or consultant in the scope of employment or consultancy with the Company or its Subsidiaries to the extent that the Company or its Subsidiaries does not acquire such rights (pursuant to a work for hire agreement or otherwise) as a matter of law. To the Company's Knowledge, such material Trade Secrets have not been used, disclosed to or discovered by any Person except pursuant to valid and appropriate non-disclosure and/or license agreements which have not been breached.

(e) Except as set forth on **Section 2.7(e)** of the Company Disclosure Letter, to the Knowledge of the Company, no employee, consultant or agent of the Company or any of its Subsidiaries, past or present, is in default or breach of any term of any employment agreement, nondisclosure agreement, assignment of invention agreement or similar agreement or contract relating in any way to the protection, ownership, development, use or transfer of Scheduled Intellectual Property or Licensed Intellectual Property. To the Knowledge of the Company, none of the Company's or its Subsidiaries' current employees is the owner of any patent issued or applications pending for any device, process, design or invention of any kind that is necessary for the Company or its Subsidiaries to conduct business, which patents or applications have not been assigned to the Company or a Subsidiary of the Company. To the Company's Knowledge, the Company's and its Subsidiaries' employees' performance of their employment activities does not violate any third party's Intellectual Property rights or such employees' contractual obligations to any third Person.

(f) To the Knowledge of the Company, there are no patentability or non-infringement opinions in the possession of the Company with respect to (i) the p38 kinase inhibitor program partnered with Bristol-Myers Squibb Company or (ii) the CXCR2 antagonist program partnered with Schering Plough.

2.8 *Compliance; Permits.* (a) The Company and its Subsidiaries are, and since January 1, 2004 have been, in compliance in all material respects with all applicable Legal Requirements. No investigation, claim, suit, proceeding, audit or other legal action by any Governmental Entity or authority is pending or, to the Knowledge of the Company, threatened against the Company or any of its Subsidiaries. There is no agreement, judgment, injunction, order or decree binding upon the Company or any of its Subsidiaries which (i) has or could reasonably be expected to have the effect of prohibiting or materially impairing any current business practice of the Company or any of its Subsidiaries, any acquisition of material property by the Company or any of its Subsidiaries or the conduct of business by the Company or any of its Subsidiaries as currently conducted, (ii) may have an adverse effect on the Company's ability to comply with or perform any covenant or obligation under this Agreement, or (iii) may have the effect of preventing, delaying, making illegal or otherwise interfering with Merger 1 or any of the other transactions contemplated hereby.

(b) The Company and its Subsidiaries hold all material permits, licenses, variances, clearances, consents, authorizations, commissions, franchises, exemptions, orders and approvals

from Governmental Entities ("**Permits**") that are required for the operation of the business of the Company as currently conducted (collectively, "**Company Permits**"). **Section 2.8(b)** of the Company Disclosure Letter identifies each Company Permit. The Company and each Subsidiary is in material compliance with the terms of the Company Permits. No action, proceeding, revocation proceeding, amendment procedure, writ, injunction or claim is pending or, to the Knowledge of the Company, threatened, which seeks to revoke, limit, suspend, or materially modify any Company Permit. The rights and benefits of each material Company Permit will be available to the Intermediate Surviving Corporation immediately after the Merger 1 Effective Time on terms substantially identical to those enjoyed by the Company and its Subsidiaries as of the date of this Agreement and immediately prior to the Merger 1 Effective Time.

(c) There are no proceedings pending or, to the Knowledge of the Company, threatened with respect to an alleged violation by the Company or any of its Subsidiaries of the Federal Food, Drug, and Cosmetic Act ("**FDCA**"), Food and Drug Administration ("**FDA**") regulations adopted thereunder, the Controlled Substance Act or any other similar Legal Requirements promulgated by the FDA or other comparable Governmental Entity responsible for regulation of the development, clinical testing, manufacturing, sale, marketing, distribution and importation or exportation of drug products ("**Drug Regulatory Agency**").

(d) The Company, its Subsidiaries and to the Company's Knowledge, its collaboration partners, hold all Permits issuable by any Drug Regulatory Agency necessary for the conduct of the business of the Company as currently conducted and the development, clinical testing, manufacturing, marketing, distribution and importation or exportation, as currently conducted, of any of its products or product candidates, including, but not limited to, PS433540, PS178990, PS031291, PS291822 (CXCR2) and PS540446 (p38) (the "**Company Product Candidates**") (the "**Company Regulatory Permits**") and each such Company Regulatory Permit is in full force and effect. The Company, its Subsidiaries and to the Company's Knowledge, its collaboration partners, have fulfilled and performed all of their respective obligations with respect to the Company Regulatory Permits, and are otherwise in compliance in all material respects with the Company Regulatory Permits. None of the Company, its Subsidiaries or to the Company's Knowledge, its collaboration partners, has received any written notice or other written communication from any Drug Regulatory Agency regarding (A) any actual or possible violation of or failure to comply with any term or requirement of any Company Regulatory Permit or (B) any actual or possible revocation, withdrawal, suspension, cancellation, termination or material modification of any Company Regulatory Permit, and to the Knowledge of the Company, no event has occurred which allows, or after notice or lapse of time to cure would allow, any Drug Regulatory Agency to take any of the foregoing actions. Except for the information and files identified in **Section 2.8(d)** of the Company Disclosure Letter, the Company has made available to Parent all material information in its possession or control relating to the clinical Company Product Candidates (including without limitation, any information provided to the Company by the Company's collaboration partners) and the development, clinical testing, manufacturing, importation and exportation of the clinical Company Product Candidates by the Company, its Subsidiaries and its collaboration partners, including without limitation, complete and correct copies of the following (to the extent there are any): (x) serious adverse event reports; clinical study reports and material study data; material inspection reports, notices of adverse findings, warning letters, filings and letters and other material correspondence to and from any Drug Regulatory Agency and the Company, its Subsidiaries and its collaboration partners; and related meeting minutes with any Drug Regulatory Agency; and (y) similar material reports, study data, notices, letters, filings, correspondence and meeting minutes among the Company, its Subsidiaries, its collaboration partners and any other Governmental Entity.

(e) To the Company's Knowledge, all pre-clinical trials conducted by or on behalf of, or sponsored by, the Company or in which the Company or its current products or product candidates, including the Company Product Candidates, have participated, either (i) have been conducted in accordance, in all material respects, with applicable Good Laboratory Practice ("**GLP**") requirements, including those contained in 21 C.F.R. Part 58 or (ii) involved experimental research techniques that were not required to be performed by a registered GLP testing laboratory (with appropriate notice being given to the FDA or the applicable Governmental Entity).

(f) To the Company's Knowledge, all clinical trials conducted by or on behalf of, or sponsored by, the Company or in which the Company or its current products or product candidates, including the Company Product Candidates, have participated were and, if still pending, are being conducted in material compliance with the applicable regulations of the Drug Regulatory Agency and other applicable Legal Requirements, including, without limitation, 21 C.F.R. Parts 50, 54, 56, 58 and 312. Except as set forth on **Section 2.8(f)** of the Company Disclosure Letter, no investigational new drug application filed by the Company or, to the Knowledge of the Company, one of its collaboration partners with the FDA for the Company Product Candidates has been terminated or suspended by the FDA, and neither the FDA nor any applicable foreign Governmental Entity has commenced, or, to the Knowledge of the Company, threatened to initiate, any action to place a clinical hold order on, or otherwise terminate, materially delay, suspend, any proposed or ongoing clinical investigation conducted or proposed to be conducted by the Company or, to the Knowledge of the Company, its collaboration partners.

(g) All applications, notifications, submissions, information, claims, reports and statistics, and other data and conclusions derived therefrom, utilized as the basis for or submitted in connection with any and all requests for a Company Regulatory Permit from the FDA or other Governmental Entity relating to the Company, its business and the Company Product Candidates, when submitted to the FDA or other Governmental Entity, did not contain any materially false or misleading information, any materially false statements or any material omissions, and any necessary or required updates, changes, corrections or modification to such applications, submissions, information and data have been submitted to the FDA or other Governmental Entity.

(h) Except as set forth on **Section 2.8(h)** of the Company Disclosure Letter, the manufacture of Company Product Candidates by or, to the Company's Knowledge, on behalf of the Company is being conducted in compliance in all material respects with all applicable Legal Requirements, including, without limitation, applicable provisions of FDA's current good manufacturing practice regulations at 21 CFR Parts 210-211.

2.9 *Litigation.* There are no claims, suits, actions, judgments or proceedings pending or, to the Knowledge of the Company, threatened against the Company or any of its Subsidiaries, before any court, governmental department, commission, agency, instrumentality or authority, or any arbitrator that seeks to (a) restrain or enjoin the consummation of the transactions contemplated hereby or (b) which would reasonably be expected, either singularly or in the aggregate with all such claims, actions, judgments or proceedings, to be material to the Company and its Subsidiaries, taken as a whole.

2.10 *Brokers' and Finders' Fees.* Except for fees payable to Cowen and Company, LLC pursuant to an engagement letter dated June 11, 2008 (the "**Cowen Agreement**") a copy of which has been provided to Parent, the Company has not incurred, nor will it incur, directly or indirectly, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement or any transaction contemplated hereby, and the Company has not entered into any indemnification agreement or arrangement with any Person in connection with this Agreement and the transactions contemplated hereby other than pursuant to the Cowen Agreement.

2.11 *Transactions with Affiliates.* Except as set forth in the Company SEC Reports, since the date of the Company's last proxy statement filed with the SEC, no event has occurred as of the date hereof that would be required to be reported by the Company pursuant to Item 404 of Regulation S-K promulgated by the SEC that was not so reported. **Section 2.11** of the Company Disclosure Letter identifies each Person who is an "affiliate" (for purposes of Rule 145 promulgated under the Securities Act) of the Company as of the date hereof.

2.12 *Employee Benefit Plans.*

(a) *Schedule.* **Section 2.12(a)** of the Company Disclosure Letter sets forth a correct and complete list of (i) each "employee benefit plan," within the meaning of Section 3(3) of ERISA, and (ii) each material plan, program or agreement providing for compensation, severance, termination pay, deferred compensation, performance awards, stock or stock-related awards, fringe benefits or other employee benefits or remuneration of any kind, whether written or unwritten, funded or unfunded (it being understood and agreed that any plan, program or agreement providing severance, termination pay, deferred compensation or stock or stock-related awards shall be deemed material), which, in the case of plans, programs or agreements described in clauses (i) or (ii) is maintained, contributed to, or required to be contributed to, by the Company or any Controlled Group Affiliate (as defined in **Section 2.12(e)**), or with respect to which the Company or any Controlled Group Affiliate has or may have any material liability or obligation, in either case, for the benefit of any current or former employee, consultant or director (each, an "**Employee**") employed by, or otherwise providing services to, the Company or any Controlled Group Affiliate (each such plan, program and agreement, a "**Company Employee Plan**"); and (iii) each material management, employment, severance, consulting, relocation, repatriation, expatriation or other agreement or contract between the Company or any Controlled Group Affiliate and any Employee (each, an "**Employee Agreement**"). Except to the extent required by Law or to conform any such Company Employee Plan or Employee Agreement to the requirements of any applicable Legal Requirements, as required by the terms of such Company Employee Plan or Employee Agreement or as permitted by the terms of this Agreement, neither the Company nor any Controlled Group Affiliate has any plan or commitment to establish any new Company Employee Plan or Employee Agreement, to modify any Company Employee Plan or Employee Agreement or to adopt or enter into any Company Employee Plan or Employee Agreement.

(b) *Documents.* The Company has made available to Parent for review (to the extent applicable) (i) the current plan document for each Company Employee Plan and each Employee Agreement including (without limitation) all amendments thereto and related trust documents, administrative service agreements, group annuity contracts, group insurance contracts, and policies pertaining to fiduciary liability insurance covering the fiduciaries for each Company Employee Plan, and with respect to any Company Employee Plan that has been merged into another Company Employee Plan, the plan documents in effect immediately prior to the merger of such plan, (ii) the most recent annual actuarial valuations and/or audited statement of assets and liabilities for each Company Employee Plan, (iii) the three (3) most recent annual reports, returns, securities registration statements (other than those available on EDGAR) or other filings, if any, required to be filed with any Governmental Entity under any applicable Legal Requirement in connection with each Company Employee Plan, (iv) the most recent IRS determination, opinion, notification and advisory letters with respect to Company Employee Plans intended to be qualified under Section 401(a) of the Code, (v) all material written correspondence by the Company to, or received by the Company from, any Governmental Entity relating to any Company Employee Plan, (vi) all discrimination tests for each Company Employee Plan, if applicable, for the most recent three (3) plan years; (vii) all model COBRA (as defined below) forms and related notices; (viii) all material communications from the Company to Employees during the last three (3) years relating to any amendments, terminations, establishments, increases or decreases in benefits, acceleration of payments or vesting schedules or other events which would result in any material liability under

any Company Employee Plan or Employee Agreement; and (ix) the most recent summary plan description together with the summary(ies) of material modifications thereto, if any, required under ERISA with respect to each Company Employee Plan. As used in this Agreement, "**COBRA**" shall mean the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, and "**ERISA**" shall mean the Employment Retirement Income Security Act of 1974, as amended.

(c) *Benefit Plan Compliance.*

(i) Each Company Employee Plan has been, in all material respects, administered and operated in accordance with its terms, with the applicable provisions of ERISA, the Code and all other applicable material Legal Requirements and the terms of all applicable collective bargaining agreements. Each Company Employee Plan that is intended to be qualified under Section 401(a) of the Code has either received a favorable determination letter from the Internal Revenue Service as to its qualified status or may rely upon an opinion letter for a prototype plan, and there has been no event, condition or circumstance that has adversely affected or, to the Company's Knowledge, is reasonably likely to adversely affect such qualified status. The Company has not engaged in any "prohibited transaction," within the meaning of Section 4975 of the Code or Sections 406 and 407 of ERISA, which is not otherwise exempt under Section 408 of ERISA, with respect to any Company Employee Plan. Except as set forth on **Section 2.12(c)** of the Company Disclosure Letter, each Company Employee Plan can be amended, terminated or otherwise discontinued after the Merger 1 Effective Time in accordance with its terms, without material liability to Parent, Company or any of its Controlled Group Affiliates (other than ordinary administration expenses or the payment of vested benefits thereunder). There are no audits, inquiries or proceedings pending or, to the Knowledge of the Company, threatened by the Internal Revenue Service or U.S. Department of Labor, or any other Governmental Entity or any Employee with respect to any Company Employee Plan. Neither the Company nor any Controlled Group Affiliate is subject to any material penalty or tax with respect to any Company Employee Plan under Section 502(i) of ERISA or Sections 4975 through 4980 of the Code.

(ii) To the Knowledge of the Company, neither the Company nor any of its Subsidiaries has entered into any agreement, arrangement or understanding, whether written or oral, with any trade union, works council or other Employee representative body which would prevent the implementation of any lay-off, redundancy, severance or similar program within its or their respective workforces (or any part of them).

(d) *Plan Funding.* With respect to the Company Employee Plans, there are no material benefit obligations for which contributions have not been timely made or properly accrued and there are no material benefit obligations which have not been accounted for by reserves, or otherwise properly footnoted in accordance with the requirements of GAAP, on the financial statements of the Company.

(e) *No Pension or Welfare Plans.* Neither the Company nor any other person or entity under common control within the meaning of Section 414(b), (c), (m) or (o) of the Code (a "**Controlled Group Affiliate**") with the Company has ever maintained, established, sponsored, participated in, or contributed to, any (i) Company Employee Plan which is or was subject to Title IV of ERISA or Section 412 of the Code, (ii) "multiemployer plan" (as defined in Section 4001(a)(3) of ERISA), (iii) "multiple employer plan" within the meaning of Section 4001(a)(3) of ERISA or subject to Section 413(c) of the Code, or (iv) "welfare benefit fund" within the meaning of Section 419 of the Code. No Company Employee Plan provides health benefits that are not fully insured through an insurance contract.

(f) *Continuation Coverage.* No Company Employee Plan or Employee Agreement provides post-termination or retiree welfare benefits (whether or not insured), with respect to any person for any reason (other than coverage mandated by applicable Legal Requirements) and neither the Company nor any Controlled Group Affiliate has ever represented, promised or contracted

(whether in oral or written form) to any of their Employees (either individually or to such Employees as a group) that such Employees would be provided with post-termination or retiree welfare benefits, except to the extent required by applicable Legal Requirements or as set forth on **Section 2.12(f)** of the Company Disclosure Letter.

(g) *International Employee Plans.* No Company Employee Plan is maintained for Employees who perform services outside of the United States.

(h) *Effect of Transaction.* Except as set forth on **Section 2.12(h)** of the Company Disclosure Letter, the execution of this Agreement and the consummation of the transactions contemplated hereby will not (either alone or upon the occurrence of any additional or subsequent events) constitute an event under any Company Employee Plan or Employee Agreement that will or may result in any material payment (whether of severance pay or otherwise), acceleration of payment, forgiveness of indebtedness, vesting, distribution, increase in benefits or obligation to fund benefits with respect to any Employee of the Company or any Subsidiary. Except as set forth on **Section 2.12(h)** of the Company Disclosure Letter, no payment or benefit which will or may be made by the Company or any Subsidiary by reason of the consummation of the transactions contemplated by this Agreement to any of their Employees or any other "disqualified individual" (as defined in Code Section 280G and the regulations thereunder) will fail to be deductible by reason of the application of Section 280G of the Code. Except as set forth on **Section 2.12(h)** of the Company Disclosure Letter, there is no contract, agreement, plan or arrangement to which the Company or any Subsidiary is a party or by which it is bound to compensate any of their Employees for excise taxes paid pursuant to Section 4999 of the Code.

(i) *Section 409A.* Each contract, agreement or arrangement to which the Company is a party that is a "nonqualified deferred compensation plan" subject to Section 409A of the Code has been operated since January 1, 2005 and has or will be amended (if necessary) by December 31, 2008 to be in good faith compliance with Section 409A of the Code and the guidance and regulations thereunder.

(j) **[Intentionally omitted].**

(k) *Labor.* No Employees are represented by any labor organization or works council with respect to their employment with the Company or any of its Subsidiaries. Neither the Company nor any of its Subsidiaries is presently a party to, or bound by, any collective bargaining agreement or union contract with respect to Employees and no collective bargaining agreement is being negotiated by the Company or any of its Subsidiaries. To the Knowledge of the Company, there are no activities of any labor union to organize any Employees. There is no strike, slowdown, concerted refusal to work overtime, or work stoppage against the Company or any of its Subsidiaries pending or, to the Knowledge of the Company, threatened. There are no material actions, suits, claims, or grievances pending or threatened or reasonably anticipated relating to any labor, safety or discrimination matters involving any Employee, including, without limitation, charges of unfair labor practices or discrimination complaints. Neither the Company nor any of its Subsidiaries has engaged in any material unfair labor practices within the meaning of the National Labor Relations Act. Except as set forth in **Section 2.12(k)** of the Company Disclosure Letter, neither the Company nor any Subsidiary has taken any action during the past two (2) years which would constitute a "plant closing" or "mass layoff" within the meaning of the WARN Act or similar state or local law and failed to comply with the requirements of such law with respect to such action.

(l) *Employment Matters.* The Company and each of its Subsidiaries is in material compliance with all applicable foreign, federal, state and local laws, rules and regulations respecting employment, employment practices, terms and conditions of employment, worker classification, employment tax withholding, prohibited discrimination, fair employment practices, meal and rest periods, the immigration status of employees, employee safety and health, the payment of wages (including overtime wages), compensation, and hours of work, and, with respect

to Employees, the Company and each of its Subsidiaries: (i) has withheld and reported all amounts required by law or by agreement to be withheld and reported with respect to wages, salaries and other payments to Employees, (ii) is not liable for any arrears of wages, severance pay or any Taxes or any penalty for failure to comply with any of the foregoing, and (iii) is not liable for any payment to any trust or other fund governed by or maintained by or on behalf of any governmental authority, with respect to unemployment compensation benefits, Social Security or other benefits or obligations for Employees (other than routine payments to be made in the normal course of business and consistent with past practice), except for any such amounts or liabilities that would not reasonably be expected to result, individually or in the aggregate, in a liability material to the Company and its Subsidiaries, taken as a whole. Except as set forth on **Section 2.12(l)** of the Company Disclosure Letter, there are no (x) actions, suits, claims or administrative matters pending or, to the Knowledge of the Company, threatened or reasonably anticipated against the Company or any of its Subsidiaries, relating to any Employee, Employee Agreement or Company Employee Plan or (y) pending or, to the Knowledge of the Company, threatened or reasonably anticipated claims or actions against the Company, any of its Subsidiaries, any Company trustee or any trustee of any Subsidiary under any worker's compensation policy or long-term disability policy, in each case except as would not, individually or in the aggregate, reasonably be expected to result in material liability to the Company or its Subsidiaries. Neither the Company nor any Subsidiary is party to a conciliation agreement, consent decree or other agreement or order with any federal, state, or local agency or governmental authority with respect to employment practices. Except as set forth on **Section 2.12(l)** of the Company Disclosure Letter, the services provided by each of the Company's and its Subsidiaries' Employees are terminable at the will of the Company and its Subsidiaries and any such termination would result in no material liability to the Company or any Subsidiary. Neither the Company nor any of its Subsidiaries has any material liability with respect to any misclassification of: (a) any Person as an independent contractor rather than as an employee, (b) any employee leased from another employer, or (c) any employee currently or formerly classified as exempt from overtime wages.

(m) There is no contract, agreement, plan or arrangement to which the Company or any of its Subsidiaries is a party, covering any Employee of the Company or any of its Subsidiaries, which, individually or collectively, could give rise to the payment of any amount the deduction of which by the Company or any Subsidiary would be disallowed pursuant to Section 162(m) of the Code.

2.13 *Title to Properties; Use and Access.*

(a) *Properties.* Neither the Company nor any of its Subsidiaries owns any real property or has ever owned any real property. **Section 2.13** of the Company Disclosure Letter sets forth a list of all real property currently leased by the Company or any of its Subsidiaries ("**Leased Real Property**"), the name of the lessor, the date of the lease and each amendment thereto, in each case, as of the date hereof ("**Leases**"). All such Leases are in full force and effect, are valid and effective in accordance with their respective terms, and there is not, under any of such Leases, any existing default or event of default (or event which with notice or lapse of time, or both, would constitute a default), except for such defaults as would not, individually or in the aggregate, reasonably be expected to result in a Company Material Adverse Effect. There are no other parties occupying, or with a right to occupy, the Leased Real Property other than the Company or any of its Subsidiaries. To the Knowledge of the Company, neither the operations of the Company or any of its Subsidiaries on the Leased Real Property nor such Leased Real Property, including the improvements thereon, violate in any material respect any applicable building code, zoning requirement or other Legal Requirement relating to such property or operations thereon, and any such non-violation is not dependent on so called non-conforming use exceptions.

(b) *Valid Title.* The Company and each of its Subsidiaries has good and valid title to, or, in the case of leased properties and assets, valid leasehold interests in, all of its material tangible properties and assets, real, personal and mixed, used or held for use in its business, free and clear

of any Liens except for (i) Liens imposed by law in respect of obligations which are owed in respect of taxes not yet due and payable or being contested in good faith and by appropriate proceedings and for which adequate reserves have been established on the Company Financials, (ii) Liens in favor of equipment lessors covering such leased equipment, (iii) Liens imposed by law and incurred in the ordinary course of business for obligations not yet due to carriers, warehousemen, laborers and materialmen and (iv) Liens which are not material in character, amount or extent, and which do not materially detract from the value, or materially interfere with the present use of the property subject thereto or affected thereby.

(c) *Use and Access.* To the Knowledge of the Company, the Company has all ownership, license of other necessary rights to its tangible properties and assets, real, personal and mixed that are required and necessary for the operation of the business of the Company as presently conducted.

2.14 *Environmental Matters.* (a) The Company and each of its Subsidiaries (i) have not received any written notice of any alleged material claim, violation of or liability under any Environmental Law which has not heretofore been cured in all material respects or for which there is any remaining material liability; (ii) to the Knowledge of the Company, have not disposed of, emitted, discharged, handled, stored, transported, used or released any Hazardous Materials, arranged for the disposal, discharge, storage or release of any Hazardous Materials, or exposed any Employee or other individual to any Hazardous Materials in each case so as would be reasonably likely to give rise to any material liability or corrective or remedial obligation of the Company or its Subsidiaries under any Environmental Laws; (iii) except as may be provided in the Leases or the Company Permits, each of which has been made available to Parent, have not assumed by written agreement any requirement to guarantee, reimburse, defend, hold harmless or indemnify any other party with respect to material liabilities arising out of Environmental Laws or the Hazardous Materials related activities of the Company or its Subsidiaries; and (iv) have delivered to Parent or made available for inspection by Parent and its agents, representatives and Employees all material records in the Company's and Subsidiaries' possession concerning the Hazardous Materials activities of the Company and all environmental audits and environmental assessments of any facility owned, leased or used at any time by the Company or each of its Subsidiaries in the possession, custody or control of the Company or any of its Subsidiaries. Except as would not reasonably be expected to result in a Company Material Adverse Effect, to the Knowledge of the Company, there are no Hazardous Materials in, on, or under any properties owned, leased or used at any time by the Company or each of its Subsidiaries such as would reasonably be likely to give rise to any liability or corrective or remedial obligation of the Company or any of its Subsidiaries under any Environmental Laws.

(b) For the purposes of this **Section 2.14**, (i) "**Environmental Laws**" shall mean all applicable federal, state, local and foreign laws and regulations relating to worker health and safety (to the extent related to exposure of workers to Hazardous Materials), pollution, protection of the environment or exposure of any individual to Hazardous Materials, including laws and regulations relating to emissions, discharges, releases or threatened releases of Hazardous Materials, or otherwise relating to the recycling, use, treatment, storage, disposal, transport or handling of Hazardous Materials and (ii) "**Hazardous Materials**" shall mean any hazardous, toxic or polluting substance, including certain radioactive and biological materials, asbestos-containing materials (ACM), petroleum and petroleum products or any fraction thereof, including without limitation, substances regulated as "hazardous substances," "hazardous materials," "hazardous waste," "toxic waste" or similar designations under Environmental Laws.

2.15 *Contracts.*

(a) *Scheduled Contracts.* For purposes of this Agreement, "**Company Scheduled Contract**" shall mean:

(i) any "material contracts" (as such term is defined in Item 601(b)(10) of Regulation S-K of the SEC) with respect to the Company and its Subsidiaries;

(ii) any employment or consulting Contract with (A) any Employee of the Company or its Subsidiaries earning an annual salary or providing for annual compensation in excess of $100,000 or (B) any member of the Company's Board of Directors, other than those that are terminable by the Company or any of its Subsidiaries on no more than thirty (30) days notice without material liability or financial obligation;

(iii) any Contract or plan, including, without limitation, any stock option plan, stock appreciation right plan or stock purchase plan, any of the benefits of which will be increased, or the vesting of benefits of which will be accelerated, by the occurrence of any of the transactions contemplated by this Agreement or the value of any of the benefits of which will be calculated on the basis of any of the transactions contemplated by this Agreement;

(iv) any material agreement of indemnification or any guaranty other than any agreement of indemnification or guarantee entered into in connection with the sale or license of hardware or software products or services in the ordinary course of business;

(v) any Contract containing any covenant (A) limiting in any material respect the right of the Company or any of its Subsidiaries to engage in any line of business, to make use of any material Intellectual Property or compete with any Person in any material line of business, (B) granting any exclusive distribution rights which are material to the Company, or (C) otherwise having an adverse effect on the right of the Company and its Subsidiaries to compete in any line of business or geographic area (which adverse effect would be material to the Company and its Subsidiaries, taken as a whole);

(vi) any Contract relating to the disposition or acquisition by the Company or any of its Subsidiaries of a material amount of assets not in the ordinary course of business or pursuant to which the Company or any of its Subsidiaries has any material ownership interest in any other Person or other business enterprise other than the Company's Subsidiaries other than licenses for Intellectual Property or collaboration agreements for drug programs;

(vii) any Contract pursuant to which the Company or any of its Subsidiaries have continuing material obligations to jointly develop any material Intellectual Property that will not be owned, in whole or in part, by the Company or any of its Subsidiaries and which may not be terminated without penalty upon notice of ninety (90) days or less;

(viii) any Contract pursuant to which the Company, any of its Subsidiaries or any other party thereto has material continuing obligations, rights or interests relating to the research, development, clinical trial, distribution, supply, manufacture, marketing or co-promotion of, or collaboration with respect to, any product or product candidate for which the Company or any of its Subsidiaries is currently engaged in research or development (*it being understood* that, the following shall be deemed material and included hereunder: material manufacture or supply services or material Contracts with contract research organizations for clinical trials-related services;

(ix) any Contract containing any material support, maintenance or service obligation on the part of the Company or any of its Subsidiaries, other than those obligations that are terminable by the Company or any of its Subsidiaries on no more than one (1) year notice without liability or financial obligation to the Company or its Subsidiaries;

(x) any material Contract to license any third party to manufacture or reproduce any of the Company's or any of its Subsidiary's products, services or technology or any material Contract to sell or distribute any of the Company's or any of its Subsidiary's products, services or technology, except agreements with distributors or sales representatives entered into in the

ordinary course of business consistent with past practice and terminable by the Company or any of its Subsidiaries without penalty upon notice of no more than one (1) year;

(xi) any mortgages, indentures, guarantees, loans or credit agreements, security agreements or other Contracts relating to the borrowing of money or extension of credit, (excluding, for the avoidance of doubt, accounts receivables and payables in the ordinary course of business);

(xii) any material settlement agreement entered into since April 30, 2004;

(xiii) any other Contract evidencing indebtedness for borrowed money in excess of $50,000; and

(xiv) any material collaboration agreements for drug programs.

(b) *Schedule.* **Sections 2.15(a)(ii)** through **2.15(a)(xiv)** of the Company Disclosure Letter sets forth a list of all Company Scheduled Contracts to which the Company or any of its Subsidiaries is a party or is bound by as of the date hereof which are described in (and correspond to the Section numbers set forth in) **Sections 2.15(a)(ii)** through **2.15(a)(xiv)** hereof.

(c) *No Breach.* All Company Scheduled Contracts are valid and in full force and effect except to the extent they have previously expired in accordance with their terms or if the failure to be in full force and effect, individually or in the aggregate, would not reasonably be expected to be material to the Company and its Subsidiaries, taken as a whole. Except as set forth on **Section 2.15(c)** of the Company Disclosure Letter, neither the Company nor any of its Subsidiaries has violated any provision of, or committed or failed to perform any act which, with or without notice, lapse of time or both would constitute a default under the provisions of, any Company Scheduled Contract, except in each case for those violations and defaults which, individually or in the aggregate, would not reasonably be material to the Company and its Subsidiaries, taken as a whole.

2.16 *Disclosure.* None of the information supplied or to be supplied by or on behalf of the Company for inclusion or incorporation by reference in the registration statement on Form S-4 (or similar successor form) to be filed with the SEC by Parent in connection with the issuance of Parent Common Stock in Merger 1 (including any amendments or supplements thereto) (the "**Registration Statement**") will, at the time the Registration Statement becomes effective under the Securities Act, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading. None of the information supplied or to be supplied by or on behalf of the Company for inclusion or incorporation by reference in the Proxy Statement to be filed with the SEC as part of the Registration Statement and sent to the stockholders of the Company in connection with the meeting of the Company's stockholders to consider the adoption of this Agreement (the "**Company Stockholders' Meeting**") such Proxy Statement, as amended or supplemented, is referred to herein as (the "**Proxy Statement**"), will, at the time the Proxy Statement is mailed to the stockholders of the Company, at the time of the Company Stockholders' Meeting or as of the Merger 1 Effective Time, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading. The Proxy Statement will comply as to form in all material respects with the provisions of the Exchange Act and the rules and regulations promulgated by the SEC thereunder at the time the Proxy Statement is mailed to the stockholders of the Company, at the time of the Company Stockholders' Meeting and as of the Merger 1 Effective Time. The representations and warranties contained in this **Section 2.16** do not and will not apply to statements included in the Proxy Statement or the Registration Statement based upon information

supplied by Parent or Merger Sub 1 for use or incorporation by reference therein (or statements regarding Parent or Merger Sub 1 which were required to have been included by Parent or Merger Sub 1 in the Proxy Statement or the Registration Statement and which were omitted from the information supplied by Parent or Merger Sub 1).

2.17 *Board Approval.* The Board of Directors of the Company has, by resolutions duly adopted at a meeting of the Board of Directors of the Company duly called and held and not subsequently rescinded or modified in any way prior to the date hereof, duly (i) determined that Merger 1 is fair to, and in the best interests of, the Company and its stockholders and declared Merger 1 to be advisable, (ii) approved this Agreement and the transactions contemplated hereby, including Merger 1, and (iii) recommended that the stockholders of the Company adopt this Agreement and directed that such matter be submitted to the Company's stockholders at the Company Stockholders' Meeting.

2.18 *Fairness Opinion.* The Company has received the opinion of Cowen and Company, LLC, financial advisor to the Company, to the effect that, as of the date of this Agreement and subject to the assumptions, qualifications and limitations set forth therein, the Merger Consideration to be received by the holders of Shares of Company Common Stock, taken in the aggregate, is fair from a financial point of view to such holders.

2.19 *Insurance.* All insurance policies covering the Company, its Subsidiaries or any of their respective Employees, properties or assets are set forth on **Section 2.19** of the Company Disclosure Letter. All such insurance policies are in full force and effect, no notice of cancellation has been received, and there is no existing material default by any insured thereunder.

2.20 *Foreign Corrupt Practices Act.* Neither the Company nor any of its Subsidiaries, nor to the Knowledge of the Company, any officer, director, agent, Employee or other Person associated with or acting on their behalf, has, directly or indirectly, materially violated any provision of the Foreign Corrupt Practices Act of 1977, as amended (the "**FCPA**"), and to the Knowledge of the Company, none of them has used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity, made, offered or authorized any unlawful payment to foreign or domestic government officials or employees, or made, offered or authorized any unlawful bribe, rebate, payoff, influence payment, kickback or other similar unlawful payment that would materially violate the FCPA or any other applicable Legal Requirement. The Company has established reasonable internal controls and procedures designed to ensure compliance with the FCPA in all material respects.

2.21 *Takeover Statutes; Company Rights Agreement.* (a) Assuming the accuracy of the representation and warranty set forth in **Section 3.10**, the action of the Board of Directors of the Company in approving this Agreement and Merger 1 is sufficient to render inapplicable to this Agreement and Merger 1 the restrictions on business combinations contained in Section 203 of the DGCL.

(b) The Company Rights Agreement has been amended so that: (i) Parent, Merger Sub 1 and any Subsidiary of Parent are exempt from the definition of "Acquiring Person" contained in the Company Rights Agreement, and no "Stock Acquisition Date" or "Distribution Date" or "Triggering Event" (as such terms are defined in the Company Rights Agreement) will occur as a result of the execution of this Agreement or the consummation of the transactions contemplated hereby, including Merger 1, and (ii) the Company Rights Agreement will terminate and the Company Rights will expire immediately prior to the Merger 1 Effective Time. The Company Rights Agreement, as so amended, has not been further amended or modified. The Company has previously provided a true and complete copy of the Company Rights Agreement and all amendments thereto to Parent and Merger Sub 1.

ARTICLE III
REPRESENTATIONS AND WARRANTIES OF PARENT PARTIES

Except as disclosed in writing in the disclosure letter (which letter shall in each case specifically identify by reference to sections of this Agreement any exceptions to each of the representations, warranties and covenants contained in this Agreement) supplied by the Parent Parties to the Company dated as of the date hereof and certified by a duly authorized executive officer of each of the Parent Parties (the "**Parent Disclosure Letter**"), the Parent Parties represent and warrant to the Company as follows:

3.1 *Organization; Standing and Power; Charter Documents; Subsidiaries.*

(a) *Organization; Standing and Power.* Each of the Parent Parties (i) is a corporation or, in the case of Merger Sub 2, a limited liability company, duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, (ii) has the requisite power and authority to own, lease and operate its properties and to carry on its business as now being conducted, and (iii) is duly qualified or licensed and in good standing to do business in each jurisdiction in which the nature of its business or the ownership or leasing of its properties makes such qualification or licensing necessary, other than in such jurisdictions where the failure to so qualify or to be in good standing, individually or in the aggregate, would not reasonably be expected to have a Parent Material Adverse Effect.

(b) *Charter Documents.* Parent has delivered or made available to the Company a true and correct copy of (i) the Certificate of Incorporation (including any Certificate of Designations) and the Bylaws of Parent, each as amended to date (collectively, the "**Parent Charter Documents**") and (ii) the certificate of incorporation and bylaws, or like organizational documents of Merger Sub 1 (collectively, the "**Merger Sub 1 Charter Documents**"), and each such instrument is in full force and effect. Parent is not in violation of any of the provisions of the Parent Charter Documents and Merger Sub 1 is not in violation of any of the provisions of the Merger Sub 1 Charter Documents.

(c) *Minutes.* Parent has made available to the Company and its representatives true and complete copies of the minutes (or, in the case of minutes that have not yet been finalized, a brief summary of the meeting, including in each case a summary of any resolutions adopted by the Board of Directors of Parent) of all meetings of the stockholders, the Board of Directors and each committee of the Board of Directors of Parent held since September 30, 2005.

(d) *Significant Subsidiaries.* As of the date of this Agreement, Parent has no Significant Subsidiaries (as defined in Rule 1.02 of Regulation of S-X of the SEC).

3.2 *Capital Structure.*

(a) *Capital Stock.*

(i) The authorized capital stock of Parent consists of: (i) 200,000,000 shares of Parent Common Stock, par value $0.001 per share and (ii) 5,000,000 shares of preferred stock, par value $0.001 per share (the "**Parent Preferred Stock**"). At the close of business on September 15, 2008: (i) 94,929,774 shares of Parent Common Stock were issued and outstanding, excluding shares of Parent Common Stock held by Parent in its treasury, (ii) 6,607,905 shares of Parent Common Stock were issued and held by Parent in its treasury, and (iii) no shares of Parent Preferred Stock were issued and outstanding.

(ii) All of the outstanding shares of capital stock of Parent are, and all shares of capital stock of Parent which may be issued as contemplated or permitted by this Agreement will be,

when issued, duly authorized and validly issued, fully paid and nonassessable and not subject to any preemptive rights.

(b) *Stock Options.*

(i) As of the close of business on September 15, 2008: (i) 3,422,856 shares of Parent Common Stock were subject to issuance pursuant to outstanding options to purchase Parent Common Stock under the stock option, stock award, stock appreciation or phantom stock plans of Parent (the "**Parent Stock Plans**") (the "**Parent Options**"), (ii) 2,140,870 shares of Parent Common Stock were reserved for future issuance pursuant to Parent Options available for grant under the Parent Stock Plans, (iii) 73,029 shares of Parent Common Stock are reserved for future issuance under the employee stock purchase plan of Parent and (iv) no shares of Parent Common Stock are subject to issuance pursuant to outstanding options or rights to purchase Parent Common Stock issued other than pursuant to the Parent Stock Plans and the Parent employee stock purchase plan. Since the close of business on September 15, 2008 through the execution of this Agreement, no Parent Options have been granted and no shares of Parent Common Stock have been reserved for future issuance pursuant to Parent Options or other equity-based awards available for grant under the Parent Stock Plans. There are no outstanding or authorized stock appreciation, phantom stock or other similar rights (whether payable in stock, cash or other property) with respect to Parent.

(ii) All shares of Parent Common Stock subject to issuance as aforesaid, upon issuance on the terms and conditions specified in the instruments pursuant to which they are issuable, would be duly authorized, validly issued, fully paid and nonassessable.

(c) *Voting Debt*. No Voting Debt of Parent is issued or outstanding as of the date hereof.

(d) *Other Securities.*

(i) Except as otherwise set forth in **Section 3.2(a)(i) and Section 3.2(b)(i)** of the Parent Disclosure Letter, as the date hereof, there are no securities, options, warrants, calls, rights, contracts, commitments, agreements, instruments, arrangements, understandings, obligations or undertakings of any kind to which Parent is a party or by which Parent is bound obligating it to (including on a deferred basis) issue, deliver or sell, or cause to be issued, delivered or sold, additional shares of capital stock, Voting Debt or other voting securities of Parent, or obligating Parent to issue, grant, extend or enter into any such security, option, warrant, call, right, commitment, agreement, instrument, arrangement, understanding, obligation or undertaking.

(ii) All outstanding shares of Parent Common Stock and all outstanding Parent Options have been issued and granted in compliance in all material respects with (i) all applicable securities laws and all other applicable Legal Requirements and (ii) all requirements set forth in applicable material Contracts.

(e) *Merger Sub 1 Capital Stock.* The authorized capital stock of Merger Sub 1 consists of 1,000 shares of common stock, par value $0.001 per share, of which 1,000 shares are issued and outstanding. Parent is the sole stockholder of Merger Sub 1 and is the legal and beneficial owner of all 1,000 issued and outstanding shares. Merger Sub 1 was formed by counsel to Parent at the direction of Parent solely for purposes of effecting Merger 1 and the other transactions contemplated hereby. Except as contemplated by this Agreement, Merger Sub 1 does not hold, nor has it held, any material assets or incurred any material liabilities nor has Merger Sub 1 carried on any business activities other than in connection with Merger 1 and the transactions contemplated by this Agreement. All of the outstanding shares of capital stock of Merger Sub 1 have been duly authorized and validly issued, and are fully paid and nonassessable and not subject to any preemptive rights.

3.3 *Authority; Non-Contravention; Necessary Consents.*

(a) *Authority.* Each of the Parent and Merger Sub 1 has all requisite corporate power and authority to enter into this Agreement and the CVR Agreement and to consummate the transactions contemplated hereby and thereby. Merger Sub 2 has all requisite power and authority to enter into this Agreement and to consummate the transactions contemplated hereby. The execution and delivery of this Agreement and the CVR Agreement and the consummation of the transactions contemplated hereby and thereby have been duly authorized by all necessary corporate action on the part of Parent and Merger Sub 1 and no other corporate proceedings on the part of Parent or Merger Sub 1 are necessary to authorize the execution and delivery of this Agreement and the CVR Agreement or to consummate Merger 1 and the other transactions contemplated hereby and thereby, subject only to the filing of the Certificate of Merger 1 pursuant to the DGCL. The execution and delivery of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all necessary action on the part of Merger Sub 2 and no other proceedings on the part of Merger Sub 2 are necessary to authorize the execution and delivery of this Agreement or to consummate Merger 2 and the other transactions contemplated hereby, subject only to the filing of the Certificate of Merger 2 pursuant to the LLC Act. This Agreement has been duly executed and delivered by the Parent Parties and, assuming due authorization, execution and delivery by the Company constitutes a valid and binding obligation of the Parent Parties, enforceable against the Parent Parties in accordance with their terms except as such enforceability may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting creditors generally and by general equitable principles (regardless of whether such enforceability is considered in a proceeding in equity or at law).

(b) *Non-Contravention.* The execution and delivery of this Agreement by the Parent Parties and the execution and delivery of the CVR Agreement by Parent do not, and the performance of this Agreement by the Parent Parties and the performance of the CVR Agreement by Parent, will not: (i) conflict with or violate the Parent Charter Documents, the Merger Sub 1 Charter Documents or the Merger Sub 2 Charter Documents, as applicable, (ii) subject to compliance with the requirements set forth in **Section 3.3(c)** , conflict with or violate any material Legal Requirements applicable to the Parent Parties or by which any of the Parent Parties or any of their respective properties is bound or affected, or (iii) result in any breach of or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or materially impair any of the Parent Parties' rights or materially alter the rights or obligations of any third party under, or give to others any rights of termination, amendment, acceleration or cancellation of, or result in the creation of a Lien on any of the properties or assets of Parent pursuant to, any Contract to which Parent is a party except, as to clauses (ii) and (iii), respectively, for any such conflicts, violations, breaches, defaults or other occurrences which would not, individually or in the aggregate, reasonably be expected to have a Parent Material Adverse Effect. **Section 3.3(b)** of the Parent Disclosure Letter lists all consents, waivers and approvals under any of Parent's Contracts required to be obtained in connection with the consummation of the transactions contemplated hereby, which, if individually or in the aggregate not obtained, would result in a Parent Material Adverse Effect.

(c) *Necessary Consents.* (A) No consent, approval, order or authorization of, or registration, declaration or filing with any Governmental Entity is required to be obtained or made by Parent or Merger Sub 1 in connection with the execution and delivery of this Agreement or the CVR Agreement or the consummation of Merger 1 and other transactions contemplated hereby, and (B) no consent, approval, order or authorization of, or registration, declaration or filing with, any Governmental Entity is required to be obtained or made by Merger Sub 2 in connection with the execution and delivery of this Agreement or the consummation of Merger 2 and other transactions

contemplated hereby, in each case, except: (i) the filing of the Certificates of Merger with the Secretary of State of the State of Delaware and appropriate documents with the relevant authorities of other states in which the Company and/or Parent are qualified to do business, (ii) the effectiveness of the Registration Statement, (iii) such consents, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable federal, foreign and state securities (or related) laws and HSR Act and satisfaction of such other requirements of the comparable applicable laws of other jurisdictions, (iv) such consents, approvals, orders, authorizations, registrations, declarations and filings as may be required under applicable state securities or "blue sky" laws and the securities laws of any foreign country and (v) such other consents, orders, authorizations, filings, declarations, approvals and registrations which if not obtained or made would materially adversely affect the ability of the parties hereto to consummate the Mergers within the time frame in which the Mergers would otherwise be consummated in the absence of the need for such consent, approval, order, authorization, registration, declaration or filings.

3.4 *SEC Filings; Financial Statements. SEC Filings*. Parent has filed all required registration statements, prospectuses, reports, schedules, forms, statements and other documents (including exhibits and all other information incorporated by reference) required to be filed by it with the SEC since January 1, 2006. Parent has made available to the Company all such registration statements, prospectuses, reports, schedules, forms, statements and other documents in the form filed with the SEC. All such required registration statements, prospectuses, reports, schedules, forms, statements and other documents (including those that Parent may file subsequent to the date hereof) are referred to herein as the "**Parent SEC Reports**." As of their respective dates, or, if amended or supplemented prior to the date of this Agreement, as of the date of such amendment or supplement, each Parent SEC Report (i) complied in all material respects with the requirements of the Securities Act, or the Exchange Act, as the case may be, and the rules and regulations of the SEC promulgated thereunder applicable to such Parent SEC Reports and (ii) did not at the time it was filed (or became effective in the case of a registration statement), or if amended, supplemented or superseded by a filing prior to the date of this Agreement then on the date of such superseding filing, amendment or supplement, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. None of Parent's Subsidiaries is required to file any forms, reports or other documents with the SEC.

(b) *Financial Statements.* Each of the consolidated financial statements (including, in each case, any related notes thereto) contained in the Parent SEC Reports (the "**Parent Financials**"), as amended or supplemented prior to the date of this Agreement, if applicable, including each Parent SEC Report filed after the date hereof until the Closing: (i) was prepared in accordance with GAAP applied on a consistent basis throughout the periods involved (except as may be indicated in the notes thereto or, in the case of unaudited interim financial statements, as may be permitted by the SEC on Form 10-Q, 8-K or any successor forms under the Exchange Act), and (ii) fairly presented in all material respects the consolidated financial position of Parent and its consolidated Subsidiaries as at the respective dates thereof and the consolidated results of Parent's operations and cash flows for the periods indicated, except that the unaudited interim financial statements were or are subject to normal year end adjustments which were not, or are not expected to be, material in amount to Parent and its Subsidiaries, taken as a whole. The balance sheet of Parent dated as of June 30, 2008 contained in the Company SEC Reports filed with the SEC on August 5, 2008 is hereinafter referred to as the "**Parent Balance Sheet**." Except as disclosed in the Parent Financials, neither Parent nor any of its Subsidiaries has any liabilities (absolute, accrued, contingent or otherwise) of a nature required to be reflected or reserved against on a consolidated balance sheet or in the related notes to the consolidated financial statements prepared in accordance with GAAP, except for liabilities or obligations (1) under this Agreement or incurred in

connection with the transactions contemplated hereby, (2) incurred in the ordinary course of business since June 30, 2008, or (3) that would not, individually or in the aggregate, reasonably be expected to have a Parent Material Adverse Effect.

3.5 *Absence of Certain Changes or Events.* Since the date of the Parent Balance Sheet, there has not been any Parent Material Adverse Effect. During the period from the date of the Parent Balance Sheet to the date hereof, there has not been: (i) any declaration, setting aside or payment of any dividend on, or other distribution (whether in cash, stock or property) in respect of, any of Parent's capital stock, or any purchase, redemption or other acquisition by Parent of any of Parent's capital stock or any other securities of Parent or any options, warrants, calls or rights to acquire any such shares or other securities except for repurchases from Employees following their termination pursuant to the terms of their pre-existing stock option or purchase agreements, or (ii) any split, combination or reclassification of any of Parent's capital stock.

3.6 *Compliance.* Parent is not in conflict with, or in default or in violation of, any Legal Requirement applicable to Parent or by which Parent or any of its business or properties is, or Parent believes is reasonably likely to be, bound or affected, or any material Contract, permit, franchise or other instrument or obligation to which Parent is a party or by which Parent or any of its business or properties is bound or affected except for those conflicts, defaults or violations that would not, individually or in the aggregate, reasonably be expected to have a Parent Material Adverse Effect. Except as set forth in the Parent SEC Reports, no material investigation or review by any Governmental Entity is pending or, to the Knowledge of Parent, has been threatened, against Parent. There is no judgment, injunction, order or decree binding upon Parent which has or would reasonably be expected to have the effect of prohibiting or materially impairing any business practice of Parent, any acquisition of material property by Parent or the conduct of business by Parent as currently conducted, except as would not have a Parent Material Adverse Effect.

3.7 *Litigation.* There are no claims, suits, actions, judgments or proceedings pending or, to the Knowledge of Parent, threatened against Parent, before any court, governmental department, commission, agency, instrumentality or authority, or any arbitrator that seeks to (a) restrain or enjoin the consummation of the transactions contemplated hereby or (b) which would reasonably be expected, either singularly or in the aggregate with all such claims, actions, judgments or proceedings, to have a Parent Material Adverse Effect.

3.8 *Disclosure.* None of the information supplied or to be supplied by or on behalf of Parent or Merger Sub 1 for inclusion or incorporation by reference in the Registration Statement will, at the time the Registration Statement becomes effective under the Securities Act, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading. None of the information supplied or to be supplied by or on behalf of Parent or Merger Sub 1 for inclusion or incorporation by reference in the Proxy Statement will, at the time the Proxy Statement is mailed to the stockholders of the Company, at the time of the Company Stockholders' Meeting or as of the Merger 1 Effective Time, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading.

3.9 *Board Approval.* The Board of Directors of Parent, by resolutions duly adopted by unanimous vote at a meeting of the Board of Directors of Parent duly called and held and not subsequently rescinded or modified in any way prior to the date hereof, has duly approved this Agreement and the transactions contemplated hereby, including the Mergers. Parent, as the sole stockholder of Merger Sub 1 and the sole managing member of Merger Sub 2, has adopted this Agreement and such adoption has not been subsequently rescinded or modified in any way.

3.10 *Company Stock.* Each of the Parent Parties is not, nor at any time during the last three years prior to the date of this Agreement has it been, an "interested stockholder" of the Company as defined in Section 203 of the Delaware General Corporation Law. As of the date of this Agreement, each of the Parent Parties does not own (directly or indirectly, beneficially or of record) and is not a party to any agreement, arrangement or understanding for the purpose of acquiring, holding, voting or disposing of, in each case, any shares of capital stock of the Company (other than as contemplated by this Agreement).

3.11 *Reorganization Treatment.* None of Parent, Merger Sub 1 or Merger Sub 2 or, to the Knowledge of Parent, any of Parent's affiliates has taken or agreed to take any action that would prevent the Mergers, taken together, from qualifying as a reorganization within the meaning of Section 368(a) of the Code. Parent is not aware of any agreement, plan or other circumstance that would prevent the Mergers, taken together, from qualifying as a reorganization within the meaning of Section 368(a) of the Code.

3.12 *Parent Scheduled Contracts.* All Parent Scheduled Contracts are valid and in full force and effect except to the extent they have previously expired in accordance with their terms or if the failure to be in full force and effect, individually or in the aggregate, would not reasonably be expected to be material to Parent and its Subsidiaries, taken as a whole. For purposes of this Agreement, "**Parent Scheduled Contracts**" shall mean (i) that certain Research, Development and License Agreement, dated December 29, 1994, between Parent and SmithKline Beecham Corporation, as amended, (ii) that certain Agreement dated May 1, 1991, between Parent and Pfizer Inc., as amended, and (iii) that certain Amended and Restated Research, Development and License Agreement dated as of December 1, 2005 between Parent and Wyeth, as amended. To the Knowledge of Parent, neither Parent nor any of its Subsidiaries is currently in violation of any provision of, or is currently committing or failing to perform any act which, with or without notice, lapse of time or both would constitute a default under the provisions of, any Parent Scheduled Contract, except in each case for those violations and defaults which, individually or in the aggregate, would not reasonably be material to Parent and its Subsidiaries, taken as a whole. Neither Parent nor any of its Subsidiaries has received any unresolved notification from any counterparty to the Parent Scheduled Contracts that it is currently in violation of any provision of, or is currently committing or failing to perform any act which, with or without notice, lapse of time or both, would constitute a default under the provisions of, any Parent Scheduled Contract.

ARTICLE IV
CONDUCT BY THE COMPANY PRIOR TO THE MERGER 1 EFFECTIVE TIME

4.1 *Conduct of Business by the Company.*

(a) *Ordinary Course.* During the period from the date hereof and continuing until the earlier of the termination of this Agreement pursuant to its terms or the Merger 1 Effective Time, the Company and each of its Subsidiaries shall, except as otherwise expressly contemplated by this Agreement, to the extent that Parent shall otherwise consent in writing (including by electronic mail), or as required by applicable Legal Requirements, (i) carry on its business in the usual, regular and ordinary course, in substantially the same manner as heretofore conducted, (ii) pay its material debts and Taxes when due and pay or perform other material obligations when due, in each case except with respect to those being contested in good faith by appropriate proceedings, and (iii) use commercially reasonable efforts consistent with past practices and policies to (x) preserve substantially intact its present business organization, (y) keep available the services of its present executive officers and Employees, and (z) preserve substantially intact its relationships with suppliers, licensors, licensees, and others with which it has material business dealings.

(b) *Required Consent.* In addition, without limiting the generality of **Section 4.1(a)**, except as permitted by the terms of this Agreement, and except as provided in **Article IV** of the Company Disclosure Letter or as required by applicable Legal Requirements or the regulations or requirements of Nasdaq, during the period from the date hereof and continuing until the earlier of the termination of this Agreement pursuant to its terms or the Merger 1 Effective Time, the Company shall not do any of the following, and shall not permit any of its Subsidiaries to do any of the following, without the prior written consent of Parent (including by electronic mail) (which consent shall not be unreasonably withheld or delayed with respect to those actions prohibited by subsection (xxi)):

(i) Enter into any new line of business;

(ii) Declare, set aside or pay any dividends on or make any other distributions (whether in cash, stock, equity securities or property) in respect of any capital stock or split, combine or reclassify any capital stock or issue or authorize the issuance of any other securities in respect of, in lieu of or in substitution for any capital stock, other than any such transaction by a wholly-owned Subsidiary of it that remains a wholly-owned Subsidiary of it after consummation of such transaction in the ordinary course of business;

(iii) Purchase, redeem or otherwise acquire, directly or indirectly, any shares of its capital stock or the capital stock of its Subsidiaries, other than repurchases of unvested shares at cost or for *de minimis* consideration in connection with either the termination of the employment relationship with any employee or upon the resignation of any director or consultant, in each case, pursuant to stock option or purchase agreements in effect on the date hereof;

(iv) Issue, deliver, sell, authorize, pledge or otherwise encumber any shares of capital stock, Voting Debt or any securities convertible into shares of capital stock or Voting Debt, or subscriptions, rights, warrants or options to acquire any shares of capital stock or Voting Debt or any securities convertible into shares of capital stock or Voting Debt, or enter into other agreements or commitments of any character obligating it to issue any such securities or rights, other than issuances of Company Common Stock upon the exercise of Company Options, warrants or other rights of the Company existing on the date hereof in accordance with their present terms;

(v) Cause, permit or propose any amendments to the Company Charter Documents or any of the Subsidiary Charter Documents of the Company's Subsidiaries;

(vi) Acquire or agree to acquire by merging or consolidating with, or by purchasing any equity or voting interest in or a portion of the assets of, or by any other manner, any business or any Person or division thereof, or otherwise acquire or agree to acquire any assets which are material, individually or in the aggregate, to the business of the Company and its Subsidiaries, taken as a whole;

(vii) Enter into any binding agreement, agreement in principle, letter of intent, memorandum of understanding or similar agreement with respect to any material joint venture, strategic partnership, collaboration, license or alliance;

(viii) Sell, lease, license, encumber or otherwise dispose of any properties or assets except (A) the sale, lease or disposition (other than through licensing) of property or assets which are not material, individually or in the aggregate to the business of the Company and its Subsidiaries, taken as a whole, or (B) perpetual licenses of the Company's products or product candidates in the ordinary course of business consistent with past practice having no material support, maintenance or service obligations other than those obligations that are terminable by

the Company or any of its Subsidiaries upon no more than one (1) year notice without liability or financial obligation to the Company or its Subsidiaries;

(ix) Make any loans, advances or capital contributions to, or investments in, any other Person, other than: (A) loans or investments by it or a wholly-owned Subsidiary of it to or in it or any wholly-owned Subsidiary of it, or (B) employee loans or advances made in the ordinary course of business consistent with past practices;

(x) Except as required by GAAP, make any material change in its methods or principles of accounting since the date of the Company Balance Sheet;

(xi) Except as required by Tax law or other applicable Legal Requirements, adopt or change any material Tax accounting method, change any Tax accounting period, make or change any material Tax election, file any amended Tax Return, settle or compromise any material Tax liability or claims, agree to an extension or waiver of the statute of limitations with respect to the assessment or determination of Taxes, enter into any Tax indemnity, Tax allocation or Tax sharing agreement, enter into any private letter ruling, closing agreement, or similar ruling or agreement with respect to any Tax or surrender any right to claim a Tax refund; provided, however, that if any of the foregoing actions in this Section 4.1(b)(xi) is required by any Tax law or other applicable Legal Requirements, the Company shall promptly provide Parent with written notification (including by electronic mail) of such action;

(xii) Amend or modify, or propose to amend or modify, or otherwise take any action under, the Company Rights Agreement;

(xiii) Revalue any of its assets or make any change in accounting methods, principles or practices, other than as required by GAAP or by a Governmental Entity;

(xiv) (A) Pay, discharge, settle or satisfy any material claims, liabilities or obligations (absolute, accrued, asserted or unasserted, contingent or otherwise), or litigation (whether or not commenced prior to the date of this Agreement), other than the payment, discharge, settlement, or satisfaction for money, of claims, liabilities, obligations or litigation (x) to the extent subject to reserves on the Company Financials existing as of the date hereof in accordance with GAAP, (y) that are accounts payable incurred in the ordinary course of business for goods and services or (z) otherwise in the ordinary course of business consistent with past practice or in accordance with their terms, of claims not in excess of $50,000 individually or $500,000 in the aggregate, provided, that with respect to any matter under this clause (A) that requires Parent's consent, such consent shall not be unreasonably withheld, conditioned or delayed, or (B) waive the benefits of, agree to modify in any manner materially adverse to the Company, terminate, release any person from or knowingly fail to enforce any material confidentiality or similar agreement to which Company or any of its Subsidiaries is a party or of which Company or any of its Subsidiaries is a beneficiary;

(xv) Except as required by Legal Requirements or as required by any Company Employee Plan or Employee Agreement in existence as of the date hereof and as set forth in **Section 2.12(a)** of the Company Disclosure Letter or in accordance with Section 4.1(a) above, (1) increase in any manner the amount of compensation or fringe benefits of, pay any bonus or special remuneration (cash, equity or otherwise) to or grant severance or termination pay to any Employee, consultant or director of the Company or any Subsidiary of the Company (other than salary increases and bonuses, in each case, made in the ordinary course of business consistent with past practice with respect to Employees who are not executive officers of the Company or directors of the Company), (2) make any increase in or commitment to increase the benefits payable under or the Company's obligations with respect to any Company Employee Plan or Employee Agreement (including any severance plan), adopt or

amend or make any commitment to adopt or amend any Company Employee Plan or Employee Agreement or make any contribution, other than regularly scheduled contributions or contributions required by the terms of the Company Employee Plan as in effect as of the date hereof, to any Company Employee Plan, (3) except as otherwise provided herein, waive any stock repurchase rights, accelerate, amend or change the vesting terms or the period of exercisability of Company Options, or reprice any Company Options or authorize cash payments in exchange for any Company Options, (4) enter into any employment, severance, termination or indemnification agreement with any Employee or enter into any collective bargaining agreement, (other than offer letters and letter agreements entered into in the ordinary course of business consistent with past practice with Employees who are terminable "at will" without the Company or its Subsidiaries incurring any material liability or financial obligation and who are not executive officers), (5) make any material oral or written commitment with respect to any material aspect of any Company Employee Plan or Employee Agreement that is not in accordance with the existing written terms and provision of such Company Employee Plan or Employee Agreement, (6) grant any stock appreciation right, phantom stock award, stock-related award or performance award (whether payable in cash, shares or otherwise) to any Person (including any Employee), or (7) enter into any agreement with any Employee the benefits of which are (in whole or in part) contingent or the terms of which are materially altered upon the occurrence of a transaction involving the Company of the nature contemplated hereby;

(xvi) Grant any exclusive rights with respect to any material Company Intellectual Property;

(xvii) Enter into, or renew, any Contracts containing, or otherwise subject the Intermediate Surviving Corporation, the Surviving Entity or Parent to, any non-competition, exclusivity or other material restrictions on the Company, the Intermediate Surviving Corporation, the Surviving Entity or Parent, or any of their respective businesses following the Closing;

(xviii) Enter into any agreement or commitment the effect of which would be to grant to a third party following Merger 1 any actual or potential right of license to any material Intellectual Property owned by Parent or any of its Subsidiaries (excluding for the avoidance of doubt, the Company and its Subsidiaries);

(xix) Take or fail to take, or agree to take or fail to take, any action that would prevent the Mergers, taken together, from qualifying as a "reorganization" within the meaning of Section 368(a) of the Code;

(xx) Hire employees other than in the ordinary course of business;

(xxi) Terminate any Employees of the Company or its Subsidiaries or take actions that are reasonably calculated to cause any Employees of the Company or its Subsidiaries to resign, in each case other than (x) in the ordinary course of business or (y) for cause or poor performance (in either case in accordance with the Company's past practices);

(xxii) Make any representations or issue any communications (including electronic communications) to Employees that are inconsistent with this Agreement or the transactions contemplated hereby, including any representations regarding offers of employment or other benefits from Parent;

(xxiii) Incur any indebtedness for borrowed money or guarantee any such indebtedness of another Person, issue or sell any debt securities or options, warrants, calls or other rights to acquire any debt securities of the Company or any of its Subsidiaries, guarantee any debt securities of another Person, enter into any "keep well" or other agreement to maintain any

financial statement condition of any other Person (other than any wholly-owned Subsidiary of it) or enter into any arrangement having the economic effect of any of the foregoing;

(xxiv) Make any individual or series of related payments in excess of $50,000 outside of the ordinary course of business or make or commit to make any capital expenditures in excess of $25,000, except in each case as otherwise required by a pre-existing contractual obligation.

(xxv) Modify or amend in a manner adverse in any material respect to the Company, or terminate any Company Scheduled Contract currently in effect, or waive, release or assign any material rights or claims thereunder, in each case, in a manner adverse in any material respect to the Company, other than any modification, amendment or termination of any such Company Scheduled Contract in the ordinary course of business, consistent with past practice;

(xxvi) take any action to exempt or make not subject to (i) the provisions of Section 203 of the DGCL; (ii) any other state takeover law or state law that purports to limit or restrict business combinations or the ability to acquire or vote shares or (iii) the Company Rights Agreement, any Person (other than Parent, Merger Sub 1 and any other Subsidiary of Parent) or any action taken thereby, which Person or action would have otherwise been subject to the restrictive provisions thereof and not exempt therefrom;

(xxvii) Enter into any Contract requiring the Company or any of its Subsidiaries to pay in excess of an aggregate of $100,000; or

(xxviii) Agree in writing or otherwise to take any of the actions described in (i) through (xxvii) above.

For the avoidance of doubt, and notwithstanding anything to the contrary herein, none of the foregoing restrictions in (i) through (xxviii) above shall in any way limit the Company's ability to perform its obligations under Section 1.6(e) and Section 1.6(f) of this Agreement.

ARTICLE V
ADDITIONAL AGREEMENTS

5.1 *Proxy Statement; Registration Statement.* As promptly as practicable after the execution of this Agreement, and in any event within thirty (30) days of the date of the Agreement, the Company will prepare the Proxy Statement, and Parent will prepare and file with the SEC the Registration Statement in which the Proxy Statement will be included as a prospectus. Each of Parent and the Company shall provide promptly to the other such information concerning its business affairs and financial statements as, in the reasonable judgment of the providing party or its counsel, may be required or appropriate for inclusion in the Proxy Statement and the Registration Statement pursuant to this **Section 5.1**, or in any amendments or supplements thereto, and shall cause its counsel and auditors to cooperate with the other's counsel and auditors in the preparation of the Proxy Statement and the Registration Statement. Each of Parent and the Company will respond to any comments from the SEC, and will use all reasonable efforts to cause the Registration Statement to be declared effective under the Securities Act as promptly as practicable (but in no event prior to such time as all waiting periods (and any extensions thereof) under the HSR Act and other applicable laws relating to the transactions contemplated hereby expire or terminate early and any objections raised by any Governmental Entity with respect to the transactions contemplated hereby have been resolved), and to keep the Registration Statement effective as long as is necessary to consummate the Mergers and the transactions contemplated hereby. Parent shall furnish all information concerning it and the holders of its capital stock as the Company may reasonably request in connection with the preparation of the Proxy Statement. Each of Parent and the Company will notify the other promptly upon the receipt of any comments from the SEC or its staff in connection with the filing of, or amendments or supplements to, the Registration Statement and/or the Proxy Statement. Parent shall promptly inform the Company if, at any time prior to the Merger 1

Effective Time, any event or circumstance relating to Parent, any Subsidiary of Parent or Merger Sub 1, or any of their respective officers or directors, is discovered by Parent that should be set forth in an amendment or a supplement to the Proxy Statement or the Registration Statement. The Company shall promptly inform Parent if, at any time prior to the Merger 1 Effective Time, any event or circumstance relating to the Company or any Subsidiary of the Company, or any of their respective officers or directors, is discovered by the Company that should be set forth in an amendment or a supplement to the Proxy Statement or the Registration Statement. Except in connection with any Change in Recommendation in accordance with **Section 5.3(d)** hereof and other than pursuant to Rule 425 of the Securities Act with respect to releases made in compliance with **Section 5.5** of this Agreement, no amendment or supplement to the Proxy Statement or the Registration Statement, nor any response to any comments or inquiry from the SEC with respect to such filings, will be made by the Company or Parent without the approval of the other party, which approval shall not be unreasonably withheld, conditioned or delayed (it being understood that it shall be unreasonable to withhold consent with respect to any amendment or supplement to the Proxy Statement or Registration Statement to the extent such amendment or supplement is required to be included therein so that the Proxy Statement or Registration Statement will not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they are made, not misleading as may be required by Rule 10b-5 or Rule 14a9 under the Exchange Act or Section 11 or Section 12 of the Securities Act); provided, however, that the Company shall not make a Change of Recommendation except in accordance with the terms of **Section 5.3(d)**. The Company and Parent each will advise the other promptly after it receives notice of the time when the Registration Statement has become effective or any supplement or amendment has been filed, of the issuance of any stop order, the suspension of the qualification of the Parent Common Stock issuable in connection with Merger 1 for offering or sale in any jurisdiction, or any request by the SEC for amendment of the Proxy Statement or the Registration Statement or comments thereon and responses thereto or requests by the SEC for additional information. Each of the parties hereto shall cause the Proxy Statement and the Registration Statement to comply as to form and substance as to such party in all material respects with the applicable requirements of (i) the Exchange Act, (ii) the Securities Act, and (iii) the rules and regulations of Nasdaq.

5.2 *Meeting of Company Stockholders; Board Recommendation.*

(a) *Meeting of Company Stockholders.* After the Registration Statement is declared effective under the Securities Act, in accordance with **Section 5.1** hereof, the Company will take all action necessary in accordance with Delaware Law and the Company Charter Documents to cause the Proxy Statement (and/or any amendment or supplement thereto) to be mailed to its stockholders and to call, hold and convene the Company Stockholders' Meeting to consider the adoption of this Agreement (the "**Company Stockholders' Meeting**") to be held as promptly as practicable after the date upon which all of the following have occurred: (A) the Registration Statement becomes effective and (B) all waiting periods (and any extensions thereof) under the HSR Act and other applicable laws relating to the transactions contemplated hereby expire or terminate early and any objections raised by any Governmental Entity with respect to the transactions contemplated hereby have been resolved (it being the intent of the parties that such meetings shall be held not later than forty-five (45) days after satisfaction of both clauses (A) and (B) except to the extent prohibited by applicable Legal Requirements). Notwithstanding anything to the contrary contained in this Agreement, the Company may adjourn or postpone the Company Stockholders' Meeting to the extent necessary to ensure that any necessary supplement or amendment to the Proxy Statement is provided to its stockholders in advance of the vote to be taken at such meeting or, if as of the time for which the Company Stockholders' Meeting is originally scheduled (as set forth in the Proxy Statement) there are insufficient shares of Company Common Stock represented (either in person or by proxy) to constitute a quorum necessary to conduct the business of such Stockholders' Meeting. The Company shall ensure that the Company Stockholders' Meeting is

called, noticed, convened, held and conducted, and that all proxies solicited by it in connection with the Company Stockholders' Meeting are solicited, in compliance with Delaware Law, the Company Charter Documents, the rules of Nasdaq and all other applicable Legal Requirements.

(b) *Board Recommendation.* Except to the extent expressly permitted by **Section 5.3(d)**: (i) the Board of Directors of the Company shall recommend that its stockholders vote in favor of adoption of this Agreement at the Company Stockholders' Meeting (the "**Board Recommendation**") and shall reaffirm (publicly, if so requested) the Board Recommendation within ten (10) calendar days after Parent requests in writing that such recommendation be reaffirmed, (ii) the Proxy Statement shall include a statement to the effect that the Board of Directors of the Company has made the Board Recommendation, and (iii) neither the Board of Directors of the Company nor any committee of it, shall withdraw, amend or modify, or propose or resolve to withdraw, amend or modify in a manner adverse to Parent, the Board Recommendation.

5.3 *Acquisition Proposals.*

(a) *No Solicitation.* The Company agrees that neither it nor any of its Subsidiaries nor any of the officers and directors of it or its Subsidiaries shall, and that it shall not authorize or permit any of its and its Subsidiaries' Employees, agents and representatives (including any investment banker, attorney or accountant retained by it or any of its Subsidiaries) to (and shall not authorize any of them to) directly or indirectly: (i) solicit or initiate, or knowingly facilitate, encourage or induce, any inquiry with respect to, or the making, submission or announcement of, any Acquisition Proposal, (ii) subject to **Section 5.3(c)**, participate in any discussions or negotiations with, or furnish any nonpublic information with respect to (x) an Acquisition Proposal or (y) any inquiry or proposal that would be reasonably expected to result in an Acquisition Proposal, (iii) approve, endorse or recommend any Acquisition Proposal (except to the extent specifically permitted pursuant to **Section 5.3(d)**), (iv) withdraw or modify the Board Recommendation in a manner adverse to Parent (except to the extent specifically permitted pursuant to **Section 5.3(d)**) or (v) except for any confidentiality agreement entered into pursuant to **Section 5.3(c)(i)**, enter into any letter of intent or similar document or any contract agreement or commitment contemplating or otherwise relating to any Acquisition Proposal or transaction contemplated thereby (except to the extent specifically permitted pursuant to **Section 5.3(d)**). The Company and its Subsidiaries will immediately cease any and all existing activities, discussions or negotiations with any third parties conducted heretofore with respect to any Acquisition Proposal. The Company agrees that it will promptly request each Person that has entered into a confidentiality agreement with the Company in connection with its consideration of an Acquisition Proposal to return or destroy all confidential information heretofore furnished to such Person by or on behalf of the Company or any of its Subsidiaries, as the case may be.

(b) *Notification of Unsolicited Acquisition Proposals.*

(i) Within the greater of twenty-four (24) hours or one business day of (x) the receipt of any Acquisition Proposal or (y) any request for nonpublic information or inquiry (1) from any Person that has informed the Company (either directly or indirectly) that it is considering an Acquisition Proposal or (2) under circumstances where it would be reasonably expected that the non-public information being requested would be used for purposes of making an Acquisition Proposal, the Company shall provide Parent with oral and written notice of the material terms and conditions of such Acquisition Proposal, request or inquiry, and the identity of the Person or group making any such Acquisition Proposal, request or inquiry and a copy of all written materials provided to or from the Company in connection with such Acquisition Proposal (other than reverse diligence materials from the Person making the Acquisition Proposal and other than any materials previously provided to Parent), request or

inquiry and a description of the material oral terms of such Acquisition Proposal, request or inquiry. The Company shall, as promptly as practicable, keep Parent informed on a current basis of the material developments with respect to such Acquisition Proposal, request or inquiry and shall promptly (but in any event within the greater of twenty-four (24) hours or one (1) business day), provide Parent a copy of all written materials subsequently provided to or from the Company in connection with such Acquisition Proposal (other than reverse diligence materials from the Person making the Acquisition Proposal and other than any materials previously provided to Parent and except as described in clauses (x) and (y) of **Section 5.3(c)(i)**), request or inquiry and a description of the material oral terms of such Acquisition Proposal, request or inquiry.

(ii) The Company shall promptly, following a determination by its Board of Directors that an Acquisition Proposal is a Superior Offer, notify Parent of such determination.

(c) *Superior Offers.* Notwithstanding anything to the contrary contained in **Section 5.3(a)**, in the event that the Company receives an unsolicited, bona fide written Acquisition Proposal from a third party that its Board of Directors has in good faith concluded (after consultation with its outside legal counsel and its financial advisor), is, or would reasonably be expected to lead to, a Superior Offer, the Company may then take the following actions (but only if (i) such Acquisition Proposal did not arise (directly or indirectly) from a breach of **Section 5.3(a)** and (ii) the Board of Directors of the Company concludes in good faith, after consultation with outside legal counsel, that the failure to do so would reasonably be expected to result in a breach of its fiduciary obligations under applicable Legal Requirements):

(i) Furnish nonpublic information to the third party making such Acquisition Proposal, *provided* that (A) (1) within twenty-four (24) hours of furnishing any such nonpublic information to such party, the Company gives Parent written notice that it has (or intends to) furnish such nonpublic information and (2) the Company receives from the third party an executed confidentiality agreement containing standstill terms and limitations on the use and disclosure of information furnished to such third party on the Company's behalf, the terms of which are no less favorable to the Company than those contained in the Confidentiality Agreement and (B) within the same day as furnishing any such nonpublic information to such third party, the Company furnishes such nonpublic information to Parent (to the extent such nonpublic information has not been previously so furnished), except that (x) the Company may redact names of employees (other than officers) set forth in such information and (y) the Company shall not be required to provide such information if doing so would be inconsistent with any applicable antitrust Legal Requirement;

(ii) Engage in discussions or negotiations with the third party with respect to the Acquisition Proposal, *provided* that within twenty-four (24) hours of entering into discussions or negotiations with such third party, the Company gives Parent written notice that it has (or intends to) enter into discussions or negotiations with such third party; and

(iii) To the extent permitted pursuant to and in compliance with **Section 7.1(i)**, enter into a binding written agreement concerning a transaction that constitutes a Superior Offer.

(d) *Change of Recommendation.*

(i) At any time prior to adoption of this Agreement by the Required Company Stockholders, other than in connection with an Acquisition Proposal, the Board of Directors of the Company may take the actions prohibited by clause (iii) of **Section 5.2(b)** (and in each case modify accordingly the statement of the Company's Board of Directors included or to be included in the Proxy Statement pursuant to clause (ii) of **Section 5.2(b)**) if the Board of Directors of the Company determines in good faith (after consultation with its outside legal

counsel) that the failure to take such action would reasonably be expected to result in a breach of its fiduciary duties under applicable Legal Requirements; *provided*, *however*, that the Company shall have, at least three (3) days prior to taking such action, provided to Parent written notice which shall state expressly that the Company intends to take such action.

(ii) In response to the receipt of a Superior Offer, the Board of Directors of the Company may (A) withhold, withdraw, amend or modify the Board Recommendation, (B) approve, endorse or recommend any Acquisition Proposal, (C) to the extent permitted by **Section 7.1(i)**, enter into a binding written agreement concerning an Acquisition Proposal, and (D) in the case of a Superior Offer that is a tender or exchange offer made directly to its stockholders, may recommend that its stockholders accept the tender or exchange offer (and in each case modify accordingly the statement of the Company's Board of Directors included or to be included in the Proxy Statement pursuant to clause (ii) of **Section 5.2(b)**) (any of the foregoing actions in response to the receipt of a Superior Offer, whether by the Board of Directors of the Company or a committee thereof, a "**Change of Recommendation**"), if all of the following conditions in clauses (1) through (5) are met:

(1) A Superior Offer with respect to it has been made and has not been withdrawn;

(2) The Company Stockholders' Meeting has not occurred;

(3) The Company shall have (A) at least three (3) days prior to a Change of Recommendation, provided to Parent written notice which shall state expressly (1) that the Company has received such Superior Offer, (2) the material terms and conditions of such Superior Offer and the identity of the Person or group making the Superior Offer, and (3) that the Company intends to effect a Change of Recommendation and the manner in which it intends to do so, and (B) complied with its obligations pursuant to **Section 5.3(b)** and **Section 5.3(c)(i)** in connection with such Superior Offer;

(4) The Board of Directors of the Company has concluded in good faith, after consultation with its outside legal counsel, that, in light of such Superior Offer, the failure of the Board of Directors to effect a Change of Recommendation would reasonably be expected to result in a breach of fiduciary duties to its stockholders under applicable Legal Requirements; and

(5) The Company shall not have materially breached (directly or indirectly) any of the provisions set forth in **Section 5.2** or this **Section 5.3**, as applicable, with respect to obtaining such Superior Offer and which breach is continuing.

(e) *Continuing Obligation to Call, Hold and Convene Stockholders' Meeting; No Other Vote.* Notwithstanding anything to the contrary contained in this Agreement, (i) the obligation of the Company to call, give notice of, convene and hold the Company Stockholders' Meeting shall not be limited or otherwise affected by the commencement, disclosure, announcement or submission to it of any Acquisition Proposal or by any Change of Recommendation, and (ii) the Company shall not submit to the vote of its stockholders any Acquisition Proposal, unless and until this Agreement is terminated by the Company pursuant to Section 7.1(i).

(f) *Compliance with Tender Offer Rules.* Nothing contained in this Agreement shall prohibit the Company or its Board of Directors from taking and disclosing to its stockholders a position contemplated by Rules 14d-9 and 14e-2(a) promulgated under the Exchange Act or from making any "stop-look-and-listen" communication to the stockholders of the Company pursuant to Rule 14d 9(f) and the Exchange Act; *provided*, *however*, in each case, that the content of any such disclosure shall be governed by the terms of this Agreement. Without limiting the foregoing proviso, the Company shall not effect a Change of Recommendation unless specifically permitted pursuant to the terms of **Section 5.3(d)**.

(g) *Certain Definitions.* For purposes of this Agreement, the following terms shall have the following meanings:

(i) "**Acquisition Proposal**," with respect to the Company, shall mean any offer or proposal, relating to any transaction or series of related transactions involving: (A) any purchase from the Company or acquisition by any Person or "group" (as defined under Section 13(d) of the Exchange Act and the rules and regulations thereunder) of a twenty percent (20%) or more interest in the total outstanding voting securities of the Company, or any tender offer or exchange offer that if consummated would result in any Person or group beneficially owning twenty percent (20%) or more of the total outstanding voting securities of the Company, or any merger, consolidation, business combination, recapitalization or similar transaction involving the Company or any of its Subsidiaries that if consummated would result in the stockholders of the Company immediately preceding such transaction holding less than eighty percent (80%) of the equity interests in the surviving or resulting entity of such transaction or the resulting direct or indirect parent or subsidiary entity thereof as a result of such transaction, (B) any sale, lease (other than in the ordinary course of business), exchange, transfer, license (other than in the ordinary course of business), or disposition of twenty percent (20%) or more of the assets of the Company and its Subsidiaries taken as a whole (including pursuant to the sale of equity in any Subsidiary of the Company), or (C) any liquidation or dissolution of the Company (*provided*, *however*, the transactions contemplated hereby shall not be deemed an Acquisition Proposal); and

(ii) "**Superior Offer**," with respect to the Company, shall mean an unsolicited, bona fide written offer made by a third party to acquire, directly or indirectly, pursuant to a tender offer, exchange offer, merger, consolidation, business combination, recapitalization or similar transaction, all or substantially all of the assets of the Company or a majority of the total outstanding voting securities of the Company as a result of which the stockholders of the Company immediately preceding such transaction would hold less than fifty percent (50%) of the equity interests in the surviving or resulting entity of such transaction or any resulting direct or indirect parent or subsidiary entity thereof as a result of such transaction, on terms that the Board of Directors of the Company has in good faith concluded (after consultation with its outside legal counsel and its financial adviser), taking into account all aspects of such Acquisition Proposal, including, among other things, all legal, financial, regulatory and other aspects of the offer and the Person making the offer, would if consummated result in a transaction that is more favorable from a financial point of view to the Company's stockholders (in their capacities as stockholders) than the transactions contemplated by this Agreement and is reasonably capable of being consummated on the terms proposed.

5.4 *Confidentiality; Access to Information; No Modification of Representations, Warranties or Covenants.*

(a) *Confidentiality.* The parties acknowledge that the Company and Parent have previously executed a Confidentiality Agreement effective as of July 22, 2008 (the "**Confidentiality Agreement**"), which Confidentiality Agreement will continue in full force and effect in accordance with its terms and each of Parent and the Company will hold, and will use reasonable efforts to cause its respective directors, officers, Employees, agents and advisors (including attorneys, accountants, consultants, bankers and financial advisors) to comply with the terms and provisions of the Confidentiality Agreement.

(b) *Access to Information.* Except as would cause a waiver of the attorney-client privilege (*provided*, *however*, that the parties agree to use reasonable efforts to enter into a joint defense agreement if they determine that doing so could permit the disclosure of the following information without the waiver of such attorney-client privilege), the Company will afford Parent and Parent's accountants, counsel and other representatives reasonable access, upon reasonable prior notice,

during normal business hours to its properties, contracts, books, records and personnel and other documents and data during the period prior to the Merger 1 Effective Time and furnish such other information concerning its business, properties, results of operations and personnel, as Parent may reasonably request; *provided*, *however*, that the Company may restrict the foregoing access to the extent that any law, treaty, rule or regulation of any Governmental Entity applicable to the Company requires it or its Subsidiaries to restrict or prohibit access to any such properties or information; *provided*, *further* that Parent shall not conduct any sampling of soil, sediment, groundwater, surface water or air without the Company's written consent, which the Company may withhold in its sole discretion.

(c) *No Modification of Representations and Warranties or Covenants.* No information or knowledge obtained in any investigation or notification pursuant to this **Section 5.4**, **Section 5.6** or **Section 5.7** shall affect or be deemed to modify any representation or warranty contained herein, the covenants or agreements of the parties hereto or the conditions to the obligations of the parties hereto to consummate and effect the Mergers under this Agreement.

5.5 *Public Disclosure.* Without limiting any other provision of this Agreement, Parent and the Company will consult with each other before issuing, and provide each other the opportunity to review, comment upon and concur with, and use all reasonable efforts to agree on any press release or public statement with respect to this Agreement and the transactions contemplated hereby, including the Mergers and any Acquisition Proposal and will not issue any such press release or make any such public statement prior to such consultation and (to the extent practicable) agreement, except as may be required by applicable Legal Requirements, any listing agreement with Nasdaq, any other applicable national securities exchange or market or in connection with a Change of Recommendation permitted pursuant by **Section 5.3(d)**. The parties have agreed to the text of the joint press release announcing the signing of this Agreement. The Parent and the Company shall hold a joint conference call immediately after the issuance of such press release.

5.6 *Regulatory Filings; Reasonable Efforts.*

(a) *Regulatory Filings.* Each of Parent, Merger Sub 1 and the Company shall coordinate and cooperate with one another and shall each use reasonable efforts to (A) take, or cause to be taken, all appropriate actions, and do or cause to be done, all things necessary, proper or advisable under applicable Legal Requirements or otherwise to consummate Merger 1 and the transactions contemplated hereby as promptly as practicable, (B) obtain from any Governmental Entities any consents, licenses, permits, waivers, approvals, authorizations or orders required to be obtained or made to avoid any action or proceeding by any Governmental Entity (including those in connection with the HSR Act) in connection with the authorization, execution and delivery of this Agreement and the consummation of Merger 1 and the transactions contemplated hereby, (C) make, or cause to be made, the applications and filings required to be made under the HSR Act or any other applicable Legal Requirements in connection with the authorization, execution and delivery of this Agreement and the consummation of Merger 1 and the transactions contemplated hereby (including under the Exchange Act and any other applicable federal or state Legal Requirements), and to pay any fees due of it in connection with such applications or filings, as promptly as is reasonably practicable, and in any event within ten (10) Business Days after the date hereof, and (D) comply at the earliest practicable date with any request under the HSR Act and any such other Legal Requirements for additional information, documents or other materials received by Parent or the Company or any of their respective Subsidiaries from the Federal Trade Commission or the Department of Justice or any other Governmental Entity in connection with such applications or filings or Merger 1 and the transactions contemplated hereby. Each of Parent and the Company will cause all documents that it is responsible for filing with any Governmental Entity under this **Section 5.6(a)** to comply in all material respects with all applicable Legal Requirements.

(b) *Exchange of Information.* Parent, Merger Sub 1 and the Company each shall promptly supply the other with any information which may be required in order to effectuate any filings or application pursuant to **Section 5.6(a)**. Except where prohibited by applicable Legal Requirements, and subject to the Confidentiality Agreement and any joint defense agreement entered into between the parties or their counsel, each party to this Agreement shall (A) keep the other party informed in all material respects and on a reasonably timely basis of any written or material oral communication received by such party from, or given by such party to, any Governmental Entity, or party to a proceeding, regarding Merger 1 and the transactions contemplated hereby, (B) give the other party to this Agreement reasonable prior notice of any written or material oral communication with, and any proposed understanding, undertaking or agreement with, any Governmental Entity relating to Merger 1 and the transactions contemplated hereby, and (C) subject to applicable Legal Requirements relating to the exchange of information, each of the parties hereto shall have the right to review in advance, and to the extent practicable each will consult and cooperate with the other on, all the information that appears in any filing made with, or written materials submitted to, any third party and/or any Governmental Entity in connection with Merger 1 and the transactions contemplated hereby. None of the parties to this Agreement shall independently participate in any meeting, or engage in any substantive conversation, with any Governmental Entity in respect of any filings or submissions with or investigation, approval process or other inquiry by any Governmental Entity without giving the other prior notice of the meeting or conversation and, unless objected to by such Governmental Entity, the opportunity to attend or participate. The parties shall coordinate and cooperate, subject to applicable Legal Requirements, with one another in connection with any analyses, appearances, presentations, memoranda, briefs, arguments, opinions and proposals made or submitted by or on behalf of any party in connection with all meetings, actions and proceedings under or relating to any such application or filing. The Company will not make any material proposals relating to, or enter into, any material understanding, undertaking or agreement with any Governmental Entity relating to Merger 1 and the transactions contemplated hereby without Parent's prior review and approval, and Parent will not make any such material proposal or enter into any such material understanding, undertaking or agreement relating to Merger 1 without the Company's prior review and approval; *provided*, *however*, that if such understanding, undertaking or agreement is to take effect only upon the consummation of Merger 1, Parent shall have no obligation to obtain the Company's prior approval but shall consult in advance with the Company with respect thereto.

(c) *Reasonable Efforts.* Each of the Company and Parent shall, and shall cause their respective controlled affiliates to, cooperate in good faith with all Governmental Entities and use their reasonable efforts to (A) cause the expiration of the notice periods under the HSR Act and any other Laws with respect to Merger 1 and the transactions contemplated hereby as promptly as is reasonably practicable after the execution of this Agreement, (B) resolve such objections, if any, as may be asserted by any Governmental Entity with respect to Merger 1 and the transactions contemplated hereby and (C) undertake any reasonable actions required to lawfully complete Merger 1 and the transactions contemplated hereby. Except where prohibited by applicable Legal Requirements, Parent shall be entitled to lead any proceedings or negotiations with any Governmental Entity related to the foregoing, provided that it shall afford the Company the opportunity to participate therein. Notwithstanding the foregoing, neither the Company nor Parent shall be required to take (and, for the avoidance of doubt, the Company shall not take without Parent's consent) any action which (x) is reasonably likely to have a material adverse effect on the condition (financial or otherwise), business, assets, liabilities or results of operations of either Parent (or any of its Subsidiaries), the Company (or any of its Subsidiaries) or the Intermediate Surviving Corporation, taken individually or in the aggregate, (any such action, a "**Burdensome Condition**") or (y) is not conditioned on the consummation of Merger 1. Notwithstanding anything in this Agreement to the contrary, neither the Company nor Parent shall be required to contest through litigation any objection, action or proceeding by any Governmental Entity.

5.7 *Notification of Certain Matters.*

(a) *By the Company.* The Company shall give prompt notice to Parent and Merger Sub 1 of any representation or warranty made by it contained in this Agreement becoming untrue or inaccurate, or any failure of the Company to comply with or satisfy in any material respect any covenant, condition or agreement to be complied with or satisfied by it under this Agreement, in each case, such that the conditions set forth in **Section 6.3(a)** or **6.3(b)** would not be satisfied.

(b) *By Parent.* Parent and Merger Sub 1 shall give prompt notice to the Company of any representation or warranty made by it contained in this Agreement becoming untrue or inaccurate, or any failure of Parent or Merger Sub 1 to comply with or satisfy in any material respect any covenant, condition or agreement to be complied with or satisfied by either of them under this Agreement, in each case, such that the conditions set forth in **Section 6.2(a)** or **6.2(b)** would not be satisfied.

(c) From the date of this Agreement until the Merger 1 Effective Time, each of Parent and the Company shall promptly notify the other in writing of any pending or, to the Knowledge of Parent or the Company (as the case may be), threatened action, suit, arbitration or other proceeding or investigation by any Governmental Entity or any other person (x) challenging or seeking material damages in connection with Merger 1 or the transactions contemplated hereby or (y) seeking to restrain or prohibit the consummation of Merger 1 or otherwise limit in any material respect the right of Parent or any Subsidiary of Parent to own or operate all or any portion of the businesses or assets of the Company or any Subsidiary of the Company.

5.8 *Third-Party Consents.* The Company and Parent shall give (or shall cause their respective Subsidiaries to give) any notices to third parties, and use, and cause their respective Subsidiaries to use, commercially reasonable efforts to obtain any third party consents, (A) necessary, proper or advisable to consummate the transactions contemplated in this Agreement, (B) required to be disclosed in the Company Disclosure Letter or the Parent Disclosure Letter, as applicable, or (C) required to prevent a Company Material Adverse Effect from occurring prior to or after the Merger 1 Effective Time or a Parent Material Adverse Effect from occurring prior to or after the Merger 1 Effective Time; provided, however, that the Company and Parent shall coordinate and cooperate in determining whether any actions, consents, approvals or waivers are required to be obtained from parties to any Company Scheduled Contracts in connection with the consummation of the Mergers and seeking any such actions, consents, approvals or waivers; provided, further that in no event shall the Company or any Subsidiary of the Company be required to pay prior to the Merger 1 Effective Time, and shall not pay or commit to pay without Parent's consent, a material amount in respect of, any fee, penalty or other consideration to any person to obtain any such consent, approval or waiver.

5.9 *Employee Benefit Matters.* (a) Effective immediately before the Merger 1 Effective Time, the Company (i) shall terminate each Company Employee Plan (unless Parent provides written notice to the Company at least five (5) business days prior to the Closing Date that such Company Employee Plan shall not be terminated), including any 401(k) plan maintained by the Company or any Subsidiary) and (ii) cause each then unvested Company Restricted Stock Unit to become fully vested, and such Company Restricted Stock Unit shall be treated in accordance with **Section 1.6** of this Agreement. Unless Parent provides any such written notice to the Company, the Company shall provide Parent with evidence that such Company Employee Plan(s) have been terminated (effective no later than immediately before the Merger 1 Effective Time) pursuant to resolutions of the Company's Board of Directors and any other necessary corporate action. The form and substance of such resolutions shall be subject to review and approval of Parent and its counsel (such review to be timely and not unreasonably withheld). The Company also shall take such other actions in furtherance of terminating such Company Employee Plan(s) as Parent may reasonably require. In the event that distribution or rollover of assets from the trust or custodial account of a 401(k) plan which is terminated is reasonably anticipated to trigger liquidation charges, surrender charges, or other fees to be imposed upon the

account of any participant or beneficiary of such terminated plan or upon the Company or plan sponsor, then the Company shall take such actions as are necessary to reasonably estimate the amount of such charges and/or fees and provide such estimate in writing to Parent as soon as possible following the date of this Agreement. Notwithstanding the foregoing, the Company shall make such amendments to the Company 401(k) Plan as are reasonably requested by Parent prior to the Closing Date.

(b) Notwithstanding anything to the contrary in **Section 5.9(a)** hereof, the Company shall terminate the Pharmacopeia Executive Deferred Compensation Plan at or prior to the Merger 1 Effective Time and shall distribute all amounts owed to participants thereunder.

(c) For a period of one (1) year following the Merger 1 Effective Time, Parent shall provide, or cause its affiliates to provide, each Employee of the Company or any of its Subsidiaries as of the Merger 1 Effective Time ("**Company Employees**") base salary that is no less favorable than the base salary of such Company Employees immediately before the Merger 1 Effective Time. Immediately following the Merger 1 Effective Time, Parent or an affiliate of Parent shall either maintain, or cause to be maintained, the Company welfare plans or enroll the Company Employees in the plans provided to similarly situated employees of Parent. In addition, for a period of one (1) year following the Merger 1 Effective Time, Parent shall, or shall cause its affiliates to, provide Company Employees with other employee benefits equal to those provided to similarly situated employees of Parent, including severance benefits under Parent's severance plan as set forth in **Section 5.9** of Parent Disclosure Letter. For all purposes (including purposes of vesting, eligibility to participate, severance, benefit accrual and level of benefits) under the employee benefit plans of Parent and its affiliates providing benefits to any Company Employees after the Merger 1 Effective Time (the "**New Plans**"), each Company Employee shall be credited with his or her years of service with the Company and its Subsidiaries and their respective predecessors before the Merger 1 Effective Time, to the same extent as such Company Employee was entitled, before the Merger 1 Effective Time, to credit for such service under any similar Company Employee Plan in which such Company Employee participated or was eligible to participate immediately prior to the Merger 1 Effective Time; *provided*, *however*, that credit for prior service shall not be automatically provided with respect to awards under Parent's equity plans but shall be given due consideration by Parent's Board of Directors or its designee with authority to grant such awards to Company Employees. In addition, for purposes of each New Plan providing medical, dental, pharmaceutical or vision benefits, Parent shall cause all pre-existing condition exclusions and actively-at-work requirements of such New Plan to be waived for such Company Employee and his or her covered dependants (unless such conditions would not have been waived under the comparable plans of the Company or its Subsidiaries in which such Company Employee participated immediately prior to the Merger 1 Effective Time (each an "**Old Plan**")) and Parent shall cause any eligible expenses incurred by such Company Employee and his or her covered dependants during the portion of the plan year of the Old Plan ending on the date such Company Employee's participation in the corresponding New Plan begins to be taken into account under such New Plan for purposes of satisfying all deductible, coinsurance and maximum out-of-pocket requirements applicable to such Company Employee and his or her covered dependants for the applicable plan years if such amounts had been paid in accordance with such New Plan.

(d) Without limiting the generality of **Section 5.9**, nothing herein expressed or implied shall confer upon any current or former Employee of the Company or any of its Subsidiaries or upon any representative of any such person, or upon any collective bargaining agent, any rights or remedies, including any third party beneficiary rights of any right to employment or continued employment for any specified period, of any nature or kind whatsoever under or by reason of this Agreement. Nothing contained in this **Section 5.9** shall prohibit or in any manner restrict Parent's or any of its Subsidiaries or Affiliates from amending or terminating any New Plan, including Parent's severance plan; provided, however, that any such amendment or termination of any New

Plan shall apply to Parent's employees generally and shall not unfavorably discriminate against Company Employees.

5.10 *Indemnification.*

(a) *Indemnity.* Subject to applicable Legal Requirements under Delaware Law, from and after the Merger 1 Effective Time, Parent agrees to cause the Surviving Entity to maintain and honor all indemnification arrangements in place for all past and present directors, officers, employees and agents of the Company and its Subsidiaries (the "**Indemnified Parties**") as of the date of this Agreement under the Company Charter Documents and the indemnification agreements set forth on **Section 5.10** of the Company Disclosure Letter (or other agreements, on the same terms as those set forth in the Company's standard form director and officer indemnification agreement, entered into by new officers or directors of the Company appointed after the date hereof), for acts or omissions occurring at or prior to the Merger 1 Effective Time; *provided*, *further* that Parent agrees to, and to cause the Surviving Entity to, indemnify and hold harmless such persons to the fullest extent permitted by applicable Legal Requirements under Delaware Law for acts or omissions occurring in connection with the approval of this Agreement and the consummation of the transactions contemplated hereby. The organizational documents of the Surviving Entity will contain provisions with respect to exculpation and indemnification that are at least as favorable to the Indemnified Parties as those contained in the Company Charter Documents as in effect on the date hereof, which provisions will not be amended, repealed or otherwise modified for a period of six (6) years from the Merger 1 Effective Time in any manner that would adversely affect the rights thereunder of the Indemnified Parties, unless such modification is required by law. Any indemnification agreements set forth on **Section 5.10** of the Company Disclosure Letter (or other agreements, on the same terms as those set forth in the Company's standard form director and officer indemnification agreement, entered into by new officers or directors of the Company appointed after the date hereof) with the Indemnified Parties in existence on the date of this Agreement shall be assumed by the Surviving Entity in the Mergers, without any further action, and shall survive the Mergers and continue in full force and effect in accordance with their terms.

(b) *Insurance.* Parent will cause the Surviving Entity to maintain a directors' and officers' insurance and indemnification policy which will cover those persons who are covered by the Company's directors' and officers' insurance and indemnification policy as of the date hereof for events occurring prior to the Merger 1 Effective Time ("**D&O Insurance**") on terms no less favorable than those applicable to the current directors and officers of the Company (from the same insurance carrier that provides the Company's D&O Insurance or a comparable insurance carrier) for a period of six (6) years; *provided*, *however*, that in no event will the Surviving Entity be required to pay an annual premium in excess of two hundred fifty percent (250%) of the annual premium currently paid by the Company for such coverage (and to the extent the annual premium payable by the Surviving Entity would exceed two hundred fifty percent (250%) of the annual premium currently paid by the Company for such coverage, the Surviving Entity shall cause to be maintained the maximum amount of coverage as is available for such two hundred fifty percent (250%) of such annual premium). The provisions of the immediately preceding sentence shall be deemed to have been satisfied if the Company obtains, at or prior to the Merger 1 Effective Time, prepaid (or "tail") D&O Insurance covering each current officer and director on terms no less favorable than those of such policies in effect on the date of this Agreement and Parent or the Surviving Entity continue to maintain such policies; *provided*, *however*, that without the prior written consent of Parent, the Company may not expend therefor in excess of 250% of the last annual premium paid by the Company for coverage for the period of twelve (12) months most recently commenced prior to the date of this Agreement.

(c) *Third-Party Beneficiaries.* The obligations under this **Section 5.10** shall not be terminated or modified in such a manner as to affect adversely any indemnitee to whom this **Section 5.10** applies without the consent of such affected indemnitee (it being expressly agreed that the indemnitees to whom this **Section 5.10** applies and their respective heirs, successors and assigns shall be express third-party beneficiaries of this **Section 5.10**). In the event the Surviving Entity (i) consolidates with or merges into any other person and shall not be the continuing or surviving corporation or entity of such consolidation or merger or (ii) transfers all or substantially all of its properties and assets to any person, then, and in each such case, proper provision shall be made so that such obligations set forth in this **Section 5.10** are assumed by such continuing or surviving corporation or entity or transferee of such assets, as the case may be, or in the sole discretion of Parent, by Parent or any Subsidiary of Parent that is at such time at least as creditworthy as the Surviving Entity.

5.11 *Nasdaq Listing.* Prior to the Merger 1 Effective Time, Parent agrees to use its reasonable efforts to authorize for listing on Nasdaq the shares of Parent Common Stock issuable, and those required to be reserved for issuance, in connection with Merger 1, subject to official notice of issuance.

5.12 *Treatment as Reorganization.*

(a) None of Parent, Merger Sub 1, Merger Sub 2 or the Company shall, and they shall not permit any of their respective Subsidiaries to, take any action prior to or following the Closing that would prevent the Mergers, taken together, from qualifying as a reorganization within the meaning of Section 368(a) of the Code. This Agreement is intended to constitute, and the parties hereto hereby adopt this Agreement as, a plan of reorganization within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3(a). Parent, Merger Sub 1, Merger Sub 2 and the Company shall report the Mergers as a reorganization within the meaning of Section 368(a) of the Code for all Tax purposes, unless otherwise required pursuant to a "determination" within the meaning of Section 1313(a) of the Code.

(b) Each of Parent, Merger Sub 1, Merger Sub 2 and the Company agrees to use all reasonable efforts in order for the Company and Parent to obtain written tax opinions (the "**Tax Opinions**") from their respective tax counsel (as specified in **Sections 6.2(d) and 6.3(e)**), in form and substance reasonably satisfactory to them, to the effect that, on the basis of the facts, representations and assumptions set forth or referred to in such opinions, for United States federal income tax purposes, the Mergers, taken together, will constitute a reorganization within the meaning of Section 368(a) of the Code. As a condition precedent to the rendering of the Tax Opinions, Parent (and Merger Sub 1 and Merger Sub 2) and the Company shall, as of the Closing Date, execute and deliver to their respective tax counsel officers' certificates, dated and executed as of the dates of such opinions (the "**Tax Certificates**"), in substantially the forms attached to this Agreement as **Exhibits 5.12(i)** and **5.12(ii)**, respectively. In rendering the Tax Opinions, such counsel shall be entitled to rely on customary assumptions and representations reasonably satisfactory to such counsel, including representations set forth in the Tax Certificates. The obligation to deliver the opinions referred to in this **Section 5.12(b)** shall not be waivable after receipt of any Company stockholder approval required by applicable Legal Requirements, unless further stockholder approval is obtained with appropriate disclosure.

5.13 *Section 16 Matters.* Prior to the Merger 1 Effective Time, the Company shall take all such steps as may be required (to the extent permitted under applicable Legal Requirements) to cause any dispositions of Company Common Stock (including derivative securities with respect to Company Common Stock) resulting from the transactions contemplated by **Article I** of this Agreement by each individual who is subject to the reporting requirements of Section 16(a) of the Exchange Act with respect to the Company to be exempt under Rule 16b-3 promulgated under the Exchange Act.

5.14 *Company Rights Agreement; State Takeover Laws.*

(a) The Company covenants and agrees that it will not (i) redeem the Company Rights, (ii) amend the Company Rights Agreement or (iii) take any action which would allow any Person (as defined in the Company Rights Agreement) other than Parent, Merger Sub 1, Merger Sub 2, or any other Subsidiary of Parent to acquire beneficial ownership (for purposes of this **Section 5.14**, as defined in the Company Rights Agreement) of 15% or more of the Shares without causing a Distribution Date or a Triggering Event (as each such term is defined in the Company Rights Agreement) to occur. The Company's Board of Directors shall not make a determination that Parent, Merger Sub 1, Merger Sub 2, or any of their respective affiliates or associates, directors, officers or employees is an "Acquiring Person" for purposes of the Company Rights Agreement.

(b) If any "control share acquisition," "fair price," "business combination" or other anti-takeover laws becomes or is deemed to be applicable to the Company, Parent, Merger Sub 1, Merger Sub 2 or the Mergers, including the acquisition of Shares pursuant thereto, or any other transaction contemplated by this Agreement, then the Company's Board of Directors shall take all action necessary to render such law inapplicable to the foregoing.

5.15 *Resignations*. The Company shall use reasonable efforts to cause each director of the Company and its Subsidiaries to deliver to Parent written resignations from such position as director, effective at or before the Merger 1 Effective Time.

5.16 *Parent Board*. Within ten (10) days following the execution of this Agreement, the Company shall nominate in writing to Parent two persons to be appointed to the Board of Directors of Parent (the "**Company Directors**"). Following receipt of such written nomination, Parent shall take all necessary action to cause such persons to be appointed to its Board of Directors as of the close of business on the date on which the Merger 1 Effective Time occurs. In the event that a Company Director is unable or unwilling to serve on Parent's Board of Directors at the Merger 1 Effective Time, then the Company's Board of Directors may select another person to serve in such person's stead. In addition, Parent shall take all reasonable steps to cause the Board of Directors of Parent (or the appropriate committee thereof) to re-nominate such persons for election as directors of Parent by the stockholders of Parent at Parent's 2009 Annual Meeting of Stockholders, each of them to continue to serve until the next election of directors, and Parent shall solicit proxies for their election at such annual meeting. Each Company Director who serves as a member of the Parent's Board of Directors will be compensated for such service after the Merger 1 Effective Time in the same manner and in the same amounts as all other directors of Parent are compensated. Each Company Director serving on the Parent's Board of Directors shall hold office until his or her successor is elected or qualified or otherwise in accordance with applicable Legal Requirements and the Parent Charter Documents.

5.17 *Labor Matters*. The Company shall comply with all notice or other obligations under the WARN Act or similar state or local law in connection with any terminations at or before the Merger 1 Effective Time.

5.18 *Due Diligence Inquiry*. No earlier than five (5) business days nor later than two (2) business days prior to the Closing Date, the Company shall use all commercially reasonable efforts to engage in teleconferences with an authorized representative from each of Bristol-Myers Squibb Company and Schering Plough, in each case, to discuss whether any Program Trigger (as defined in **Section 8.3**) has occurred. Immediately following the conclusion of each such teleconference, but in no event later than twelve (12) hours, the Company shall provide to Parent a summary, which shall address solely whether any Program Trigger has occurred.

5.19 *Parent Capital Stock*. Parent covenants and agrees that it will not take any action that results in the purchase, redemption or other acquisition by Parent of any Parent Common Stock, other than repurchases of unvested shares in connection with the termination of the employment relationship with any employee, or upon the resignation of any director or consultant, pursuant to stock purchase agreements.

ARTICLE VI
CONDITIONS TO THE MERGERS

6.1 *Conditions to the Obligations of Each Party to Effect Merger 1*. The respective obligations of each party to this Agreement to consummate and effect Merger 1 shall be subject to the satisfaction at or prior to the Merger 1 Effective Time of the following conditions, any of which may be waived, in writing, by mutual agreement of Parent and the Company to the extent permitted by applicable Legal Requirements:

(a) *Stockholder Approval*. This Agreement shall have been adopted by the Required Company Stockholders.

(b) *No Order*. No Governmental Entity of competent jurisdiction shall have enacted, issued, promulgated, enforced or entered any statute, rule, regulation, executive order, decree, injunction or other order (whether temporary, preliminary or permanent) which (i) is in effect and (ii) has the effect of making Merger 1 illegal or otherwise prohibiting consummation of Merger 1.

(c) *Registration Statement Effective; Proxy Statement*. The SEC shall have declared the Registration Statement effective. No stop order suspending the effectiveness of the Registration Statement or any part thereof shall have been issued and no proceeding for that purpose, and no similar proceeding in respect of the Proxy Statement, shall have been initiated or threatened in writing by the SEC.

(d) *HSR Act*. All waiting periods (and any extension thereof) under the HSR Act relating to the transactions contemplated hereby will have expired or terminated early. All other material foreign antitrust approvals or requirements required by applicable Legal Requirements to be obtained or satisfied prior to the Merger 1 Effective Time in connection with the transactions contemplated hereby shall have been obtained or satisfied, as applicable.

(e) *Nasdaq Listing*. The shares of Parent Common Stock to be issued in Merger 1 and the transactions contemplated hereby shall have been authorized for listing on Nasdaq, subject to official notice of issuance.

6.2 *Additional Conditions to the Obligations of the Company*. The obligation of the Company to consummate and effect Merger 1 shall be subject to the satisfaction at or prior to the Merger 1 Effective Time of each of the following conditions, any of which may be waived, in writing, exclusively by the Company:

(a) *Representations and Warranties*. The representations and warranties of Parent and Merger Sub 1 contained in this Agreement shall be true and correct on the date hereof and as of the Closing Date with the same force and effect as if made on the Closing Date (except that those representations and warranties which address matters only as of a particular date or only with respect to a particular period need only to have been true and correct on such date or with respect to such period), except, in each case or in the aggregate (other than with respect to the representations and warranties of Parent and Merger Sub 1 contained in **Sections 3.2(a)(i)**, **3.2(b)(i)** , **3.2(c)**, **3.2(d)(i)**, **3.3(a)** and **3.9**, which shall be true and correct in all material respects), as does not constitute a Parent Material Adverse Effect at the Merger 1 Effective Time (it being understood that, for purposes of determining the accuracy of such representations and warranties, (i) all "Material Adverse Effect" qualifications and other qualifications based on the word "material" contained in such representations and warranties shall be disregarded and (ii) any update of or modification to the Parent Disclosure Letter made or purported to have been made after the execution of this Agreement shall be disregarded). The Company shall have received a certificate with respect to the foregoing signed on behalf of Parent, with respect to the representations and warranties of Parent, by an authorized executive officer of Parent and a certificate with respect to the foregoing signed on behalf of Merger Sub 1, with respect to the

representations and warranties of Merger Sub 1, by an authorized executive officer of Merger Sub 1.

(b) *Agreements and Covenants*. Parent and Merger Sub 1 shall have performed or complied in all material respects with all agreements and covenants required by this Agreement to be performed or complied with by Parent or Merger Sub 1 on or prior to the Merger 1 Effective Time, and the Company shall have received a certificate with respect to the foregoing signed on behalf of Parent, with respect to the covenants of Parent, by an authorized executive officer of Parent and a certificate with respect to the foregoing signed on behalf of Merger Sub 1, with respect to the covenants of Merger Sub 1, by an authorized executive officer of Merger Sub 1.

(c) *Material Adverse Effect*. There shall not have occurred any Effect that has had or is reasonably likely to have a Parent Material Adverse Effect since the date hereof that is continuing.

(d) *Tax Opinion*. The Company shall have received a Tax Opinion from its tax counsel (Dechert LLP, or such other nationally-recognized law firm selected by the Company), subject to the provisions of **Section 5.12(b)**, and such opinion shall not have been withdrawn.

6.3 *Additional Conditions to the Obligations of Parent*. The obligations of Parent and Merger Sub 1 to consummate and effect Merger 1 shall be subject to the satisfaction at or prior to the Merger 1 Effective Time of each of the following conditions, any of which may be waived, in writing, exclusively by Parent and Merger Sub 1:

(a) *Representations and Warranties*. The representations and warranties of the Company contained in this Agreement shall be true and correct on the date hereof and as of the Closing Date with the same force and effect as if made on the Closing Date (except that those representations and warranties which address matters only as of a particular date or only with respect to a particular period need only to have been true and correct on such date or with respect to such period), except, in each case or in the aggregate (other than with respect to the representations and warranties of the Company contained in **Sections 2.2(a)(i)**, **2.2(b)(i)**, **2.2(c)**, **2.2(d)(i)**, **2.3(a) and 2.17** which shall be true and correct in all material respects), as does not constitute a Company Material Adverse Effect at the Merger 1 Effective Time (it being understood that, for purposes of determining the accuracy of such representations and warranties, (i) all "Material Adverse Effect" qualifications and other qualifications based on the word "material" contained in such representations and warranties shall be disregarded (other than the representation and warranty in **Section 2.5**, which shall be read with the "Company Material Adverse Effect" qualifier) and (ii) any update of or modification to the Company Disclosure Letter made or purported to have been made after the execution of this Agreement shall be disregarded). Parent and Merger Sub 1 shall have received a certificate with respect to the foregoing signed on behalf of the Company by an authorized executive officer of the Company.

(b) *Agreements and Covenants*. The Company shall have performed or complied in all material respects with all agreements and covenants required by this Agreement to be performed or complied with by it at or prior to the Merger 1 Effective Time, and Parent and Merger Sub 1 shall have received a certificate to such effect signed on behalf of the Company by an authorized executive officer of the Company.

(c) *Material Adverse Effect*. There shall not have occurred any Effect that has had or is reasonably likely to have a Company Material Adverse Effect since the date hereof that is continuing.

(d) *No Governmental Restriction*. There shall not be any pending suit, action or proceeding asserted by any Governmental Entity (i) challenging or seeking to restrain or prohibit the consummation of Merger 1 or any of the other transactions contemplated by this Agreement, the effect of which restraint or prohibition if obtained would cause the condition set forth in

Section 6.1(b) to not be satisfied or (ii) seeking to require Parent or the Company or any Subsidiary or affiliate to effect or agree to a Burdensome Condition.

(e) *Tax Opinion*. Parent shall have received a Tax Opinion from its tax counsel (LW or such other nationally-recognized law firm selected by Parent), subject to the provisions of **Section 5.12(b)**, and such opinion shall not have been withdrawn.

(f) *Non-USRPHC Certificate*. Parent shall have received from the Company (i) a properly executed statement, dated as of the Closing Date, stating under penalties of perjury that the Company is not, and has not been, a "United States real property holding corporation" as defined in Section 897(c)(2) of the Code during the applicable period described in Section 897(c)(1)(A)(ii) of the Code, in form and substance reasonably acceptable to Parent, and (ii) proof reasonably satisfactory to Parent that the Company has provided notice of such verification to the Internal Revenue Service in accordance with the provisions of Treasury Regulations Section 1.897-2(h)(2).

6.4 *Conditions Precedent to Obligations of the Parties to Consummate Merger 2*. In addition to the foregoing, the respective obligations of each of Parent, the Intermediate Surviving Corporation and Merger Sub 2 to consummate Merger 2 are subject to the condition that Merger 1 shall have been consummated.

ARTICLE VII
TERMINATION, AMENDMENT AND WAIVER

7.1 *Termination*. This Agreement may be terminated at any time prior to the Merger 1 Effective Time, by action taken or authorized by the Board of Directors of the terminating party or parties, and except as provided below, whether before or after the requisite approval of the stockholders of the Company:

(a) by mutual written consent duly authorized by the Boards of Directors of Parent and the Company;

(b) by either the Company or Parent if Merger 1 shall not have been consummated by February 2, 2009 (including as extended by the provisions of this paragraph (b), hereinafter the "**End Date**"); *provided*, that the End Date shall be automatically extended by sixty (60) days if the waiting period, if any, applicable to the consummation of the transactions contemplated by this Agreement under the HSR Act shall not have expired or been earlier terminated; *provided*, *further*, that in the event the Proxy Statement has been mailed to the Company's stockholders on or prior to the End Date, the End Date shall be automatically extended to be the date that is two (2) business days following the scheduled date of the Company Stockholders' Meeting but in no event later than February 28, 2009; *provided*, *however*, that the right to terminate this Agreement under this **Section 7.1(b)** shall not be available to any party (i) whose action or failure to act has been a principal cause of or primarily resulted in the failure of Merger 1 to occur on or before such date and such action or failure to act constitutes a breach of this Agreement or (ii) that is in material breach of this Agreement;

(c) by either the Company or Parent if a Governmental Entity of competent jurisdiction shall have issued an order, decree or ruling or taken any other action (including the failure to have taken an action), in any case having the effect of permanently restraining, enjoining or otherwise prohibiting Merger 1, which order, decree, ruling or other action is final and nonappealable;

(d) by either the Company or Parent if the approval of the Required Company Stockholders to adopt this Agreement shall not have been obtained at a meeting of the Company's stockholders duly convened therefor or at any adjournment or postponement thereof;

(e) by Parent (at any time prior to the adoption of this Agreement by the Required Company Stockholders) if a Triggering Event with respect to the Company shall have occurred;

(f) by the Company, if (i) any representation or warranty of Parent or Merger Sub 1 set forth in this Agreement shall have been breached or become untrue or Parent or Merger Sub 1 has breached any covenant or agreement of Parent or Merger Sub 1 set forth in this Agreement, (ii) such breach or misrepresentation is not cured within thirty (30) days after receipt by Parent of written notice from the Company (*provided*, *however*, that such thirty (30) day period shall not apply if such breach or misrepresentation is not curable), and (iii) such breach or misrepresentation would cause the conditions set forth in **Section 6.2(a)** or **Section 6.2(b)** incapable of being satisfied by the End Date; *provided* that the Company is not then in breach of its respective warranties, covenants or agreements set forth in this Agreement such that any of the conditions set forth in **Section 6.3(a)** or **Section 6.3(b)** would not be satisfied;

(g) by Parent, if (i) any representation or warranty of the Company set forth in this Agreement shall have been breached or become untrue or the Company has breached any covenant or agreement of the Company set forth in this Agreement, (ii) such breach or misrepresentation is not cured within thirty (30) days after receipt by the Company of written notice from Parent (*provided*, *however*, that such thirty (30) day period shall not apply if such breach or misrepresentation is not curable), and (iii) such breach or misrepresentation would cause the conditions set forth in **Section 6.3(a)** or **Section 6.3(b)** incapable of being satisfied by the End Date; *provided* that Parent is not then in breach of its respective warranties, covenants or agreements set forth in this Agreement such that any of the conditions set forth in **Section 6.2(a)** or **Section 6.2(b)** would not be satisfied;

(h) by the Company, if prior to the Merger 1 Effective Time and within five (5) business days of such termination, the closing price of Parent Common Stock, as reported on The Nasdaq Global Market, is less than or equal to $1.65 per share.

(i) by the Company, if: (A) the Company has not breached (other than any immaterial breach) **Section 5.3(a)** relating to the Superior Offer referred to in this clause (i); (B) the Company's Board of Directors has received a Superior Offer; (C) in light of such Superior Offer, the Company's Board of Directors shall have determined in good faith, after consultation with outside counsel, that the failure of the Company's Board of Directors to withdraw or modify its approval or recommendation of this Agreement or Merger 1 would reasonably be expected to result in a breach of its fiduciary obligations; (D) the Company has notified Parent in writing (which shall include written electronic communication) of the determinations described in clause (C) above on the date such determinations are made; (E) at least three business days following delivery to Parent of the notice referred to in clause (D) above (or, if such notice is delivered fewer than three business days prior to the Merger 1 Effective Time, then for the period remaining up to immediately prior to the Merger 1 Effective Time), and taking into account any revised proposal that is binding and irrevocable for such three business day (or, as applicable, shorter) period made by Parent, such Superior Offer remains a Superior Offer and the Company's Board of Directors has again made the determinations referred to in clause (C) above; (F) at or before the effective time of the termination of this Agreement pursuant to this **Section 7.1(i)**, the Company pays to Parent the Company Termination Fee due under **Section 7.3**; and (G) the Company's Board of Directors concurrently approves, and the Company concurrently enters into, a definitive agreement providing for the implementation of such Superior Offer.

For the purposes of this Agreement, a "**Triggering Event**," with respect to the Company, shall be deemed to have occurred if: (i) its Board of Directors or any committee thereof shall for any reason have withdrawn or shall have amended or modified in a manner adverse to Parent the Board Recommendation, or shall have resolved to do the same, (ii) it shall have failed to include in the Proxy

Statement the Board Recommendation, (iii) its Board of Directors fails to reaffirm (publicly, if so requested) the Board Recommendation within ten (10) calendar days after Parent requests in writing that such recommendation be reaffirmed, (iv) its Board of Directors or any committee thereof shall have approved or recommended any Acquisition Proposal or publicly proposed to submit to the vote of its stockholders any Acquisition Proposal, (v) the Company shall have entered into any letter of intent or similar document or any agreement, contract or commitment accepting any Acquisition Proposal; or (vi) a tender or exchange offer relating to the Company's securities shall have been commenced by a Person unaffiliated with Parent and the Company shall not have published, sent or given to its security holders pursuant to Rule 14e-2 promulgated under the Securities Act, within ten (10) business days after such tender or exchange offer is first published, sent or given, a statement disclosing that the Board of Directors of the Company recommends rejection of such tender or exchange offer.

7.2 *Notice of Termination; Effect of Termination*. Any termination of this Agreement under **Section 7.1** above will be effective immediately upon the delivery of a valid written notice of the terminating party to the other party hereto. In the event of the termination of this Agreement as provided in **Section 7.1**, this Agreement shall be of no further force or effect and there shall be no liability or obligation on the part of Parent or the Company or their respective Subsidiaries, officers or directors, except (i) as set forth in **Section 5.4(a)**, this **Section 7.2**, **Section 7.3** and **Article VIII**, each of which shall survive the termination of this Agreement and (ii) with respect to any liabilities or damages incurred or suffered by a party as a result of the willful and material breach by the other party of any of its representations, warranties, covenants or other agreements set forth in this Agreement, nothing in this Agreement shall relieve any party from any liability for such willful and material breach (it being understood that any such liability or damages for which the Company may become liable shall be calculated net of the amount of the Company Termination Fee, if, and to the extent, paid by the Company). No termination of this Agreement shall affect the obligations of the parties contained in the Confidentiality Agreement, all of which obligations shall survive termination of this Agreement in accordance with their terms.

7.3 *Fees and Expenses.*

(a) *General*. Except as set forth in this **Section 7.3**, all fees and expenses incurred in connection with this Agreement and the transactions contemplated hereby shall be paid by the party incurring such expenses whether or not Merger 1 is consummated; *provided*, *however*, that Parent and the Company shall share equally all fees and expenses, other than attorneys' and accountants' fees and expenses which fees shall be paid for by the party incurring such expense, incurred in relation to the printing, mailing and filing (with the SEC) of the Registration Statement and Proxy Statement (including financial statements and exhibits) and any amendments or supplements thereto.

(b) Termination Fee.

(i) *Company Payment.*

(1) In the event that this Agreement is terminated by Parent pursuant to **Section 7.1(e)**, then the Company shall pay Parent a termination fee of USD $3,375,000 (the "**Company Termination Fee**") within three (3) business days of such termination.

(2) In the event that (A) this Agreement is terminated by Parent or the Company pursuant to **Section 7.1(b)** (except if the failure to consummate Merger 1 prior to the End Date (as it may be extended) was caused by the actions of any Governmental Entity), (B) an Acquisition Proposal had been made publicly to the Company after the date hereof and not withdrawn prior to the date of such termination and (C) within twelve (12) months of such termination the Company enters into a definitive agreement for, or consummates, any Acquisition, then the Company shall pay Parent, upon the consummation of such Acquisition, an amount equal to the Company Termination Fee.

(3) In the event that this Agreement is terminated by Parent or the Company pursuant to **Section 7.1(d)**, and an Acquisition Proposal is made publicly to the Company within twelve (12) months of such termination, and the Company within twelve (12) months of such termination enters into a definitive agreement for and within eighteen (18) months of such termination consummates an Acquisition resulting from such Acquisition Proposal, then the Company shall pay Parent concurrently upon consummation of such Acquisition, an amount equal to Parent's actual documented reasonable out-of-pocket expenses in connection with the transactions contemplated hereunder up to a maximum of $1,400,000.

(4) In the event that (A) this Agreement is terminated by Parent pursuant to **Section 7.1(g)** due to a willful and knowing breach of this Agreement by the Company (except that the requirement of willful and knowing shall not apply to a breach of the covenants and agreements contained in Section 5.3 of this Agreement), (B) an Acquisition Proposal had been made publicly or privately to the Company prior to the occurrence of the breach giving rise to the right to terminate pursuant to such section and not withdrawn prior to the date of such termination and (C) within twelve (12) months of such termination the Company enters into a definitive agreement for, or consummates, any Acquisition, then the Company shall pay Parent, upon the consummation of such Acquisition, an amount equal to the Company Termination Fee.

(5) In the event that this Agreement is terminated by the Company pursuant to **Section 7.1(i)**, then the Company shall pay Parent, at or before the effective time of such termination, an amount equal to the Company Termination Fee.

(ii) *Interest and Costs; Other Remedies*. The Company acknowledges that the agreements contained in this **Section 7.3** are an integral part of the transactions contemplated by this Agreement, and that, without these agreements, Parent would not enter into this Agreement; accordingly, if the Company fails to pay in a timely manner the amounts due pursuant to this **Section 7.3**, and, in order to obtain such payment, Parent makes a claim that results in a judgment against the Company for the amounts set forth in this **Section 7.3**, the Company shall pay to Parent the reasonable costs and expenses of Parent (including reasonable attorneys' fees and expenses) in connection with such suit, together with interest on the amounts set forth in this **Section 7.3** at the prime rate of Citibank, N.A. in effect on the date such payment was required to be made. Payment of the fees described in this **Section 7.3** shall not be in lieu of damages incurred and otherwise recoverable in the event of breach of this Agreement; *provided*, *however*, any fees paid pursuant to this **Section 7.3** shall be credited (without duplication) against the amounts otherwise payable by the Company to Parent hereunder.

(iii) *Certain Definitions*. For the purposes of this **Section 7.3** only, "**Acquisition**," with respect to the Company, shall mean any of the following transactions (other than the transactions contemplated by this Agreement): (i) a merger, consolidation, business combination, recapitalization, liquidation, dissolution or similar transaction involving the party pursuant to which the stockholders of the party immediately preceding such transaction hold less than fifty percent (50%) of the aggregate equity interests in the surviving or resulting entity of such transaction or any resulting direct or indirect parent or subsidiary entity thereof, as a result of such transaction, (ii) a sale or other disposition by the party of assets representing in excess of fifty percent (50%) of the aggregate fair market value of the party's business immediately prior to such sale, or (iii) the acquisition by any Person or group (including by way of a tender offer or an exchange offer or issuance by the party or such Person or group), directly or indirectly, of beneficial ownership or a right to acquire beneficial ownership of shares representing in excess of fifty percent (50%) of the voting power of the then outstanding shares of capital stock of the party.

7.4 *Amendment*. Subject to applicable Legal Requirements, this Agreement may be amended by the parties hereto, by action taken or authorized by their respective Boards of Directors, at any time prior to the Merger 1 Effective Time; provided, however, after the adoption of this Agreement by the Company's stockholders, no amendment shall be made which by law or in accordance with the rules of any relevant stock exchange requires further approval by the stockholders of the Company, without such further stockholder approval. This Agreement may not be amended except by execution of an instrument in writing signed on behalf of each of Parent, Merger Sub 1 and the Company.

7.5 *Extension; Waiver*. At any time prior to the Merger 1 Effective Time, Parent and Merger Sub 1 on the one hand and the Company, on the other hand, by action taken or authorized by their respective Board of Directors, may, to the extent legally allowed: (i) extend the time for the performance of any of the obligations or other acts of the other, (ii) waive any inaccuracies in the representations and warranties of the other contained herein or in any document delivered pursuant hereto, and (iii) waive compliance by the other with any of the agreements or conditions for the benefit of such party contained herein; provided, however, that after the adoption of this Agreement by the Company's stockholders, as contemplated by this Agreement, there may not be any extension or waiver of this Agreement or any portion thereof which, by Law or in accordance with the rules of any relevant stock exchange, requires further approval by such stockholders. Any such extension or waiver shall be valid only if set forth in an instrument in writing signed by the Party or Parties to be bound thereby on behalf of such party, but such extension or waiver or failure to insist on strict compliance with an obligation, covenant, agreement or condition shall not operate as a waiver of, or estoppel with respect to, any subsequent or other failure. Delay in exercising any right under this Agreement shall not constitute a waiver of such right.

ARTICLE VIII
GENERAL PROVISIONS

8.1 *Non-Survival of Representations and Warranties.* The representations, warranties and covenants of the Company, Parent and Merger Sub 1 contained in this Agreement, or any instrument delivered pursuant to this Agreement, shall terminate at the Merger 1 Effective Time, except that the covenants that by their terms survive the Merger 1 Effective Time and this **Article VIII** shall survive the Merger 1 Effective Time.

8.2 *Notices.* All notices and other communications hereunder shall be in writing and shall be deemed duly given (i) on the date of delivery if delivered personally, (ii) on the date of confirmation of receipt (or, the first business day following such receipt if such date is not a business day) of transmission by facsimile (but only if followed by transmittal by a nationally recognized overnight carrier for delivery on the next business day), or (iii) on the date of confirmation of receipt (or, the first business day following such receipt if such date is not a business day) if delivered by a nationally recognized overnight courier service. All notices hereunder shall be delivered as set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

(a) if to Parent, Merger Sub 1 or Merger Sub 2, to:

Ligand Pharmaceuticals Incorporated
10275 Science Center Drive
San Diego, California 92121
Attention: General Counsel
Telephone No.: (858) 550-7500
Facsimile No.: (858) 550-7272

with copies to:

Latham & Watkins LLP
12636 High Bluff Drive, Suite 400
San Diego, California 92130-2071
Attention: Scott N. Wolfe
Telephone No.: (858) 523-5400
Facsimile No.: (858) 523-5450

if to the Company, to:

Pharmacopeia, Inc.
3000 Eastpark Boulevard
Cranbury, New Jersey 08512-3516
Attention: General Counsel
Telephone No.: (609) 452-3600
Facsimile No.: (609) 452-3672

with copies to:

Dechert LLP
Cira Centre
2929 Arch Street
Philadelphia, Pennsylvania 19104-2808
Attention: R. Craig Smith
Telephone No.: (215) 994-4000
Facsimile No.: (215) 994-2222

8.3 *Interpretation; Knowledge.* (a) When a reference is made in this Agreement to Exhibits, such reference shall be to an Exhibit to this Agreement unless otherwise indicated. When a reference is made in this Agreement to Sections, such reference shall be to a section of this Agreement unless otherwise indicated. For purposes of this Agreement: (i) the words "**include**," "**includes**" and "**including**," when used herein, shall be deemed in each case to be followed by the words "**without limitation**"; (iii) the words "**hereof**," "**herein**," "**hereto**" and "**hereunder**" and words of similar import, when used in this Agreement, shall refer to this Agreement as a whole and not to any particular provision of this Agreement; (iii) references herein to "**party**" or "**parties**" shall mean a party or the parties to this Agreement unless the context provides otherwise; (iv) the table of contents and headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement; (v) the meaning assigned to each term defined herein shall be equally applicable to both the singular and the plural forms of such term, and words denoting any gender shall include all genders, (vi) a reference to any party to this Agreement or any other agreement or document shall include such party's successors and permitted assigns, (vii) a reference to any Legal Requirement or to any provision of any Legal Requirement shall include any amendment to, and any modification or re-enactment thereof, any provision substituted therefor and all regulations and statutory instruments issued thereunder or pursuant thereto, (viii) all references to "$" or "dollars" shall be deemed references to United States dollars and (ix) capitalized terms used and not defined in the exhibits, annexes and schedules attached to this Agreement shall have the respective meanings set forth in this Agreement. When reference is made herein to "**the business of**" an entity, such reference shall be deemed to include the business of all such entity and its Subsidiaries, taken as a whole.

(b) For purposes of this Agreement, the term "**Knowledge**" means, with respect to any matter in question, as of the date hereof and, for the purposes of **Article VI**, as of the Closing

Date, (i) with respect to Parent, that any of John L. Higgins, Charles S. Berkman, John Sharp, Zofia E. Dziewanowska and Martin D. Meglasson has actual knowledge of and (ii) with respect to the Company, that any of Joseph A. Mollica, Stephen C. Costalas, Brian M. Posner, René Belder and Maria L. Webb has actual knowledge of.

(c) For purposes of this Agreement, the term "**Company Material Adverse Effect**" means any change, circumstance, event or effect (each an "**Effect**") that (i) is materially adverse to the business, financial condition or results of operations of the Company and the Company's Subsidiaries, taken as a whole, including without limitation, failure of either of (1) the p38 kinase inhibitor program with Bristol-Myers Squibb Company in rheumatoid arthritis or (2) the CXCR2 antagonist program with Schering Corporation and Schering Plough Ltd. in chronic obstructive pulmonary disease to meet its primary Phase 2 clinical endpoints (outcome measures), or a clinical hold imposed by the FDA or other comparable Governmental Entity with respect to either of such programs as evidenced by general public disclosure or formal written notification to the Company of any such Effect (either (1) or (2), the "**Program Triggers**"); provided that Parent may only exercise its right to terminate this Agreement pursuant to a Company Material Adverse Effect relating to either Program Trigger if it provided written notice to the Company of such termination within ten (10) business days of notification by the Company to Parent, pursuant to **Section 8.2**, of the occurrence of a Program Trigger, and absent such notice of termination, Parent shall be deemed to waive any right to terminate this Agreement and shall be deemed to waive the nonsatisfaction of any condition to closing under Article VI of this Agreement, in each case, relating to or arising from such Program Trigger; or (ii) materially impedes the consummation of the transactions contemplated by this Agreement in accordance with the terms hereof and all applicable Legal Requirements; provided, however, that none of the following shall be deemed in themselves, either alone or in combination, to constitute, and that none of the following shall be taken into account in determining whether there has been or will be, a Company Material Adverse Effect: (A) any adverse Effect (1) to the extent attributable in whole or in part to the announcement or pendency of Merger 1; (B) any adverse Effect attributable to conditions generally affecting the biotechnology or pharmaceutical industries or the U.S. or international economy or the U.S. or international financial markets which do not materially disproportionately affect the Company or the applicable Company Subsidiaries; (C) any adverse Effect arising from or relating to compliance with the terms of this Agreement; (D) changes in GAAP or regulatory accounting principles after the date hereof; (E) changes in law after the date hereof; (F) earthquakes, fires, floods, hurricanes, tornadoes or similar catastrophes, or acts of war, sabotage, terrorism, military action or any escalation or worsening thereof after the date hereof, and whether or not pursuant to the declaration of national emergency or war; (G) any adverse data resulting from pre-clinical activities; (H) the failure of the Company to meet analysts' projections, in and of itself (it being understood that any Effect that may have caused or contributed to any such failure may be deemed to constitute, in and of itself, a Company Material Adverse Effect and may be taken into consideration when determining whether a Company Material Adverse Effect has occurred); (I) any action taken by the Company with Parent's written consent or the taking of any action expressly required by this Agreement; (J) a decline in the Company's stock price, in and of itself (it being understood that any Effect that may have caused or contributed to any such decline may be deemed to constitute, in and of itself, a Company Material Adverse Effect and may be taken into consideration when determining whether a Company Material Adverse Effect has occurred); or (K) the Effects upon the Company's business, financial condition and/or results of operations as contemplated in the Company's forecast plan delivered to Parent by the Company prior to the date of this Agreement (provided that for the purposes of this clause (K) "contemplated" means the forecasts related to the business, financial condition and results of operations of the Company which are contained in the forecast plan and any variances from such forecasts which are not material to the Company).

(d) For purposes of this Agreement, the term "**Parent Material Adverse Effect**" means any Effect that is (i) materially adverse to the business, financial condition or results of operations of Parent and Parent's Subsidiaries, taken as a whole or (ii) materially impedes the consummation of the transactions contemplated by this Agreement in accordance with the terms hereof and all applicable Legal Requirements; *provided*, *however*, that none of the following shall be deemed in themselves, either alone or in combination, to constitute, and that none of the following shall be taken into account in determining whether there has been or will be, a Parent Material Adverse Effect: (A) any adverse Effect to the extent attributable in whole or in part to the announcement or pendency of Merger 1 (provided that the exception in this clause (A) shall not apply to the use of the term "Material Adverse Effect" in **Section 6.2(a)** with respect to the representations and warranties contained in **Section 3.3** and **Section 3.7(a)**); (B) any adverse Effect attributable to conditions generally affecting the biotechnology industry or the U.S. economy in any locations where Parent or any of Parent's Subsidiaries has material operations which do not materially disproportionately affect Parent or the applicable Parent Subsidiaries; (C) any adverse Effect arising from or relating to compliance with the terms of this Agreement; (D) changes in GAAP or regulatory accounting principles after the date hereof; (E) changes in law after the date hereof; (F) earthquakes, fires, floods, hurricanes, tornadoes or similar catastrophes, or acts of war, sabotage, terrorism, military action or any escalation or worsening thereof after the date hereof, and whether or not pursuant to the declaration of national emergency or war; (G) any adverse data resulting from pre-clinical activities; (H) the failure of Parent to meet analysts' projections, in and of itself (it being understood that any Effect that may have caused or contributed to any such failure may be deemed to constitute, in and of itself, a Parent Material Adverse Effect and may be taken into consideration when determining whether a Parent Material Adverse Effect has occurred); (I) any action taken by Parent with the Company's consent or the taking of any action expressly required by this Agreement; or (J) a decline in Parent's stock price, in and of itself (it being understood that any Effect that may have caused or contributed to any such decline may be deemed to constitute, in and of itself, a Parent Material Adverse Effect and may be taken into consideration when determining whether a Parent Material Adverse Effect has occurred).

(e) For purposes of this Agreement, the term "**Person**" shall mean any individual, corporation (including any non-profit corporation), general partnership, limited partnership, limited liability partnership, joint venture, estate, trust, company (including any limited liability company or joint stock company), firm or other enterprise, association, organization, entity or Governmental Entity.

8.4 *Counterparts.* This Agreement may be executed in two or more counterparts, all of which shall be considered the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other party, it being understood that all parties need not sign the same counterpart.

8.5 *Entire Agreement; Third-Party Beneficiaries.* This Agreement and all exhibits and attachments hereto, including the Company Disclosure Letter, the Parent Disclosure Letter, the CVR Agreement and the Confidentiality Agreement (i) constitute the entire agreement among the parties with respect to the subject matter hereof and supersede all prior agreements and understandings, both written and oral, among the parties with respect to the subject matter hereof, it being understood that the Confidentiality Agreement shall continue in full force and effect until the Closing and shall survive any termination of this Agreement and (ii) are not intended to confer upon any other Person any rights or remedies hereunder, except as specifically provided, following the Merger 1 Effective Time, in **Section 5.10**.

8.6 *Severability.* In the event that any provision of this Agreement or the application thereof, becomes or is declared by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of this Agreement will continue in full force and effect and the application of such

provision to other Persons or circumstances will be interpreted so as reasonably to effect the intent of the parties hereto. The parties further agree to negotiate in good faith to replace such void or unenforceable provision of this Agreement with a valid and enforceable provision that will achieve, to the greatest extent possible, the economic, business and other purposes of such void or unenforceable provision.

8.7 *Other Remedies; Specific Performance.*

(a) *Other Remedies.* Except as otherwise provided herein, any and all remedies herein expressly conferred upon a party will be deemed cumulative with and not exclusive of any other remedy conferred hereby, or by law or equity upon such party, and the exercise by a party of any one remedy will not preclude the exercise of any other remedy.

(b) *Specific Performance.* The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof in any court of the United States or any state having jurisdiction, this being in addition to any other remedy to which they are entitled at law or in equity.

8.8 *Governing Law.* This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, regardless of the laws that might otherwise govern under applicable principles of conflicts of law thereof.

8.9 *Jurisdiction.* Each of the parties hereto irrevocably and unconditionally agrees that any legal action or proceeding with respect to this Agreement and the rights and obligations arising hereunder, or for recognition and enforcement of any judgment in respect of this Agreement and the rights and obligations arising hereunder brought by the other party hereto or its successors or assigns, shall be brought and determined exclusively in the Delaware Court of Chancery and any state appellate court therefrom within the State of Delaware (or, if the Delaware Court of Chancery declines to accept jurisdiction over a particular matter, any state or federal court within the State of Delaware). Each of the parties hereto hereby irrevocably submits with regard to any such action or proceeding for itself and in respect of its property, generally and unconditionally, to the exclusive personal jurisdiction of the aforesaid courts and agrees that it will not bring any action relating to this Agreement or any of the transactions contemplated by this Agreement in any court other than the aforesaid courts. Each of the parties hereto hereby irrevocably waives, and agrees not to assert, by way of motion, as a defense, counterclaim or otherwise, in any action or proceeding with respect to this Agreement, (i) any claim that it is not personally subject to the jurisdiction of the above-named courts for any reason, (ii) any claim that it or its property is exempt or immune from jurisdiction of any such court or from any legal process commenced in such courts (whether through service of notice, attachment prior to judgment, attachment in aid of execution of judgment, execution of judgment or otherwise) and (iii) to the fullest extent permitted by applicable Legal Requirements, any claim that (A) the suit, action or proceeding in such court is brought in an inconvenient forum, (B) the venue of such suit, action or proceeding is improper or (C) this Agreement, or the subject mater hereof, may not be enforced in or by such courts.

8.10 *Rules of Construction.* The parties hereto agree that they have been represented by counsel during the negotiation and execution of this Agreement and, therefore, waive the application of any law, regulation, holding or rule of construction providing that ambiguities in an agreement or other document will be construed against the party drafting such agreement or document.

8.11 *Assignment.* No party may assign either this Agreement or any of its rights, interests, or obligations hereunder without the prior written approval of the other parties. Any purported

assignment in violation of this **Section 8.11** shall be void. Subject to the preceding sentence, this Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns.

8.12 *Waiver of Jury Trial.* EACH PARTY ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY WHICH MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE IT HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT AND ANY OF THE AGREEMENTS DELIVERED BY THE PARTIES IN CONNECTION HEREWITH OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY. EACH PARTY CERTIFIES AND ACKNOWLEDGES THAT (A) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE EITHER OF SUCH WAIVERS, (B) IT UNDERSTANDS AND HAS CONSIDERED THE IMPLICATIONS OF SUCH WAIVERS, (C) IT MAKES SUCH WAIVERS VOLUNTARILY, AND (D) IT HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS **SECTION 8.12**.

*****

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized respective officers as of the date first written above.

LIGAND PHARMACEUTICALS INCORPORATED

By: /s/ JOHN L. HIGGINS

Name: John L. Higgins
Title: *President and Chief Executive Officer*

MARGAUX ACQUISITION CORP.

By: /s/ CHARLES BERKMAN

Name: Charles Berkman
Title: *President and Chief Executive Officer*

LATOUR ACQUISITION, LLC

By: /s/ JOHN SHARP

Name: John Sharp
Title: *President and Chief Executive Officer*

PHARMACOPEIA, INC.

By: /s/ JOSEPH A. MOLLICA

Name: Joseph A. Mollica
Title: *Chairman of the Board of Directors and Interim President and Chief Executive Officer*

Annex B

Form of CVR Agreement

CONTINGENT VALUE RIGHTS AGREEMENT

THIS CONTINGENT VALUE RIGHTS AGREEMENT, dated as of [ ], 200[ ] (this "***Agreement***"), is entered into by and among **LIGAND PHARMACEUTICALS INCORPORATED**, a Delaware corporation ("***Buyer***"), **PHARMACOPEIA, INC.**, a Delaware corporation ("***Target***"), and **[ ]**, a [ ], as Rights Agent (the "***Rights Agent***") and as initial CVR Registrar (as defined herein).

Preamble

Buyer, Margaux Acquisition Corp., a Delaware corporation ("***Sub***"), Latour Acquisition, LLC, a Delaware limited liability company, and Target have entered into an Agreement and Plan of Merger dated as of September 24, 2008 (the "***Merger Agreement***"), pursuant to which Sub will merge with and into Target (the "***Merger***"), with Target (or a successor entity) surviving the Merger as a subsidiary of Buyer.

Pursuant to the Merger Agreement, Buyer agreed to create and issue to Target's stockholders of record immediately prior to the effective time of the Merger and other securityholders of Target, contingent value rights as hereinafter described.

The parties have done all things necessary to make the contingent value rights, when issued pursuant to the Merger Agreement and hereunder, the valid obligations of Buyer and to make this Agreement a valid and binding agreement of Buyer, in accordance with its terms.

NOW, THEREFORE, for and in consideration of the premises and the consummation of the transactions referred to above, it is mutually covenanted and agreed, for the equal and proportionate benefit of all Holders (as hereinafter defined), as follows:

ARTICLE I
DEFINITIONS

Section 1.1 Definitions.

(a) For all purposes of this Agreement, except as otherwise expressly provided or unless the context otherwise requires:

(i) the terms defined in this Article have the meanings assigned to them in this Article, and include the plural as well as the singular;

(ii) all accounting terms used herein and not expressly defined herein shall have the meanings assigned to such terms in accordance with United States generally accepted accounting principles, as in effect on the date hereof;

(iii) the words "herein," "hereof" and "hereunder" and other words of similar import refer to this Agreement as a whole and not to any particular Article, Section or other subdivision;

(iv) unless the context otherwise requires, words describing the singular number shall include the plural and vice versa, words denoting any gender shall include all genders and words denoting natural Persons shall include corporations, partnerships and other Persons and vice versa; and

(v) all references to "including" shall be deemed to mean including without limitation.

(b) Capitalized terms used but not otherwise defined herein shall have the meanings ascribed thereto in the Merger Agreement. The following terms shall have the meanings ascribed to them as follows:

"**Achievement Certificate**" has the meaning set forth in Section 2.4(a).

"**Board of Directors**" means the board of directors of Buyer.

"**Board Resolution**" means a copy of a resolution certified by the secretary or an assistant secretary of Buyer to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification, and delivered to the Rights Agent.

"**Business Day**" means any day other than a Saturday, Sunday or a day on which banking institutions in New York, New York are authorized or obligated by law or executive order to remain closed.

"**CVR Payment Amount**" means an amount equal to $15 million, payable in cash.

"**CVR Payment Date**" means the date that the CVR Payment Amount is payable by Buyer to the Holders, which date shall be established pursuant to Section 2.4.

"**CVR Payment Event**" means the entry by Buyer or any of its subsidiaries into a license or sale agreement related to DARA, or any other agreement for the development, marketing or sale of DARA, or any option to enter into any such agreements, with any third party, other than Bristol-Myers Squibb Company or any of its Affiliates, on or prior to December 31, 2011.

"**CVR Register**" has the meaning set forth in Section 2.3(b).

"**CVR Registrar**" has the meaning set forth in Section 2.3(b).

"**CVRs**" means the contingent value rights issued by Buyer pursuant to the Merger Agreement and this Agreement.

"**DARA**" means any product candidate from Target's dual-acting angiotensin and endothelin receptor antagonist program (including Target's Phase 2 product candidate identified by code PS433540), including related back-up compounds, research data, Intellectual Property and any other related rights or assets.

"**Holder**" means a Person in whose name a CVR is registered in the CVR Register.

"**Non-Achievement Certificate**" has the meaning set forth in Section 2.4(d).

"**Notice of Objection**" has the meaning set forth in Section 2.4(d).

"**Objection Period**" has the meaning set forth in Section 2.4(d).

"**Officer's Certificate**" means a certificate signed by the chief executive officer, president, chief financial officer, any vice president, the controller, the treasurer or the secretary, in each case of Buyer, in his or her capacity as such an officer, and delivered to the Rights Agent.

"**Permitted Transfer**" means: (i) the transfer of any or all of the CVRs (upon the death of the Holder) by will or intestacy; (ii) transfer by instrument to an inter vivos or testamentary trust in which the CVRs are to be passed to beneficiaries upon the death of the trustee; (iii) transfers made pursuant to a court order of a court of competent jurisdiction (such as in connection with divorce, bankruptcy or liquidation); (iv) if the Holder is a partnership or limited liability company, a distribution by the transferring partnership or limited liability company to its partners or members, as applicable; or (v) a transfer made by operation of law (including a consolidation or merger) or in connection with the dissolution, liquidation or termination of any corporation, limited liability company, partnership or other entity.

"**Rights Agent**" means the Rights Agent named in the first paragraph of this Agreement, until a successor Rights Agent shall have become such pursuant to the applicable provisions of this Agreement, and thereafter "Rights Agent" shall mean such successor Rights Agent.

"**Rights Agent Fee**" means the fee of the Rights Agent to act in such capacity pursuant to the terms of this Agreement.

"**Surviving Person**" has the meaning set forth in Section 6.1(a)(i).

ARTICLE II
CONTINGENT VALUE RIGHTS

Section 2.1 Issuance of CVRs; Appointment of Rights Agent.

(a) The CVRs shall be issued pursuant to the Merger Agreement at the time and in the manner set forth in the Merger Agreement.

(b) Buyer hereby appoints [ ] as the Rights Agent to act as rights agent for Buyer in accordance with the instructions hereinafter set forth in this Agreement, and the Rights Agent hereby accepts such appointment.

Section 2.2 Nontransferable.

The CVRs shall not be sold, assigned, transferred, pledged, encumbered or in any other manner transferred or disposed of, in whole or in part, other than through a Permitted Transfer.

Section 2.3 No Certificate; Registration; Registration of Transfer; Change of Address.

(a) The CVRs shall not be evidenced by a certificate or other instrument.

(b) The Rights Agent shall keep a register (the "***CVR Register***") for the registration of CVRs. The Rights Agent is hereby initially appointed "***CVR Registrar***" for the purpose of registering CVRs and transfers of CVRs as herein provided.

(c) Subject to the restriction on transferability set forth in Section 2.2, every request made to transfer a CVR must be in writing and accompanied by a written instrument or instruments of transfer and any other requested documentation in form reasonably satisfactory to Buyer and the CVR Registrar, duly executed by the registered Holder or Holders thereof or by the duly appointed legal representative thereof or by a duly authorized attorney, such signature to be guaranteed by a participant in a recognized Signature Guarantee Medallion Program. A request for a transfer of a CVR shall be accompanied by such documentation establishing satisfaction that the transfer is a Permitted Transfer as may be reasonably requested by Buyer and the CVR Registrar (including opinions of counsel), if appropriate. Upon receipt of such written notice, the CVR Registrar shall, subject to its reasonable determination that the transfer instrument is in proper form and the transfer otherwise complies with the other terms and conditions herein, register the transfer of the CVRs in the CVR Register. All duly transferred CVRs registered in the CVR Register shall be the valid obligations of Buyer, evidencing the same right and shall entitle the transferee to the same benefits and rights under this Agreement, as those held by the transferor. No transfer of a CVR shall be valid until registered in the CVR Register, and any transfer not duly registered in the CVR Register will be void ab initio. Any transfer or assignment of the CVRs shall be without charge (other than the cost of any transfer tax which shall be the responsibility of the transferor) to the Holder.

(d) A Holder may make a written request to the CVR Registrar to change such Holder's address of record in the CVR Register. The written request must be duly executed by the Holder. Upon receipt of such written notice, the CVR Registrar shall promptly record the change of address in the CVR Register.

Section 2.4 Payment Procedures.

(a) Promptly following the occurrence of the CVR Payment Event, but in no event later than five Business Days after such event, Buyer shall deliver to the Rights Agent a certificate (the "***Achievement Certificate***"), certifying that the Holders are entitled to receive the CVR Payment Amount. No transaction in compliance with Section 6.1 hereof shall give the Holders the right to receive the CVR Payment Amount.

(b) If a CVR Payment Event has not occurred on or prior to December 31, 2011, then, within five Business Days after such date, Buyer shall deliver to the Rights Agent a certificate (the "***Non-Achievement Certificate***"), stating that a CVR Payment Event did not occur.

(c) Except as otherwise requested by any Holder, the Rights Agent shall promptly (and in no event later than five Business Days after receipt thereof) send each Holder a copy of any Achievement Certificate or Non-Achievement Certificate at its registered address.

(d) Upon demand by any Holder or Holders of at least 20% in the aggregate of the outstanding CVRs, within 45 calendar days after distribution by the Rights Agent of a Non-Achievement Certificate (the "***Objection Period***"), the Rights Agent shall deliver a written notice to Buyer prepared by such Holder or Holders specifying that such Holder or Holders object to the determination of Buyer that a CVR Payment Event did not occur (a "***Notice of Objection***") and stating the reason upon which such Holder or Holders have determined that a CVR Payment Event has occurred on or prior to December 31, 2011. Any dispute arising from a Notice of Objection shall be resolved in accordance with the procedure set forth in Section 7.12, which decision shall be binding on the parties hereto and the Holders.

(e) If a Notice of Objection has not been delivered to Buyer within the Objection Period, then the Holders shall have no right to receive the CVR Payment Amount, and Buyer and the Rights Agent shall have no further obligations with respect to the CVR Payment Amount.

(f) If Buyer delivers an Achievement Certificate to the Rights Agent or if the CVR Payment Amount is determined to be payable pursuant to Section 2.4(d) above, Buyer shall establish a CVR Payment Date that is within 15 calendar days of the date of the Achievement Certificate or the date of final determination pursuant to Section 2.4(d) above, as applicable. At least five Business Days prior to such CVR Payment Date, Buyer shall cause the CVR Payment Amount to be delivered to the Rights Agent, who will in turn, on the CVR Payment Date, distribute the CVR Payment Amount to the Holders (each Holder being entitled to receive its *pro rata* share of the CVR Payment Amount based on the number of CVRs held by such Holder as reflected on the CVR Register) (i) by check mailed to the address of each Holder as reflected in the CVR Register as of the close of business on the last Business Day prior to such CVR Payment Date, or, (ii) with respect to any Holder that is due payment pursuant to this Agreement in excess of $1,000,000 who has provided the Rights Agent with wire transfer instructions, by wire transfer of immediately available funds to such account.

(g) Buyer shall be entitled to deduct and withhold, or cause to be deducted or withheld, from each CVR Payment Amount otherwise payable pursuant to this Agreement, such amounts as Buyer or the applicable subsidiary of Buyer is required to deduct and withhold with respect to the making of such payment under the Internal Revenue Code, or any provision of state, local or foreign tax law. To the extent that amounts are so withheld or paid over to or deposited with the relevant governmental entity, such withheld amounts shall be treated for all purposes of this Agreement as having been paid to the Holder in respect of which such deduction and withholding was made.

(h) Buyer shall promptly furnish to the Rights Agent all information and documentation in connection with this Agreement and the CVRs that the Rights Agent or any Holder or Holders of at least 5% in the aggregate of the outstanding CVRs may reasonably request in connection with the

determination of whether the CVR Payment Event has occurred. The Rights Agent shall forward any information and documentation it receives to the Holders who request such information.

Section 2.5 No Voting, Dividends or Interest; No Equity or Ownership Interest in Buyer.

(a) The CVRs shall not have any voting or dividend rights, and interest shall not accrue on any amounts payable on the CVRs to any Holder.

(b) The CVRs shall not represent any equity or ownership interest in Buyer or in any constituent company to the Merger.

Section 2.6 Sole Discretion and Decision Making Authority.

Notwithstanding anything contained herein to the contrary, the development of pharmaceutical products, such as DARA, is uncertain and expensive and as a result, Buyer shall have sole discretion and decision making authority over whether to continue to invest, how much to invest in DARA and whether and on what terms, if any, to enter into (i) a license or sale agreement related to DARA, (ii) any other agreement for the development, marketing or sale of DARA, or (iii) any option to enter into any such agreements.

ARTICLE III
THE RIGHTS AGENT

Section 3.1 Certain Duties and Responsibilities.

(a) The Rights Agent shall not have any liability for any actions taken or not taken in connection with this Agreement, except to the extent of its willful misconduct, bad faith or gross negligence. No provision of this Agreement shall require the Rights Agent to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder or in the exercise of any of its rights or powers.

(b) Any Holder or Holders of at least 20% in the aggregate of the outstanding CVRs may direct the Rights Agent to act on behalf of the Holders in enforcing any of its or their rights hereunder, including, without limitation, the delivery of any Notice of Objection and negotiation or arbitration pursuant to Section 7.12. The Rights Agent shall be under no obligation to institute any action, suit or legal proceeding or to take any other action likely to involve material expense unless such Holder or Holders shall furnish the Rights Agent with reasonable security and indemnity for any costs and expenses which may be incurred. All rights of action under this Agreement may be enforced by the Rights Agent, and any action, suit or proceeding instituted by the Rights Agent shall be brought in its name as Rights Agent, and any recovery of judgment shall be for the ratable benefit of all the Holders, as their respective rights or interests may appear.

Section 3.2 Certain Rights of Rights Agent.

The Rights Agent undertakes to perform such duties and only such duties as are specifically set forth in this Agreement, and no implied covenants or obligations shall be read into this Agreement against the Rights Agent. In addition:

(a) the Rights Agent may rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties;

(b) whenever the Rights Agent shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Rights Agent may, in the absence of willful misconduct, bad faith or gross negligence on its part, rely upon an Officer's Certificate;

(c) the Rights Agent may engage and consult with counsel of its selection and the written advice of such counsel or any opinion of counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;

(d) in the event of arbitration, the Rights Agent may engage and consult with tax experts, valuation firms and other experts and third parties that it, in its sole and absolute discretion, deems appropriate or necessary to enable it to discharge its duties hereunder;

(e) the permissive rights of the Rights Agent to do things enumerated in this Agreement shall not be construed as a duty;

(f) the Rights Agent shall not be required to give any note or surety in respect of the execution of such powers or otherwise in respect of the premises; and

(g) Buyer agrees to indemnify the Rights Agent for, and hold the Rights Agent harmless against, any loss, liability, claim, demands, suits or expense arising out of or in connection with the Rights Agent's duties under this Agreement, including the costs and expenses of defending the Rights Agent against any claims, charges, demands, suits or loss, unless such loss shall have been determined by a court of competent jurisdiction to be a result of the Rights Agent's willful misconduct, bad faith or gross negligence, *provided*, *however*, that the Rights Agent's aggregate liability with respect to, arising from, or arising in connection with this Agreement, or from all services provided or omitted to be provided under this Agreement, whether in contract, in tort, or otherwise, is limited to, and shall not exceed, the amounts paid hereunder by Buyer to the Rights Agent as fees and charges, but not including reimbursable expenses.

(h) Buyer agrees (i) to pay the fees and expenses of the Rights Agent in connection with this Agreement, as set forth on *Schedule 1* hereto, and (ii) to reimburse the Rights Agent for all taxes and governmental charges, reasonable expenses and other charges of any kind and nature incurred by the Rights Agent in the execution of this Agreement (other than taxes measured by the Rights Agent's net income). The Rights Agent shall also be entitled to reimbursement from Buyer for all reasonable and necessary out-of-pocket expenses (including reasonable fees and expenses of the Rights Agent's counsel and agent) paid or incurred by it in connection with the administration by the Rights Agent of its duties hereunder. An invoice for the Rights Agent Fee will be rendered a reasonable time prior to, and paid on, the effective date of the transaction. An invoice for any out-of-pocket expenses and per item fees realized will be rendered and payable within thirty (30) days after receipt by Buyer, except for postage and mailing expenses, which funds must be received one (1) Business Day prior to the scheduled mailing date. Buyer agrees to pay to the Rights Agent any amounts, including fees and expenses, payable in favor of the Rights Agent in connection with any dispute, resolution or arbitration arising under or in connection with this Agreement; *provided*, *however*, that in the event of a resolution in favor of Buyer, any amounts, including fees and expenses, payable in favor of the Rights Agent related to such dispute, resolution or arbitration shall be offset against the CVR Payment Amount, if any.

Section 3.3 Resignation and Removal; Appointment of Successor.

(a) The Rights Agent may resign at any time by giving written notice thereof to Buyer specifying a date when such resignation shall take effect, which notice shall be sent at least 30 days prior to the date so specified.

(b) If the Rights Agent shall resign, be removed or become incapable of acting, Buyer, by way of a Board Resolution, shall promptly appoint a qualified successor Rights Agent who may be a Holder

but shall not be an officer of Buyer. The successor Rights Agent so appointed shall, forthwith upon its acceptance of such appointment in accordance with this Section 3.3(c), become the successor Rights Agent.

(c) Buyer shall give notice of each resignation and each removal of a Rights Agent and each appointment of a successor Rights Agent by mailing written notice of such event by first-class mail, postage prepaid, to the Holders as their names and addresses appear in the CVR Register. Each notice shall include the name and address of the successor Rights Agent. If Buyer fails to send such notice within ten days after acceptance of appointment by a successor Rights Agent, the successor Rights Agent shall cause such notice to be mailed at the expense of Buyer.

Section 3.4 Acceptance of Appointment by Successor.

Every successor Rights Agent appointed hereunder shall execute, acknowledge and deliver to Buyer and to the retiring Rights Agent an instrument accepting such appointment and a counterpart of this Agreement, and thereupon such successor Rights Agent, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Rights Agent; *provided*, that upon the request of Buyer or the successor Rights Agent, such retiring Rights Agent shall execute and deliver an instrument transferring to such successor Rights Agent all the rights, powers and trusts of the retiring Rights Agent.

ARTICLE IV
COVENANTS

Section 4.1 List of Holders.

Buyer shall furnish or cause to be furnished to the Rights Agent (a) in such form as Buyer receives from its transfer agent (or other agent performing similar services for Buyer), the names, addresses and shareholdings of the Holders within five Business Days of the effective time of the Merger, and (b) at such other times as the Rights Agent may request in writing, within five days after receipt by Buyer of any such request, a list, in such form as Buyer receives from its transfer agent (or other agent performing similar services for Buyer), of the names and the addresses of the Holders as of a date not more than 15 days prior to the time such list is furnished. Buyer shall also furnish or cause to be furnished to the Rights Agent with respect to each holder of any Assumed Company Option and New Warrant, such holder's name, address and the number of shares of Buyer's common stock issuable upon exercise of such Assumed Company Option or New Warrant. Upon such exercise, such holder shall be a "Holder" for all purposes of this Agreement.

Following the distribution by the Rights Agent of the CVR Payment Amount, if any, to the Holders in accordance with Section 4.2 hereof, any remaining amount which has been set aside for holders of Assumed Company Options and New Warrants will be promptly returned to Buyer to be held by Buyer for distribution to such holders, upon exercise of such Assumed Company Options and New Warrants.

Section 4.2 Payment of CVR Payment Amount.

Buyer shall duly and promptly pay the CVR Payment Amount, if any, in immediately available funds, to the Rights Agent to be distributed to the Holders in the manner provided for in Section 2.4 and in accordance with the terms of this Agreement.

Section 4.3 Ability to Make Prompt Payment.

Neither Buyer nor any of its Subsidiaries shall enter into any agreement that would restrict Buyer's right to be able to promptly make payments to the Holders under this Agreement or otherwise restrict Buyer's ability to fund such payments.

Section 4.4 Assignment.

Buyer shall not, in whole or in part, assign any of its rights or obligations under this Agreement other than in accordance with the terms of Section 6.1 hereof.

Section 4.5 Registration

If required pursuant to applicable United States securities laws, the CVRs will be registered pursuant to the Registration Statement under the Securities Act and Buyer covenants and agrees:

(a) to prepare and file with the SEC such amendments and supplements to the Registration Statement and the prospectus used in connection therewith as may be necessary to keep the Registration Statement effective through the CVR Payment Date or until such time as the CVRs terminate in accordance with the terms hereof and to use its reasonable efforts to keep the Registration Statement effective during such period; and

(b) to use its reasonable efforts to register or qualify the CVRs under the securities or blue sky laws of each jurisdiction in which such registration or qualification is necessary.

ARTICLE V
AMENDMENTS

Section 5.1 Amendments Without Consent of Holders.

(a) Without the consent of any Holders or the Rights Agent, Buyer, when authorized by a Board Resolution, at any time and from time to time, may enter into one or more amendments hereto, for any of the following purposes:

(i) to evidence the succession of another Person to Buyer and the assumption by any such successor of the covenants of Buyer herein in a transaction contemplated by Section 6.1 hereof; or

(ii) to evidence the termination of the CVR Registrar and the succession of another Person as a successor CVR Registrar and the assumption by any successor of the obligations of the CVR Registrar herein.

(b) Without the consent of any Holders, Buyer, when authorized by a Board Resolution, and the Rights Agent, in the Rights Agent's sole and absolute discretion, at any time and from time to time, may enter into one or more amendments hereto, for any of the following purposes:

(i) to evidence the succession of another Person as a successor Rights Agent and the assumption by any successor of the covenants and obligations of the Rights Agent herein;

(ii) to add to the covenants of Buyer such further covenants, restrictions, conditions or provisions as the Board of Directors and the Rights Agent shall consider to be for the protection of the Holders; provided, that in each case, such provisions shall not adversely affect the interests of the Holders;

(iii) to cure any ambiguity, to correct or supplement any provision herein that may be defective or inconsistent with any other provision herein, or to make any other provisions with respect to matters or questions arising under this Agreement; provided, that in each case, such provisions shall not adversely affect the interests of the Holders; or

(iv) to add, eliminate or change any provision of this Agreement unless such addition, elimination or change is adverse to the interests of the Holders.

(c) Promptly after the execution by Buyer and the Rights Agent of any amendment pursuant to the provisions of this Section 5.1, Buyer shall mail a notice thereof by first-class mail to each of the

Holders at their addresses as they shall appear on the CVR Register, setting forth in general terms the substance of such amendment.

Section 5.2 Amendments With Consent of Holders.

(a) Subject to Section 5.1 (which amendments pursuant to Section 5.1 may be made without the consent of the Holders), with the consent of the Holders of not less than a majority of the outstanding CVRs, whether evidenced in writing or taken at a meeting of the Holders, Buyer, when authorized by a Board Resolution, and the Rights Agent may enter into one or more amendments hereto for the purpose of adding, eliminating or changing any provisions of this Agreement, even if such addition, elimination or change is in any way adverse to the interests of the Holders.

(b) Promptly after the execution by Buyer and the Rights Agent of any amendment pursuant to the provisions of this Section 5.2, Buyer shall mail a notice thereof by first-class mail to the Holders at their addresses as they shall appear on the CVR Register, setting forth in general terms the substance of such amendment.

Section 5.3 Execution of Amendments.

In executing any amendment permitted by this Article V, the Rights Agent shall be entitled to receive, and shall be fully protected in relying upon, an opinion of counsel stating that the execution of such amendment is authorized or permitted by this Agreement. The Rights Agent may, but is not obligated to, enter into any such amendment that affects the Rights Agent's own rights, privileges, covenants or duties under this Agreement or otherwise.

Section 5.4 Effect of Amendments.

Upon the execution of any amendment under this Article V, this Agreement shall be modified in accordance therewith, such amendment shall form a part of this Agreement for all purposes and every Holder shall be bound thereby.

ARTICLE VI
CONSOLIDATION, MERGER, SALE OR CONVEYANCE

Section 6.1 Buyer May Consolidate, Etc.

(a) Buyer shall not consolidate with or merge into any other Person or convey, transfer or lease its properties and assets substantially as an entirety to any Person, unless:

(i) the Person formed by such consolidation or into which Buyer is merged or the Person that acquires by conveyance or transfer, or that leases, the properties and assets of Buyer substantially as an entirety (the "***Surviving Person***") shall expressly assume payment of amounts on all the CVRs and the performance of every duty and covenant of this Agreement on the part of Buyer to be performed or observed; and

(ii) Buyer has delivered to the Rights Agent an Officer's Certificate, stating that such consolidation, merger, conveyance, transfer or lease complies with this Article VI and that all conditions precedent herein provided for relating to such transaction have been complied with.

(b) For purposes of this Section 6.1 only, "convey, transfer or lease its properties and assets substantially as an entirety" shall mean (i) properties and assets contributing in the aggregate at least 80% of Buyer's total consolidated revenues for the current period as reported in Buyer's last available periodic financial report (quarterly or annual, as the case may be) or (ii) properties and assets constituting in the aggregate at least 80% of Buyer's total assets for the current period as reported in Buyer's last available periodic financial report (quarterly or annual, as the case may be).

(c) In the event Buyer conveys, transfers or leases its properties and assets substantially as an entirety in accordance with the terms and conditions of this Section 6.1, Buyer and the Surviving Person shall be jointly and severally liable for the payment of the CVR Payment Amount and the performance of every duty and covenant of this Agreement on the part of Buyer to be performed or observed.

Section 6.2 Successor Substituted.

Upon any consolidation of or merger by Buyer with or into any other Person, or any conveyance, transfer or lease of the properties and assets substantially as an entirety to any Person in accordance with Section 6.1, the Surviving Person shall succeed to, and be substituted for, and may exercise every right and power of, Buyer under this Agreement with the same effect as if the Surviving Person had been named as Buyer herein, and thereafter, except in the case of a lease, the predecessor Person shall be relieved of all obligations and covenants under this Agreement and the CVRs.

ARTICLE VII
OTHER PROVISIONS OF GENERAL APPLICATION

Section 7.1 Notices to Rights Agent and Buyer.

Any request, demand, authorization, direction, notice, consent, waiver or other document provided or permitted by this Agreement shall be sufficient for every purpose hereunder if in writing and sent by facsimile transmission, delivered personally, or by certified or registered mail (return receipt requested and first-class postage prepaid) or sent by a nationally recognized overnight courier (with proof of service), addressed as follows, and shall be deemed to have been given upon receipt:

(a) if to the Rights Agent, addressed to it at [ ], facsimile at [ ], or at any other address previously furnished in writing to the Holders and Buyer by the Rights Agent in accordance with this Section 7.1; or

(b) if to Buyer, addressed to it at 10275 Science Center Drive, San Diego, California 92121, facsimile at (858) 550-7272, or at any other address previously furnished in writing to the Rights Agent and the Holders by Buyer in accordance with this Section 7.1.

Section 7.2 Notice to Holders.

Where this Agreement provides for notice to Holders, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to each Holder affected by such event, at his, her or its address as it appears in the CVR Register, not later than the latest date, and not earlier than the earliest date, prescribed for the giving of such notice. In any case where notice to Holders is given by mail, neither the failure to mail such notice, nor any defect in any notice so mailed, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders.

Section 7.3 Effect of Headings.

The Article and Section headings herein are for convenience only and shall not affect the construction hereof.

Section 7.4 Successors and Assigns.

All covenants and agreements in this Agreement by Buyer shall bind its successors and assigns, whether so expressed or not.

Section 7.5 Benefits of Agreement.

Nothing in this Agreement, express or implied, shall give to any Person (other than the parties hereto, the Holders and their permitted successors and assigns hereunder) any benefit or any legal or equitable right, remedy or claim under this Agreement or under any covenant or provision herein contained, all such covenants and provisions being for the sole benefit of the parties hereto, the Holders and their permitted successors and assigns.

Section 7.6 Governing Law.

This Agreement and the CVRs shall be governed by and construed in accordance with the laws of the State of Delaware without regards to its rules of conflicts of laws.

Section 7.7 Legal Holidays.

In the event that a CVR Payment Date shall not be a Business Day, then, notwithstanding any provision of this Agreement to the contrary, any payment required to be made in respect of the CVRs on such date need not be made on such date, but may be made on the next succeeding Business Day with the same force and effect as if made on the CVR Payment Date.

Section 7.8 Severability Clause.

In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Agreement, but this Agreement shall be construed as if such invalid or illegal or unenforceable provision had never been contained herein. Upon such determination that any term or other provision is invalid, illegal or unenforceable, the court or other tribunal making such determination is authorized and instructed to modify this Agreement so as to effect the original intent of the parties as closely as possible so that the transactions and agreements contemplated herein are consummated as originally contemplated to the fullest extent possible.

Section 7.9 Counterparts.

This Agreement may be signed in any number of counterparts (which may be effectively delivered by facsimile or other electronic means), each of which shall be deemed to constitute but one and the same instrument.

Section 7.10 Termination.

This Agreement shall terminate and be of no further force or effect, and the parties hereto shall have no liability hereunder, upon the earlier to occur of (a) the payment of the CVR Payment Amount, (b) in the event that a Notice of Objection is not delivered within the Objection Period, the expiration of the Objection Period or (c) in the event of the delivery of a Notice of Objection, either (i) the final determination in accordance with this Agreement that a CVR Payment Event has not been achieved or (ii) the fulfillment of any payment or other obligation required pursuant to a final determination made in accordance with this Agreement.

Section 7.11 Entire Agreement.

This Agreement and the Merger Agreement represent the entire understanding of the parties hereto with reference to the CVRs and this Agreement supersedes any and all other oral or written agreements hereto made with respect to the CVRs, except for the Merger Agreement. If and to the extent that any provision of this Agreement is inconsistent or conflicts with the Merger Agreement, this Agreement shall govern and be controlling.

Section 7.12 Negotiation; Arbitration.

(a) Prior to any arbitration pursuant to Section 7.12(b), Buyer, the Rights Agent and, if available, any Holder or Holders of at least 5% in the aggregate of the outstanding CVRs shall negotiate in good faith for a period of 30 days to resolve any controversy or claim arising out of or relating to this Agreement or the breach thereof.

(b) After expiration of the 30-day period contemplated by Section 7.12(a), such controversy or claim, including any claims for breach of this Agreement, shall be settled by arbitration administered by the American Arbitration Association under its Commercial Arbitration Rules, and judgment on the award rendered by the arbitrators may be entered in any court having jurisdiction thereof. Buyer, the Rights Agent and any Holder or Holders of at least 20% in the aggregate of the outstanding CVRs may initiate an arbitration for any matter relating to this Agreement. However, in the event of a dispute arising from the delivery of a Notice of Objection, the sole matter to be settled by arbitration shall be whether a CVR Payment Event has occurred on or prior to December 31, 2011. The number of arbitrators shall be three. Within 15 days after the commencement of arbitration, each party shall select one person to act as arbitrator, and the two selected shall select a third arbitrator within 15 days of their appointment. If the arbitrators selected by the parties are unable or fail to agree upon the third arbitrator, the third arbitrator shall be selected by the American Arbitration Association. The place of the arbitration shall be New York, New York. The arbitrators shall be lawyers or retired judges with experience in the life sciences industry and with mergers and acquisitions. Except as may be required by law, neither a party nor an arbitrator may disclose the existence, content or results of any arbitration hereunder without the prior written consent of both parties (provided that the Rights Agent may disclose to the Holders any such information without the consent of Buyer). Any award payable in favor of the Holders or the Rights Agent as a result of arbitration shall be distributed to the Holders on a pro rata basis, based on the number of CVRs held by each Holder. Buyer shall pay all fees and expenses incurred in connection with any arbitration, including the costs and expenses billed by the arbitrators in connection with the performance of their duties described herein; *provided*, *however*, that if the arbitrator rules in favor of Buyer, the Arbitrator's fees and expenses shall be offset against the CVR Payment Amount, if any.

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IN WITNESS WHEREOF, each of the parties has caused this Agreement to be executed on its behalf by its duly authorized officers as of the day and year first above written.

LIGAND PHARMACEUTICALS INCORPORATED

By: _____

Name:
Title:

PHARMACOPEIA, INC.

By: _____

Name:
Title:

[RIGHTS AGENT]

By: _____

Name:
Title:

Schedule 1

Fees and Expenses of the Rights Agent

Annex C

Opinion of Cowen and Company

September 23, 2008

Board of Directors
Pharmacopeia, Inc.
3000 Eastpark Boulevard
Cranbury, NJ 08512

Ladies and Gentlemen:

You have requested our opinion as to the fairness, from a financial point of view, to the holders of the common stock of Pharmacopeia, Inc. (the "Company") of the Consideration (as defined below) to be received by such holders pursuant to the terms of that certain Agreement and Plan of Merger, to be dated as of September 24, 2008 (the "Merger Agreement"), by and among Ligand Pharmaceuticals Incorporated ("Parent"), Margaux Acquisition Corp., a wholly-owned subsidiary of Parent ("Merger Sub 1"), Latour Acquisition, LLC, a wholly-owned subsidiary of Parent ("Merger Sub 2"), and the Company, and that certain Contingent Value Rights Agreement executed prior to consummation of Merger 1 (as defined below) (the "CVR Agreement"), by and among Parent, a Rights Agent, and the Company.

As more specifically set forth in the Merger Agreement, and subject to the terms, conditions and adjustments set forth in the Merger Agreement and as further described to us by management of Company, Merger Sub 1 will merge with and into the Company ("Merger 1"), with the Company being the surviving company (the "Intermediate Surviving Corporation"), followed by a merger ("Merger 2" and, collectively with Merger 1, the "Mergers") of Merger Sub 2 with Intermediate Surviving Corporation, with Merger Sub 2 being the surviving company. By virtue of Merger 1, each share of the common stock of the Company, par value $0.01 per share (the "Company Common Stock"), issued and outstanding immediately prior to the effective time of Merger 1, excluding shares owned by the Company or Parent or their respective wholly-owned subsidiaries and any Dissenting Shares (as defined in the Merger Agreement), shall be converted into the right to receive (i) 0.489 to 0.617 shares of common stock of Parent (the "Exchange Ratio"), (ii) cash consideration of up to $0.33 (the "Cash Consideration"), if applicable, and (iii) one (1) contingent value right (the "CVR") representing the right to receive $0.50 in cash, contingent upon the occurrence of certain events following consummation of the Mergers. Collectively, the Exchange Ratio, the Cash Consideration and the CVR are referred to as the "Consideration."

Cowen and Company, LLC ("Cowen"), as part of its investment banking business, is continually engaged in the valuation of businesses and their securities in connection with mergers and acquisitions, negotiated underwritings, secondary distributions of listed and unlisted securities, private placements and valuations for corporate and other purposes. In the ordinary course of our business, we and our affiliates actively trade the securities of the Company and may actively trade the securities of Parent for our own account and for the accounts of our customers and, accordingly, may at any time hold a long or short position in such securities.

We are acting as exclusive financial advisor to the Board of Directors of the Company in connection with the Mergers and will receive a fee from the Company for our services pursuant to the terms of our engagement letter with the Company, dated as of June 11, 2008, a significant portion of which is contingent upon the consummation of Merger 1. We will also receive a fee for providing this Opinion. In addition, the Company has agreed to reimburse our expenses and indemnify us for certain liabilities that may arise out of our engagement. In the two years preceding the date of this Opinion, Cowen has not had a material relationship with the Company or any other party to the Mergers. One member of Parent's Board of Directors serves as an officer for an affiliate of Cowen. Cowen and its

affiliates may in the future provide commercial and investment banking services to the Company and Parent and may receive fees for the rendering of such services.

In connection with our opinion, we have reviewed and considered such financial and other matters as we have deemed relevant, including, among other things:

- A draft of the Merger Agreement, dated as of September 22, 2008, and a draft of the CVR Agreement, dated as of September 22, 2008, which are the most recent drafts available to Cowen;
- Certain publicly available financial and other information for the Company and the Parent, respectively, including equity research, and certain other relevant financial and operating data furnished to Cowen by the managements of the Company and Parent, respectively;
- Certain internal financial analyses, financial forecasts, reports and other information concerning the Company (the "Company Forecast") and Parent (the "Parent Forecast") prepared by the managements of the Company and Parent, respectively, which were adjusted for clinical and regulatory risk by Company management;
- Discussions Cowen has had with certain members of the managements of each of the Company and Parent concerning the historical and current business operations, financial conditions and prospects of the Company and Parent, respectively, and such other matters Cowen deemed relevant;
- Certain operating results of the Company as compared to the operating results of certain publicly traded companies Cowen deemed relevant;
- The reported price and trading histories of the shares of the common stock of the Company and Parent, respectively, as compared to the reported price and trading histories of certain publicly traded companies Cowen deemed relevant;
- Certain financial terms of the Mergers as compared to the financial terms of certain selected business combinations Cowen deemed relevant;
- Based on the Company Forecast and Parent Forecast, the cash flows generated by the Company and Parent, respectively, on a stand-alone basis to determine the present value of the discounted cash flows;
- Certain pro forma financial effects of the Mergers; and
- Such other information, financial studies, analyses and investigations and such other factors that Cowen deemed relevant for the purposes of its opinion.

In conducting our review and arriving at our opinion, we have, with your consent, assumed and relied, without independent investigation, upon the accuracy and completeness of all financial and other information provided to us by the Company and Parent, respectively, or which is publicly available or was otherwise reviewed by us. We have not undertaken any responsibility for the accuracy, completeness or reasonableness of, or independent verification of, such information. We have relied upon, without independent verifications, the assessment of Company management as to the existing products and services of the Company and the viability of, and risks associated with, the future products and services of the Company. In addition, we have not conducted, nor have we assumed any obligation to conduct, any physical inspection of the properties or facilities of the Company or Parent. We have further relied upon the Company's representation that all information provided to us by the Company is accurate and complete in all material respects. We have, with your consent, assumed that the financial forecasts which we examined were reasonably prepared by the management of the Company on bases reflecting the best currently available estimates and good faith

judgments of such management as to the future performance of the Company and Parent, and that such forecasts provide

a reasonable basis for our opinion. We express no opinion as to the Company Forecast, the Parent Forecast, or the assumptions on which they were made. We expressly disclaim any undertaking or obligation to advise any person of any change in any fact or matter affecting our opinion of which we become aware after the date hereof.

We have not made or obtained any independent evaluations, valuations or appraisals of the assets or liabilities of the Company or Parent, nor have we been furnished with such materials. In addition, we have not evaluated the solvency or fair value of the Company, Parent, Merger Sub 1 or Merger Sub 2 under any state or federal laws relating to bankruptcy, insolvency or similar matters. With respect to all legal matters relating to the Company and Parent, we have relied on the advice of legal counsel to the Company. Our opinion addresses only the fairness of the Consideration, from a financial point of view to the stockholders of the Company. We express no view as to any other aspect or implication of the Mergers or any other agreement, arrangement or understanding entered into in connection with the Mergers or otherwise. Our opinion is necessarily based upon economic and market conditions and other circumstances as they exist and can be evaluated by us on the date hereof. It should be understood that although subsequent developments may affect our opinion, we do not have any obligation to update, revise or reaffirm our opinion and we expressly disclaim any responsibility to do so.

For purposes of rendering our opinion we have assumed in all respects material to our analysis, that the representations and warranties of each party contained in the Merger Agreement and the CVR Agreement are true and correct, that each party will perform all of the covenants and agreements required to be performed by it under the Merger Agreement and the CVR Agreement and that all conditions to the consummation of the Mergers will be satisfied without waiver thereof. We have assumed that the final forms of the Merger Agreement and the CVR Agreement will be substantially similar to the last draft of each thereof reviewed by us. We have also assumed that all governmental, regulatory and other consents and approvals contemplated by the Merger Agreement and the CVR Agreement will be obtained and that in the course of obtaining any of those consents no restrictions will be imposed or waivers made that would have an adverse effect on the contemplated benefits of the Mergers. You have informed us, and we have assumed, that the Transaction will be treated as a tax-free reorganization.

It is understood that this letter is intended for the benefit and use of the Board of Directors of the Company in its consideration of the Mergers and may not be used for any other purpose or reproduced, disseminated, quoted or referred to at any time, in any manner or for any purpose without our prior written consent. This letter does not constitute a recommendation to any stockholder as to how such stockholder should vote with respect to the Mergers or to take any other action in connection with the Mergers or otherwise. We are not expressing any opinion as to what the value of the Parent Common Stock or the CVR's actually will be when issued to the Company's stockholders pursuant to Merger 1. We have not been requested to opine as to, and our opinion does not in any manner address, the Company's underlying business decision to effect the Mergers or the relative merits of the Mergers as compared to other business strategies or transactions that might be available to the Company. In addition, we have not been requested to opine as to, and our opinion does not in any manner address, the fairness of the amount or nature of the compensation to any of the Company's officers, directors or employees, or class of such persons, relative to the compensation to the public stockholders of the Company. Furthermore, we express no view as to the price or trading range for shares of the common stock of Parent following the consummation of the Mergers.

This Opinion was reviewed and approved by Cowen's Fairness Opinion Review Committee.

Based upon and subject to the foregoing, including the various assumptions and limitations set forth herein, it is our opinion that, as of the date hereof, the Consideration to be received by the holders of Company Common Stock in Merger 1 is fair, from a financial point of view, to the holders of Company Common Stock.

Very truly yours,

Cowen and Company, LLC

Annex D

Section 262 of the General Corporation Law of the State of Delaware

§ 262. Appraisal rights.

(a) Any stockholder of a corporation of this State who holds shares of stock on the date of the making of a demand pursuant to subsection (d) of this section with respect to such shares, who continuously holds such shares through the effective date of the merger or consolidation, who has otherwise complied with subsection (d) of this section and who has neither voted in favor of the merger or consolidation nor consented thereto in writing pursuant to § 228 of this title shall be entitled to an appraisal by the Court of Chancery of the fair value of the stockholder's shares of stock under the circumstances described in subsections (b) and (c) of this section. As used in this section, the word "stockholder" means a holder of record of stock in a stock corporation and also a member of record of a nonstock corporation; the words "stock" and "share" mean and include what is ordinarily meant by those words and also membership or membership interest of a member of a nonstock corporation; and the words "depository receipt" mean a receipt or other instrument issued by a depository representing an interest in one or more shares, or fractions thereof, solely of stock of a corporation, which stock is deposited with the depository.

(b) Appraisal rights shall be available for the shares of any class or series of stock of a constituent corporation in a merger or consolidation to be effected pursuant to § 251 (other than a merger effected pursuant to § 251(g) of this title), § 252, § 254, § 257, § 258, § 263 or § 264 of this title:

(1) Provided, however, that no appraisal rights under this section shall be available for the shares of any class or series of stock, which stock, or depository receipts in respect thereof, at the record date fixed to determine the stockholders entitled to receive notice of and to vote at the meeting of stockholders to act upon the agreement of merger or consolidation, were either (i) listed on a national securities exchange or (ii) held of record by more than 2,000 holders; and further provided that no appraisal rights shall be available for any shares of stock of the constituent corporation surviving a merger if the merger did not require for its approval the vote of the stockholders of the surviving corporation as provided in subsection (f) of § 251 of this title.

(2) Notwithstanding paragraph (1) of this subsection, appraisal rights under this section shall be available for the shares of any class or series of stock of a constituent corporation if the holders thereof are required by the terms of an agreement of merger or consolidation pursuant to §§ 251, 252, 254, 257, 258, 263 and 264 of this title to accept for such stock anything except:

a. Shares of stock of the corporation surviving or resulting from such merger or consolidation, or depository receipts in respect thereof;

b. Shares of stock of any other corporation, or depository receipts in respect thereof, which shares of stock (or depository receipts in respect thereof) or depository receipts at the effective date of the merger or consolidation will be either listed on a national securities exchange or held of record by more than 2,000 holders;

c. Cash in lieu of fractional shares or fractional depository receipts described in the foregoing subparagraphs a. and b. of this paragraph; or

d. Any combination of the shares of stock, depository receipts and cash in lieu of fractional shares or fractional depository receipts described in the foregoing subparagraphs a., b. and c. of this paragraph.

(3) In the event all of the stock of a subsidiary Delaware corporation party to a merger effected under § 253 of this title is not owned by the parent corporation immediately prior to the merger, appraisal rights shall be available for the shares of the subsidiary Delaware corporation.

(c) Any corporation may provide in its certificate of incorporation that appraisal rights under this section shall be available for the shares of any class or series of its stock as a result of an amendment to its certificate of incorporation, any merger or consolidation in which the corporation is a constituent corporation or the sale of all or substantially all of the assets of the corporation. If the certificate of incorporation contains such a provision, the procedures of this section, including those set forth in subsections (d) and (e) of this section, shall apply as nearly as is practicable.

(d) Appraisal rights shall be perfected as follows:

(1) If a proposed merger or consolidation for which appraisal rights are provided under this section is to be submitted for approval at a meeting of stockholders, the corporation, not less than 20 days prior to the meeting, shall notify each of its stockholders who was such on the record date for such meeting with respect to shares for which appraisal rights are available pursuant to subsection (b) or (c) hereof that appraisal rights are available for any or all of the shares of the constituent corporations, and shall include in such notice a copy of this section. Each stockholder electing to demand the appraisal of such stockholder's shares shall deliver to the corporation, before the taking of the vote on the merger or consolidation, a written demand for appraisal of such stockholder's shares. Such demand will be sufficient if it reasonably informs the corporation of the identity of the stockholder and that the stockholder intends thereby to demand the appraisal of such stockholder's shares. A proxy or vote against the merger or consolidation shall not constitute such a demand. A stockholder electing to take such action must do so by a separate written demand as herein provided. Within 10 days after the effective date of such merger or consolidation, the surviving or resulting corporation shall notify each stockholder of each constituent corporation who has complied with this subsection and has not voted in favor of or consented to the merger or consolidation of the date that the merger or consolidation has become effective; or

(2) If the merger or consolidation was approved pursuant to § 228 or § 253 of this title, then either a constituent corporation before the effective date of the merger or consolidation or the surviving or resulting corporation within 10 days thereafter shall notify each of the holders of any class or series of stock of such constituent corporation who are entitled to appraisal rights of the approval of the merger or consolidation and that appraisal rights are available for any or all shares of such class or series of stock of such constituent corporation, and shall include in such notice a copy of this section. Such notice may, and, if given on or after the effective date of the merger or consolidation, shall, also notify such stockholders of the effective date of the merger or consolidation. Any stockholder entitled to appraisal rights may, within 20 days after the date of mailing of such notice, demand in writing from the surviving or resulting corporation the appraisal of such holder's shares. Such demand will be sufficient if it reasonably informs the corporation of the identity of the stockholder and that the stockholder intends thereby to demand the appraisal of such holder's shares. If such notice did not notify stockholders of the effective date of the merger or consolidation, either (i) each such constituent corporation shall send a second notice before the effective date of the merger or consolidation notifying each of the holders of any class or series of stock of such constituent corporation that are entitled to appraisal rights of the effective date of the merger or consolidation or (ii) the surviving or resulting corporation shall send such a second notice to all such holders on or within 10 days after such effective date; provided, however, that if such second notice is sent more than 20 days following the sending of the first notice, such second notice need only be sent to each stockholder who is entitled to appraisal rights and who has demanded appraisal of such holder's shares in accordance with this subsection. An affidavit of the secretary or assistant secretary or of the transfer agent of the corporation that is required to give either notice that such notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein. For purposes of determining the stockholders entitled to receive either notice, each constituent corporation may fix, in advance, a record date that shall be

not more than 10 days prior to the date the notice is given, provided, that if the notice is given on or after the effective date of the merger or consolidation, the record date shall be such effective date. If no record date is fixed and the notice is given prior to the effective date, the record date shall be the close of business on the day next preceding the day on which the notice is given.

(e) Within 120 days after the effective date of the merger or consolidation, the surviving or resulting corporation or any stockholder who has complied with subsections (a) and (d) of this section hereof and who is otherwise entitled to appraisal rights, may commence an appraisal proceeding by filing a petition in the Court of Chancery demanding a determination of the value of the stock of all such stockholders. Notwithstanding the foregoing, at any time within 60 days after the effective date of the merger or consolidation, any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party shall have the right to withdraw such stockholder's demand for appraisal and to accept the terms offered upon the merger or consolidation. Within 120 days after the effective date of the merger or consolidation, any stockholder who has complied with the requirements of subsections (a) and (d) of this section hereof, upon written request, shall be entitled to receive from the corporation surviving the merger or resulting from the consolidation a statement setting forth the aggregate number of shares not voted in favor of the merger or consolidation and with respect to which demands for appraisal have been received and the aggregate number of holders of such shares. Such written statement shall be mailed to the stockholder within 10 days after such stockholder's written request for such a statement is received by the surviving or resulting corporation or within 10 days after expiration of the period for delivery of demands for appraisal under subsection (d) of this section hereof, whichever is later. Notwithstanding subsection (a) of this section, a person who is the beneficial owner of shares of such stock held either in a voting trust or by a nominee on behalf of such person may, in such person's own name, file a petition or request from the corporation the statement described in this subsection.

(f) Upon the filing of any such petition by a stockholder, service of a copy thereof shall be made upon the surviving or resulting corporation, which shall within 20 days after such service file in the office of the Register in Chancery in which the petition was filed a duly verified list containing the names and addresses of all stockholders who have demanded payment for their shares and with whom agreements as to the value of their shares have not been reached by the surviving or resulting corporation. If the petition shall be filed by the surviving or resulting corporation, the petition shall be accompanied by such a duly verified list. The Register in Chancery, if so ordered by the Court, shall give notice of the time and place fixed for the hearing of such petition by registered or certified mail to the surviving or resulting corporation and to the stockholders shown on the list at the addresses therein stated. Such notice shall also be given by 1 or more publications at least 1 week before the day of the hearing, in a newspaper of general circulation published in the City of Wilmington, Delaware or such publication as the Court deems advisable. The forms of the notices by mail and by publication shall be approved by the Court, and the costs thereof shall be borne by the surviving or resulting corporation.

(g) At the hearing on such petition, the Court shall determine the stockholders who have complied with this section and who have become entitled to appraisal rights. The Court may require the stockholders who have demanded an appraisal for their shares and who hold stock represented by certificates to submit their certificates of stock to the Register in Chancery for notation thereon of the pendency of the appraisal proceedings; and if any stockholder fails to comply with such direction, the Court may dismiss the proceedings as to such stockholder.

(h) After the Court determines the stockholders entitled to an appraisal, the appraisal proceeding shall be conducted in accordance with the rules of the Court of Chancery, including any rules specifically governing appraisal proceedings. Through such proceeding the Court shall determine the fair value of the shares exclusive of any element of value arising from the accomplishment or expectation of the merger or consolidation, together with interest, if any, to be paid upon the amount determined to be the fair value. In determining such fair value, the Court shall take into account all

relevant factors. Unless the Court in its discretion determines otherwise for good cause shown, interest from the effective date of the merger through the date of payment of the judgment shall be compounded quarterly and shall accrue at 5% over the Federal Reserve discount rate (including any surcharge) as established from time to time during the period between the effective date of the merger and the date of payment of the judgment. Upon application by the surviving or resulting corporation or by any stockholder entitled to participate in the appraisal proceeding, the Court may, in its discretion, proceed to trial upon the appraisal prior to the final determination of the stockholders entitled to an appraisal. Any stockholder whose name appears on the list filed by the surviving or resulting corporation pursuant to subsection (f) of this section and who has submitted such stockholder's certificates of stock to the Register in Chancery, if such is required, may participate fully in all proceedings until it is finally determined that such stockholder is not entitled to appraisal rights under this section.

(i) The Court shall direct the payment of the fair value of the shares, together with interest, if any, by the surviving or resulting corporation to the stockholders entitled thereto. Payment shall be so made to each such stockholder, in the case of holders of uncertificated stock forthwith, and the case of holders of shares represented by certificates upon the surrender to the corporation of the certificates representing such stock. The Court's decree may be enforced as other decrees in the Court of Chancery may be enforced, whether such surviving or resulting corporation be a corporation of this State or of any state.

(j) The costs of the proceeding may be determined by the Court and taxed upon the parties as the Court deems equitable in the circumstances. Upon application of a stockholder, the Court may order all or a portion of the expenses incurred by any stockholder in connection with the appraisal proceeding, including, without limitation, reasonable attorney's fees and the fees and expenses of experts, to be charged pro rata against the value of all the shares entitled to an appraisal.

(k) From and after the effective date of the merger or consolidation, no stockholder who has demanded appraisal rights as provided in subsection (d) of this section shall be entitled to vote such stock for any purpose or to receive payment of dividends or other distributions on the stock (except dividends or other distributions payable to stockholders of record at a date which is prior to the effective date of the merger or consolidation); provided, however, that if no petition for an appraisal shall be filed within the time provided in subsection (e) of this section, or if such stockholder shall deliver to the surviving or resulting corporation a written withdrawal of such stockholder's demand for an appraisal and an acceptance of the merger or consolidation, either within 60 days after the effective date of the merger or consolidation as provided in subsection (e) of this section or thereafter with the written approval of the corporation, then the right of such stockholder to an appraisal shall cease. Notwithstanding the foregoing, no appraisal proceeding in the Court of Chancery shall be dismissed as to any stockholder without the approval of the Court, and such approval may be conditioned upon such terms as the Court deems just; provided, however that this provision shall not affect the right of any stockholder who has not commenced an appraisal proceeding or joined that proceeding as a named party to withdraw such stockholder's demand for appraisal and to accept the terms offered upon the merger or consolidation within 60 days after the effective date of the merger or consolidation, as set forth in subsection (e) of this section.

(l) The shares of the surviving or resulting corporation to which the shares of such objecting stockholders would have been converted had they assented to the merger or consolidation shall have the status of authorized and unissued shares of the surviving or resulting corporation. (8 Del. C. 1953, § 262; 56 Del. Laws, c. 50; 56 Del. Laws, c. 186, § 24; 57 Del. Laws, c. 148, §§ 27-29; 59 Del. Laws, c. 106, § 12; 60 Del. Laws, c. 371, §§ 3-12; 63 Del. Laws, c. 25, § 14; 63 Del. Laws, c. 152, §§ 1, 2; 64 Del. Laws, c. 112, §§ 46-54; 66 Del. Laws, c. 136, §§ 30-32; 66 Del. Laws, c. 352, § 9; 67 Del. Laws, c. 376, §§ 19, 20; 68 Del. Laws, c. 337, §§ 3, 4; 69 Del. Laws, c. 61, § 10; 69 Del. Laws, c. 262, §§ 1-9; 70 Del. Laws, c. 79, § 16; 70 Del. Laws, c. 186, § 1; 70 Del. Laws, c. 299, §§ 2, 3; 70 Del. Laws, c. 349, § 22; 71 Del. Laws, c. 120, § 15; 71 Del. Laws, c. 339, §§ 49-52; 73 Del. Laws, c. 82, § 21; 76 Del. Laws, c. 145, §§ 11-16.)

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 20. INDEMNIFICATION OF DIRECTORS AND OFFICERS

As permitted by Section 102 of the Delaware General Corporation Law, Ligand has adopted provisions in its certificate of incorporation and Bylaws that limit or eliminate the personal liability of its directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of the corporation, directors exercise an informed business judgment based on all material information reasonably available to them. Consequently, a director will not be personally liable to Ligand or its stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for: any breach of the director's duty of loyalty to Ligand or its stockholders; any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law; any act related to unlawful stock repurchases, redemptions or other distributions or payment of dividends; or any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission. As permitted by Section 145 of the Delaware General Corporation Law, the certificates of incorporation and Bylaws to be in effect upon the closing of this offering provide that: Ligand may indemnify its directors, officers, employees and agents to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions; Ligand may advance expenses to its directors and officers in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions; and the rights provided in the certificates of incorporation and Bylaws are not exclusive.

In addition, Ligand has entered into separate indemnification agreements with its directors and officers which may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements may require Ligand, among other things, to indemnify its officers and directors against liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct. These indemnification agreements also may require Ligand to advance any expenses incurred by the directors or officers as a result of any proceeding against them as to which they could be indemnified. In addition, Ligand has purchased a policy of directors' and officers' liability insurance that insures its directors and officers against the cost of defense, settlement or payment of a judgment in some circumstances. These indemnification provisions and the indemnification agreements may be sufficiently broad to permit indemnification of Ligand's officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act.

In addition, after the mergers, the surviving entity will maintain and honor all indemnification arrangements in place for all past and present directors, officers, employees and agents of Pharmacopeia as of the date of the merger agreement for acts or omissions occurring at or prior to the effective time of merger 1. The surviving entity will also indemnify and hold harmless such persons to the fullest extent permitted by applicable Delaware law for acts or omissions occurring in connection with the approval of the merger agreement and the consummation of the transactions contemplated thereby. The organizational documents of the surviving entity will contain provisions with respect to exculpation and indemnification that are at least as favorable to the past and present indemnified directors, officers, employees and agents of Pharmacopeia as those contained in Pharmacopeia's certificate of incorporation and bylaws as in effect on the date of the merger agreement. Such provisions will not be amended, repealed or otherwise modified for six years from the effective time of merger 1 in any manner that would adversely affect the rights thereunder of such indemnified persons.

Upon completion of the mergers, subject to certain exceptions, the surviving entity will also maintain a directors' and officers' insurance and indemnification policy which will cover those persons who are covered by Pharmacopeia's directors' and officers' insurance and indemnification policy as of the date of the merger agreement for events occurring prior to the effective time of merger 1 on terms no less favorable than those applicable to the current directors and officers of Pharmacopeia for six years; provided that the surviving entity shall not be obligated to make aggregate annual premium payments which exceed 250% of the annual premium payments on Pharmacopeia's current policy in effect as of the date of the merger agreement.

ITEM 21. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)

Exhibits

Exhibit Number	Exhibit Description
2.1	Agreement and Plan of Merger, dated as of September 24, 2008, by and among Ligand Pharmaceuticals Incorporated, Pharmacopeia, Inc., Margaux Acquisition Corp. and Latour Acquisition, LLC (included as Annex A to the proxy statement/prospectus).
2.2	Form of CVR Agreement (included as Annex B to the proxy statement/prospectus).
3.1	Amended and Restated Certificate of Incorporation of Ligand Pharmaceuticals Incorporated dated May 17, 1995 (incorporated by reference to Exhibit 3.2 of Ligand Pharmaceuticals Incorporated's Registration Statement on Form S-4 (No. 333-58823) filed with the SEC on July 9, 1998), as amended by a Certificate of Amendment of Amended and Restated Certificate of Incorporation dated June 13, 2000 (incorporated by reference to Exhibit 3.5 of Ligand Pharmaceuticals Incorporated's Annual Report on Form 10-K for the year ended December 31, 2000), and as further amended by a Certificate of Amendment of Amended and Restated Certificate of Incorporation dated June 30, 2004 (incorporated by reference to Exhibit 3.6 of Ligand Pharmaceuticals Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2004).
3.2	Amended Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of Ligand Pharmaceuticals Incorporated dated March 3, 1999 (incorporated by reference to Exhibit 3.3 of Ligand Pharmaceuticals Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 1999).
3.3	Amended and Restated Bylaws of Ligand Pharmaceuticals Incorporated dated November 25, 1992, as amended by a Certificate of Amendment of Bylaws dated December 11, 1997 (incorporated by reference to Exhibit 3.3 of Ligand Pharmaceuticals Incorporated's Registration Statement on Form S-4 (No. 333-58823) filed with the SEC on July 9, 1998), as further amended by an Amendment of the Bylaws dated November 8, 2005 (incorporated by reference to Exhibit 3.1 of Ligand Pharmaceuticals Incorporated's Current Report on Form 8-K filed with the SEC on November 14, 2005), and as further amended by an Amendment of Bylaws dated December 4, 2007 (incorporated by reference to Exhibit 3.1 of Ligand Pharmaceuticals Incorporated's Current Report on Form 8-K filed with the SEC on December 6, 2007).
4.1	Specimen stock certificate for shares of Common Stock of Ligand Pharmaceuticals Incorporated (incorporated by reference to Exhibit 4.1 of Ligand Pharmaceuticals Incorporated's Registration Statement on Form S-1 (No. 33-47257) filed with the SEC on April 16, 1992, as amended).

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4.2	2006 Preferred Shares Rights Agreement, dated as of October 13, 2006, by and between Ligand Pharmaceuticals Incorporated and Mellon Investor Services LLC (incorporated by reference to Exhibit 4.1 of Ligand Pharmaceuticals Incorporated's Current Report on Form 8-K filed with the SEC on October 17, 2006).
5.1*	Opinion of Latham & Watkins LLP regarding the legality of the securities being registered.
8.1*	Opinion of Dechert LLP as to certain United States federal income tax matters.
8.2*	Opinion of Latham & Watkins LLP as to certain United States federal income tax matters.
23.1	Consent of BDO Seidman, LLP, independent registered public accounting firm of Ligand Pharmaceuticals Incorporated.
23.2	Consent of Ernst & Young, LLP, independent registered public accounting firm of Pharmacopeia, Inc..
23.3*	Consent of Latham & Watkins LLP (included in Exhibits 5.1 and 8.2).
23.4*	Consent of Dechert LLP (included in Exhibit 8.1).
24.1	Powers of Attorney (included with the signature pages to this registration statement).
99.1	Opinion of Cowen and Company, LLC, regarding the fairness of the merger (included as Annex C to the proxy statement/prospectus forming a part of this Registration Statement)
99.2	Consent of Cowen and Company, LLC
99.3	Form of Pharmacopeia proxy card.

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* To be filed by amendment

ITEM 22. UNDERTAKINGS

The undersigned registrant hereby undertakes:

(1) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(2) That prior to any public reoffering of the securities registered hereunder through use of a prospectus which is a part of this registration statement, by any person or party who is deemed to be an underwriter within the meaning of Rule 145(c), the issuer undertakes that such reoffering prospectus will contain the information called for by the applicable registration form with respect to reofferings by persons who may be deemed underwriters, in addition to the information called for by the other items of the applicable form.

(3) That every prospectus (i) that is filed pursuant to paragraph (2) immediately preceding, or (ii) that purports to meet the requirements of Section 10(a)(3) of the Securities Act of 1933 and is used in connection with an offering of securities subject to Rule 415, will be filed as a part of an amendment to the registration statement and will not be used until such amendment is effective and that, for purposes of determining any liability under the Securities Act, each such post-effective

amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(4) To respond to requests for information that is incorporated by reference into the prospectus pursuant to Item 4, 10(b), 11 or 13 of this Form, within one business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.

(5) To supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in the registration statement when it became effective.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on October 20, 2008.

Ligand Pharmaceuticals Incorporated

By: /s/ JOHN L. HIGGINS

Name: John L. Higgins
Title: *President and Chief Executive Officer*

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John L. Higgins and Charles S. Berkman and each of them, and any successor or successors to such offices held by each of them, acting individually, as such person's true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for such person in his name or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitutes, may do or cause to be done by virtue thereof. This power of attorney may be executed in counterparts.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JOHN L. HIGGINS John L. Higgins	President, Chief Executive Officer and Director (Principal Executive Officer)	October 20, 2008
/s/ JOHN P. SHARP John P. Sharp	Vice President, Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	October 20, 2008
/s/ JASON M. ARYEH Jason M. Aryeh	Director	October 20, 2008
/s/ TODD C. DAVIS Todd C. Davis	Director	October 20, 2008

Signature	Title	Date
/s/ DAVID M. KNOTT David M. Knott	Director	October 20, 2008
/s/ JOHN W. KOZARICH John W. Kozarich	Director	October 20, 2008
/s/ JEFFREY R. PERRY Jeffrey R. Perry	Director	October 20, 2008
/s/ STEPHEN L. SABBA Stephen L. Sabba	Director	October 20, 2008

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