LIGAND PHARMACEUTICALS INC Form S-4/A November 17, 2008

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As Filed with the Securities and Exchange Commission on November 17, 2008

Registration No. 333-154454

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1 to

FORM S-4

REGISTRATION STATEMENT

Under

The Securities Act of 1933

LIGAND PHARMACEUTICALS INCORPORATED

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

2834 (Primary Standard Industrial Classification Code Number) 10275 Science Center Drive San Diego, California 92121-1117 (858) 550-7500 77-0160744

(I.R.S. Employer Identification Number)

(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)

Scott N. Wolfe, Esq. Latham & Watkins LLP 12636 High Bluff Drive, Suite 400 San Diego, California 92130 (858) 523-5400 Copies to: Stephen C. Costalas, Esq. Executive Vice President, Corporate Development, General Counsel and Secretary Pharmacopeia, Inc. P.O. Box 5350 Princeton, New Jersey 08543-5350 Telephone: (609) 452-3600

James J. Marino, Esq. Dechert LLP Suite 500, 902 Carnegie Center Princeton, New Jersey 08540 (609) 955-3211

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.

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):

Smaller reporting

company o

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

Large accelerated

filer o

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 November 17, 2008

PROXY STATEMENT/PROSPECTUS

A MERGER IS PROPOSED YOUR VOTE IS VERY IMPORTANT

Dear Pharmacopeia stockholder,

November 17, 2008

You are cordially invited to attend a special meeting of Pharmacopeia, Inc. stockholders to be held on December 23, 2008, starting at 10:00 a.m., 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 November 13, 2008 of \$1.44, the exchange ratio set forth above implies a purchase price of \$1.20 per common share of Pharmacopeia, or an equity value of approximately \$36 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 approximately 1% and a premium over the closing price of Pharmacopeia on November 13, 2008 (the last full trading the last practicable date prior to the date of this proxy statement/prospectus) of approximately 33%.

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 November 13, 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 November 13, 2008, the latest practicable date prior to the date of this proxy statement/prospectus, the last reported sale price per share of Ligand common stock on Nasdaq was \$1.44.

This proxy statement/prospectus is dated November 17, 2008, and is first being mailed to Pharmacopeia stockholders on or about November 21, 2008.

PHARMACOPEIA, INC.

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

To Be Held on December 23, 2008

To the Stockholders of Pharmacopeia, Inc.:

A special meeting of stockholders of Pharmacopeia, Inc., a Delaware corporation, or Pharmacopeia, will be held on December 23, 2008, starting at 10:00 a.m., 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 November 13, 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 29,861,817 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 November 21, 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 December 16, 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

Why am I receiving this proxy statement/prospectus?

A:

Q:

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 November 13, 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 December 23, 2008, starting at 10:00 a.m., 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.

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

A:

Q:

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 November 13, 2008 of \$1.44, the exchange ratio set forth above implies a purchase price of \$1.20 per common share of Pharmacopeia, or an equity value of approximately \$36 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 approximately 1% and a premium over the closing price of Pharmacopeia on November 13, 2008 (the latest practicable date prior to the date of this proxy statement/prospectus) of approximately 33%.

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 mergers 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.

When do the parties expect to complete the mergers?

A:

Q:

The parties are working towards completing the mergers as quickly as possible. The mergers are expected to close by January 2009. 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 \$1.0 million 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 November 13, 2008, there were 4,033,350 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 November 13, 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 November 13, 2008, there were 197,000 shares of Pharmacopeia common stock issuable pursuant to Pharmacopeia restricted stock units.

Effective immediately prior to the effective time of merger 1, each outstanding 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 outstanding warrant, and in lieu of the shares of Pharmacopeia capital stock otherwise issuable upon exercise or conversion of the outstanding warrant, the applicable merger consideration that would have been receivable upon merger 1 by the holder of the existing warrant if the outstanding warrant had been exercised immediately prior to the effective time of merger 1. On November 13, 2008, there were 1,626,063 shares of Pharmacopeia capital stock issuable upon the exercise of outstanding 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?

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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 at the effective time of merger 1. 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.

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

A:

Q:

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.

Who can help answer my additional questions?

A:

Q:

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

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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 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 December 23, 2008, at 10:00 a.m., 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 November 13, 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 29,861,817 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. As of the record date, the directors and executive officers of Pharmacopeia beneficially owned in the aggregate approximately 0.5% 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 November 13, 2008 of \$1.44, the exchange ratio set forth above implies a purchase price of \$1.20 per common share of Pharmacopeia, or an equity value of approximately \$36 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 approximately 1% and a premium over the closing price of Pharmacopeia on November 13, 2008 (the latest practicable date prior to the date of this proxy statement/prospectus) of approximately 33%.

These values exclude a potential for approximately \$0.50 in cash 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" 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 \$1.0 million 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 November 13, 2008, there were 4,033,350 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 November 13, 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 November 13, 2008, there were 197,000 shares of Pharmacopeia common stock issuable pursuant to Pharmacopeia restricted stock units.

Effective immediately prior to the effective time of merger 1, each outstanding 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 outstanding warrant, the applicable merger consideration that would have been receivable upon merger 1 by the holder of the outstanding warrant if the outstanding warrant had been exercised immediately prior to the effective time of merger 1, instead of shares of Pharmacopeia common stock. On November 13, 2008, there were 1,626,063 shares of Pharmacopeia capital stock issuable upon the exercise of outstanding 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 12.9% and 16.7% 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 1% 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, and an approximate 33% premium over the closing price (\$0.90) of Pharmacopeia common stock on November 13, 2008, the latest practicable date prior to the date of this proxy statement/prospectus;

the total potential merger consideration, including the CVR payments, represents an approximate 43% 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, and an approximate 89% premium over the closing price (\$0.90) of Pharmacopeia common stock on November 13, 2008, the latest practicable date prior to the date of this proxy statement/prospectus;

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 in cash 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, which occurred effective October 29, 2008; 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.

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

(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 and warranties or compliance with covenants and 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 million 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 at the effective time of merger 1. If the mergers, taken together, do not qualify as a reorganization 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. Early termination was granted effective October 29, 2008.

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 was 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. On November 4, 2008, Pharmacopeia received further notification from Nasdaq that trading in its securities would be suspended at the opening of business on November 13, 2008 unless Pharmacopeia timely requests a hearing before a Nasdaq Listing Qualifications Panel. Pharmacopeia has requested a hearing, which request automatically stays the delisting process until the issuance of the Panel's decision after the hearing. The hearing before the Panel is scheduled for December 18, 2008. 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 October 31, 2008)	\$ 2.94	\$ 1.41	\$ 1.52	\$ 0.83

(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 366 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 November 13, 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.

	Cor	gand mmon tock	Cor	nacopeia nmon tock	Equ Pharn Per	mated ivalent nacopeia Share rice
September 24, 2008	\$	3.12	\$	1.19	\$	1.81(a)
November 13, 2008	\$	1.44	\$	0.90	\$	1.20(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)

The estimated equivalent price per share reflects the value of Ligand common stock and cash that Pharmacopeia stockholders would receive in exchange for each share of Pharmacopeia common stock if the mergers were completed on November 13, 2008, the latest practicable date before the date of this proxy statement/prospectus. Based upon the closing price per share of Ligand common stock on such date, each share of Pharmacopeia common stock would be exchanged for 0.60 of a share of Ligand common stock and \$0.33 in cash.

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 nine-month period ended September 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, 2006				
2004	2	2003		
lata)				
,				
	\$			
31,342		11,786		
11,300		13,698		
30,742		28,302		
12,580		12,059		
(680)		(14,877)		
2,684		(24,566)		
(47,825)		(69,900)		
		(2,005)		
(45,141)		(96,471)		
0.04	\$	(0.35)		
(0.65)		(0.98)		
		(0.03)		
(0.61)	\$	(1.36)		
(0.01)	+	(2.2.0)		
73 602 087	70	685,234		
15,092,987	70,	005,254		
0.02	¢	(0.25)		
	\$	(0.35)		
(0.48)		(0.98)		
		(0.02)		
		(0.03)		
	.			
(0.45)	\$	(1.36)		
100,402,063	70	685,234		
	2004 ata) 31,342 11,300 30,742 12,580 (680) 2,684 (47,825) (45,141) 0.04 (0.65) (0.61) 73,692,987 0.03 (0.48) (0.45)	2004 2 ata) \$ 31,342 \$ 11,300 30,742 12,580 (680) 2,684 (47,825) (45,141) (45,141) (45,141) 0.04 \$ (0.65) (0.65) \$ (0.61) \$ 73,692,987 70, 0.03 \$ (0.48) (0.48) \$		

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 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:		Nine Months Ended September 30, 2008 2007				
D		(unau	dited)			
Revenues:	<u>_</u>		~	<i></i>		
Royalties	\$	14,926	\$	6,639		
Collaborative research and development and other revenues				485		
Total revenues		14,926		7,124		
Operating costs and expenses:						
Research and development		19,707		34,191		
General and administrative		20,579		26,539		
Total operating costs and expenses		40,286		60,730		
Accretion of deferred gain on sale leaseback		(1,473)		(1,473)		

Loss from operations		(23,887)	(52,133)
Other income (expense):			
Interest income		1,899	7,359
Interest expense		(136)	(603)
Other, net		(1,427)	161
Total other income (expense), net		336	6,917
Loss before income taxes		(23,551)	(45,216)
Income tax (expense) benefit		(179)	15,779
Loss from continuing operations		(23,730)	(29,437)
\mathcal{C} 1		(-))	
	15		
	1.5		

Discontinued operations:			
Income from discontinued operations before income taxes			5,993
Gain (loss) on sale of AVINZA Product Line before income			
taxes		7,287	317,306
Gain (loss) on sale of Oncology Product Line before income			
taxes		(12,569)	7,669
Income tax benefit (expense) on discontinued operations		525	(25,781)
Discontinued operations		(4,757)	305,187
1			,
Net income (loss):	\$	(28,487)	\$ 275,750
Basic and diluted per share amounts:			
Loss from continuing operations	\$	(0.25)	\$ (0.30)
Discontinued operations		(0.05)	3.08
Net income (loss)	\$	(0.30)	\$ 2.78
Weighted average number of common shares	9	5,059,166	99,020,141

	-	As of mber 30,				As	of	December 3	31,			
	2	2008		2007		2006		2005 (in		2004		2003
	(una	udited)					tł	nousands)				
Consolidated Balance Sheet Data:												
Cash, cash equivalents, short-term												
investments and restricted cash and												
investments	\$	72,523	\$	95,819	\$	212,488	\$	88,756	\$	114,870	\$	100,690
Working capital (deficit)(1)		34,264		58,975		64,747		(102,244)		(48,505)		(16,930)
Total assets		147,191		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)		54,862		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		23,783		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		(609,999))	(581,512)	(862,802)		(831,059)	((794,660)	((749,519)
Total stockholders' equity (deficit)		1,954		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 e	nded Decemb	er 31,	
	2007	2006	2005	2004	2003
		(in thousand	s, except per s	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)
	\$(17,000)	\$(27,701)	φ(17,150)	\$\(17,120)	\$ (2,010)
Net loss per share:					
Basic and diluted	\$ (1.79)	\$ (1.69)	\$ (1.27)	\$ (1.43)	\$ (0.23)
	17				

	F	or the Nine M Septem		
	(in	2008 thousands, e	xcept	2007 share and
		per sha	re dat	ta)
Statement of Operations Data:				
Revenue				
Net revenue	\$	18,008	\$	16,395
Operating Expenses				
Collaborative research and development expense		20,466		16,697
Proprietary research and development expense		24,777		21,965
General and administrative expense		11,209		8,025
Restructuring expense		4,868		
Total operating expenses		61,320		46,687
Operating loss		(43,312)		(30,292)
Other income		700		94
Interest income		1,053		2,686
Interest and other expense, net		(306)		(20)
(Increase) decrease in warrant liability		3,733		(1,125)
Loss before income taxes		(38,132)		(28,657)
Provision for (benefit from) income taxes		2		(52)
Net loss	\$	(38,134)	\$	(28,605)
Net loss per share:				
Basic and diluted	\$	(1.28)	\$	(1.07)
Weighted average number of common stock shares outstanding:	Ŧ	(1.20)	Ŷ	(1.07)
Basic and diluted	2	9,730,928	2	6,737,034
	-	,	_	.,,

	As of ember 30,		As	of December	31,	
	2008	2007	2006	2005	2004	2003
			(in thousan	ds)		
Balance Sheet Data:						
Cash, cash equivalents and						
marketable securities	\$ 33,436	\$71,315	\$46,140	\$30,366	\$40,885	\$ 524
Total assets	50,026	90,398	66,127	46,019	57,005	11,052
Current liabilities	38,638	37,471	18,750	8,862	10,251	6,420
Long-term liabilities	24,006	29,843	16,946	1,904	3,046	325
Total stockholders' (deficit)						
equity	(12,618)	23,084	30,431	35,253	43,708	4,307
Cash dividends declared per						
common share						
		18				

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 September 30, 2008 gives effect to the proposed mergers as if they had occurred on September 30, 2008, and combines the historical balance sheets of Ligand and Pharmacopeia as of September 30, 2008. The selected unaudited pro forma condensed combined statements of operations for the year ended December 31, 2007 and for the nine months ended September 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 nine months ended September 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.

		Nine E Septe	idited Pro Fo (in thou except per s Months Ended ember 30, 2008	sands hare o Twe	,
Earnings Data:					
Revenue		\$	32,934	\$	34,300
Expenses			101,606		149,032
Operating loss			(67,199)		(112,768)
Other income			5,348		10,405
Loss before income taxes			(61,851)		(102,363)
Income tax (expense) benefit			(181)		823
Loss from continuing operations			(62,032)		(101,540)
Basic and diluted per share amounts:					
Continuing operations		\$	(0.55)	\$	(0.88)
				P ((in e sl	Unaudited Pro Forma Combined thousands, except per hare data) ptember 30, 2008
Balance Sheet Data:					
Total assets				\$	211,639
Total liabilities					195,536
Ligand common stock subject to redemption					12,345
Total stockholders' equity					3,758
	20				

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

	Nine E Septo	f and for the Months Ended ember 30, 2008	As of and for the Year Ended December 31, 2007		
Historical per common share data (basic and					
diluted):					
Loss from continuing operations	\$	(0.25)	\$	(0.35)	
Income (loss) from discontinued operations	\$	(0.05)	\$	3.22	
Net income (loss)	\$	(0.30)	\$	2.87	
Book value (based on basic weighted average					
shares outstanding)	\$	0.02	\$	0.30	
21					

Pharmacopeia

	Nine E Septe	f and for the Months Ended ember 30, 2008	As of and for the Year Ended December 31, 2007		
Historical per common share data (basic and					
diluted):					
Net income (loss)	\$	(1.28)	\$	(1.79)	
Book value (based on basic weighted average					
shares outstanding)	\$	(0.42)	\$	0.86	

Combined Ligand and Pharmacopeia

	Nino I Septo	of and for the e Months Ended ember 30, 2008	As of and for the Year Ended December 31, 2007		
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	\$	(0.55)	\$	(0.88)	
Book value (based on basic weighted average					
shares outstanding)	\$	0.03			
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	\$	(0.32)	\$	(0.51)	
Book value (based on basic weighted average					
shares outstanding)	\$	0.02			
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	\$	(0.32)	\$	(0.50)	
Book value (based on basic weighted average					
shares outstanding)	\$	0.02			
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		(0.05)		(0. 6-)	
diluted	\$	(0.39)	\$	(0.62)	
Book value (based on basic weighted average	<i>•</i>	0.05			
shares outstanding)	\$	0.02	~~		
			22		

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 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. On November 4, 2008, Pharmacopeia received further notification from Nasdaq that trading in its securities would be suspended at the opening of business on November 13, 2008 unless Pharmacopeia timely requests a hearing before a Nasdaq Listing Qualifications Panel. Pharmacopeia has requested a hearing, which request automatically stays the delisting process until the issuance of the Panel's decision after the hearing. The hearing before the Panel is scheduled for December 18, 2008.

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 November 13, 2008, at the closing of the mergers, Ligand will issue up to 18,976,461 shares of Ligand common stock, or up to approximately 16.7% of the number of outstanding shares of Ligand's common stock following the mergers, 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 16.7% 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 has selected 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;

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 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.

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 be time-consuming and expensive and 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, 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 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; 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 involves a number of uncertainties, 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 September 30, 2008, Ligand's accumulated deficit was \$610.0 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 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 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 September 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 \$58.7 million as of September 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 merger 1 is not consummated, Pharmacopeia will be required to raise additional capital. If it cannot raise such capital, or if it consumes cash more quickly than expected, it will be forced to curtail operations.

As of September 30, 2008, Pharmacopeia had cash, cash equivalents and marketable securities of approximately \$33.4 million. In addition, as of September 30, 2008, Pharmacopeia had deferred revenue of approximately \$42.7 million relating to cash payments and licenses to certain product candidates that it has received under its alliances and license agreements in exchange for research and development activities that are to be performed subsequent to September 30, 2008. Pharmacopeia's obligations to perform these research and development activities extend over multiple years and it expects that it will incur significant costs in fulfilling these obligations. Pharmacopeia's cash used in operating activities for the nine months ended September 30, 2008 was approximately \$35.5 million, which included \$5.0 million in research funding it received from GlaxoSmithKline (GSK). Without this receipt of the \$5.0 million from GSK, Pharmacopeia's net cash used in operating activities would have been approximately \$40.5 million during that period.

If merger 1 is not consummated and Pharmacopeia remains an independent company, to progress its internal development programs and to satisfy its commitments to its corporate partners and its other contractual obligations, Pharmacopeia will need to raise funds from one or a combination of approaches, which could include public and/or private financing, sale and/or partnering of one or more of its internal programs, partnering of its internal drug discovery capabilities or other strategic initiatives. Capital could be raised through public or private financings involving debt or common stock or other classes of Pharmacopeia's equity. Additional issuances of equity securities will further dilute Pharmacopeia's existing stockholders' percentage ownership.

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 clinical development programs for its product candidates 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 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, or Schering-Plough, 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;

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. Pharmacopeia has curtailed its operations significantly since the beginning of 2008, and it may further curtail its current operations. If adequate funds are not available, Pharmacopeia may 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 nine months ended September 30, 2008, Pharmacopeia had a net loss of approximately \$38.1 million. In addition, during the year ended December 31, 2007, Pharmacopeia had a net loss of approximately \$47.9 million. The net losses for these periods were 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 Pharmacopeia's other product candidates. The net loss for the nine months ended September 30, 2008 included a restructuring charge of approximately \$4.9 million. The net loss for the year ended December 31, 2007 included a non-cash charge of \$9.2 million to proprietary research and development expense related to the acquisition of Pharmacopeia's SARM program.

Pharmacopeia expects to incur losses in future periods. However, it intends to manage all of its expenditures in a manner consistent with its available resources. 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 123R, which was effective January 1, 2006, increased its compensation costs and will continue to have a significant impact on its results of operations. In addition, under Emerging Issue Task Force No. 00-19, "Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock," 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 Pharmacopeia's 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's 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-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 ten months ended October 31, 2008, the closing market price of Pharmacopeia's common stock ranged from \$0.83 per share at its low point in October 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.

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 field on the principal condition and results of operations. Pharmacopeia business, financial condition and results of operations.

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 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, if at all. In the event of a successful claim of product infringement against 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 December 23, 2008, starting at 10:00 a.m., 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 November 13, 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 29,861,817 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 November 13, 2008, the record date for the special meeting, the directors and executive officers of Pharmacopeia beneficially owned in the aggregate 149,302 shares of Pharmacopeia common stock, which is equal to approximately 0.5% 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 10:00 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 10:00 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 10:00 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 10:00 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 10:00 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 10:00 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 November 13, 2008 of \$1.44, the exchange ratio set forth above implies a purchase price of \$1.20 per common share of Pharmacopeia, or an equity value of approximately \$36 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 approximately 1% and a premium over the closing price of Pharmacopeia on November 13, 2008 (the latest practicable date prior to the date of this proxy statement/prospectus) of approximately 33%.

These values exclude a potential for approximately \$0.50 in cash 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 12.9% and 16.7% 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 \$1.0 million 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 November 13, 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 14 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, after considering other potential financial advisors, 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. Pharmacopeia with input from Cowen identified the 39 companies from a significantly larger pool of prospects to which Pharmacopeia potentially could be sold by using metrics including therapeutic area focus, market capitalization, cash available to fund continuing operations, geographic location and potential strategic fit of Pharmacopeia's business with the companies' respective businesses. 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. Pharmacopeia identified the 35 companies as ones that might have significant interest in the DARA program by using metrics including therapeutic area focus, cash available to fund continuing operations and potential strategic fit of the DARA program and the other aspects of Pharmacopeia's business with the companies' respective businesses. 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 5, 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, which the parties used as the basis for their negotiations of the terms of the merger agreement.

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 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 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 1% 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, and an approximate 33% premium over the closing price (\$0.90) of Pharmacopeia common stock on November 13, 2008, the latest practicable date prior to the date of this proxy statement/prospectus;

the total potential merger consideration, including the CVR payments, represents an approximate 43% 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, and an approximate 89% premium over the closing price (\$0.90) of Pharmacopeia common stock on November 13, 2008, the latest practicable date prior to the date of this proxy statement/prospectus;

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

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 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 (including forecasts of projected earnings before interest and taxes), 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 or Ligand. 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 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 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 BiosciencesPenwest PharmaceuticalsMetabasis TherapeuticsAchillion PharmaceuticalsSunesis PharmaceuticalsZIOPHARM OncologyInhibitexKeryx BiopharmaceuticalsMemory Pharmaceuticals

TorreyPines Therapeutics

Cowen selected these companies because they engage in businesses and are in a stage of development similar to those of Pharmacopeia. Similar to Pharmacopeia, 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. Similar to Pharmacopeia, 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.

Valuation Methodology	Reference Selected C Equity Value	8	Per Share E Equity	armacopeia Cquity Value Enterprise Value Basis	Transac V	oeia Per Share tion Equity 'alue Assuming Full Payment of CVR
Selected Early Stage						
Drug Discovery						
Companies	\$145.0 \$190.	0\$55.0 \$115	.0\$4.83 \$6.3	3\$2.28 \$4.2	8\$ 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 \$1.6	7\$0.61 \$1.4	5\$ 1.97	\$ 2.47
Although the Selec	ted Companies	were used fo	r comparison	purposes, no	one of those	companies are

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 forImplied PharmacopeiaPharmacopeiaSelected TransactionsPer Share Equity ValueTransaction Equity

					Value	
						Assuming
	-		-			Full
Valuation Methodology	Equity Value	Enterprise Value	Equity Value Basis	Enterprise Value Basis	Excluding	Payment of CVR
Comparison to Phase II	(unde	vulue	vulue Dusis	vulue Dusis	OVR	OTR
Company Transactions	\$35.0 \$75.	0\$35.0 \$75.	0\$1.17 \$2.5	0\$1.61 \$2.9	5\$ 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. Cowen calculated ranges of terminal value amounts for Pharmacopeia as of December 31, 2017 by applying an assumed perpetual growth rate of (2.5)% 2.5% to the estimated 2017 after-tax cash flow of Pharmacopeia described in the Pharmacopeia Forecast. 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 the Selected Early Stage Life Sciences Companies with Less than 1 Year of Cash.

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. Cowen calculated ranges of terminal value amounts for Pharmacopeia and Ligand as of December 31, 2017 by applying an assumed perpetual growth rate of (2.5)% 2.5% to the estimated 2017 after-tax cash flow of Pharmacopeia and Ligand described in the Pharmacopeia Forecast and the Ligand Forecast. 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 the Selected Early Stage Life Sciences Companies with Less than 1 Year of Cash and Selected Early Stage Drug Discovery Companies, respectively.

Cowen calculated the implied equity value for Pharmacopeia and Ligand based on the discounted value of each company's respective after-tax cash flow and terminal value. Cowen then computed an implied exchange ratio based on the ratio of Pharmacopeia's implied equity value to Ligand's implied equity value.

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. In the ordinary course of business, Cowen and its affiliates actively trade the securities of Pharmacopeia and may actively trade the securities. Cowen and its affiliates in the ordinary course of business may in the future provide commercial and investment banking services to Pharmacopeia and Ligand 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 warrants are exercised and depending on the number of Pharmacopeia stock options that are cancelled pursuant to Pharmacopeia's tender offer, 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 approximately 0.1% (which represents the percentage if all Pharmacopeia stock options are cancelled pursuant to Pharmacopeia's tender offer) and 0.9% (which represents the percentage if none of Pharmacopeia's stock options are cancelled pursuant to Pharmacopeia's tender offer) 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 with the mergers, on or before December 31, 2008, and the per share merger consideration with the mergers, on or before December 31, 2008, and the per share merger consideration with the mergers, on or before December 31, 2008, and the per share merger consideration with the mergers, on or before December 31, 2008, and the per share merger consideration 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 Interna



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 November 13, 2008, Messrs. Costalas and Posner and Drs. Belder and Webb had 113,857, 136,880, 163,431 and 40,001 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 approximately \$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 October 31, 2008, before applicable withholding taxes is \$1,186,407 for Dr. Mollica, \$201,885 for Dr. Webb and \$73,275 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. Early termination of the waiting period was granted effective October 29, 2008.

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 was provided 30 calendar days, or until October 30, 2008, to regain compliance with the continued listing requirements. If Pharmacopeia was unable to demonstrate compliance with the Rule by October 30, 2008, the notice indicated that the Nasdaq staff would provide written notification to Pharmacopeia that Pharmacopeia's securities would be delisted from Nasdaq. On November 4, 2008, Pharmacopeia received further notification from Nasdaq that trading in its securities would be suspended at the opening of business on November 13, 2008 unless Pharmacopeia timely requests a hearing before a Nasdaq Listing Qualifications Panel. Pharmacopeia has requested a hearing, which request automatically stays the delisting process until the issuance of the Panel's decision after the hearing. The hearing before the Panel is scheduled for December 18, 2008. 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 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 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.

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 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 into which Pharmacopeia options issued and outstanding immediately prior to the effective time of merger 1 and (3) the aggregate number of shares 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, recognization, 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, Mellon Investor Services LLC, 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 \$1.0 million 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 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 November 13, 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 were, 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 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 for such coverage for such coverage

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. 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