

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934

Ligand Pharmaceuticals Incorporated  
-----

(Name of Issuer)

CLASS A COMMON STOCK  
-----

(Title of Class of Securities)

53220K108  
-----

(CUSIP Number)

LOUIS L. HOYNES, JR., ESQ.  
Senior Vice President and General Counsel  
American Home Products Corporation  
5 Giralda Farms, Madison, N.J. 07940  
(201) 660-5000  
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(Name, Address and Telephone Number of Person Authorized  
to Receive Notices and Communications)

September 6, 1994  
-----

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Rule 13d-1(b)(3) or (4), check the following box [  ].

Check the following box if a fee is being paid with the statement [X].

(A fee is not required only if the reporting person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of five percent or less of such class.)  
(See Rule 13d-7.)

Note: Six copies of this statement, including all exhibits, should be filed with the Commission. See Rule 13d-1(a) for other parties to whom copies are to be sent.

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 53220K108

1. NAME OF REPORTING PERSON  
S.S. or I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

American Home Products Corporation

Tax I.D. 13-2526821

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP

- (a)  
(b) [X]

3. SEC USE ONLY

4. SOURCE OF FUNDS\*  
WC

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED  
PURSUANT TO ITEMS 2(d) or 2 (E)  
[ ]

6. CITIZENSHIP OR PLACE OF ORGANIZATION

Delaware

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

7. SOLE VOTING POWER

431,965

8. SHARED VOTING POWER

9. SOLE DISPOSITIVE POWER

431,965

10. SHARED DISPOSITIVE POWER

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

431,965

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES  
CERTAIN SHARES\*  
[ ]

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

5.9%

14. TYPE OF REPORTING PERSON\*

CO

\*SEE INSTRUCTIONS BEFORE FILLING OUT!

Item 1. Security and Issuer.

This statement relates to the Class A Common Stock (the "Common Stock") of Ligand Pharmaceuticals Incorporated, a Delaware corporation (the "Company"), which has its principal executive offices at 9393 Towne Center Drive, San Diego, California 92121.

Item 2. Identity and Background.

This statement is filed by American Home Products Corporation, a Delaware corporation ("AHP"). AHP's the principal executive offices are located at Five Giralda Farms, Madison, New Jersey 07940.

AHP is one of the world leaders in prescription drugs,

packaged medicines, medical supplies and instrumentation, over the counter medications and food products. Through its subsidiaries and divisions, AHP is a major research-oriented pharmaceutical company with leading products in the areas of women's health care, cardiovascular and metabolic therapies, central nervous system drugs, anti-inflammatory agents, vaccines and infant nutritionals.

For information required by this Item 2 of Schedule 13D with respect to the executive officers and directors of AHP, reference is made to Attachment A to this Schedule 13D, which is incorporated herein by reference.

Neither AHP, nor to its best knowledge, any of the persons named on Attachment A attached hereto, has during the last five years: (i) been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors); or (ii) been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

#### Item 3. Source and Amount of Funds or Other Consideration.

The \$5 million consideration paid to acquire the 431,965 shares of Common Stock was financed entirely from the working capital of AHP.

#### Item 4. Purpose of Transaction.

AHP has purchased 431,965 shares of Common Stock (the "Purchased Common Stock") pursuant to a Stock and Note Purchase Agreement, dated as of September 2, 1994, by and between AHP and the Company (the "Purchase Agreement"), a copy of which is attached hereto as Exhibit I and which is hereby incorporated herein by reference, for a total purchase price of \$5 million. In addition, under the Purchase Agreement, AHP has purchased at 100% of the principal amount thereof an Unsecured Convertible Promissory Note in the principal amount of \$10 million (the "First Note"), a copy of which is attached hereto as Exhibit II and which is hereby incorporated herein by reference, and has agreed to purchase a \$5 million Unsecured Convertible Promissory Note (the "Second Note") contingent upon certain research milestones being reached under the Research Agreement (as defined below) and an additional \$5 million Unsecured Convertible Promissory Note (the "Third Note" and, together with the First Note and the Second Note, the "Notes") contingent upon AHP exercising its right to extend the Research Agreement.

The Purchase Agreement was entered into concurrently with (i) a Research, Development and License Agreement (the "Research Agreement") providing for, among other things, a collaborative research program seeking to discover new pharmaceutical products during an initial term of three years with an option to extend the research for an additional two years, and (ii) a Second Addendum to Amended Registration Rights Agreement (the "Second Addendum") effective as of September 2, 1994, a copy of which is attached hereto as Exhibit III and is hereby incorporated herein by reference, each by and between AHP and the Company, pursuant to which AHP is entitled to the rights granted under the Amended Registration Rights Agreement made as of June 24, 1994 by and between the Company and a group of investors listed on a Schedule attached thereto (the "Registration Agreement") which is attached hereto as Exhibit IV and is hereby incorporated herein by reference. The descriptions of the documents incorporated by reference herein are qualified in their entirety by the full text of such documents. The acquisition of Common Stock pursuant to the Purchase Agreement was made to induce the Company to enter into the Research Agreement and is for long-term investment purposes.

The First Note bears interest, and the Second and Third Notes, if and when issued, will bear interest at 7.75% per annum, with interest to be paid semi-annually. The Notes will mature on September 2, 1999; however, the Company may extend the Notes for an additional two year period. On or after the third anniversary of the Purchase Agreement, AHP will have the option to convert the entire principal amount and any unpaid interest of each the Notes into Common Stock at a conversion price of \$13.311 per share of Common Stock for the First Note and Second Note and \$14.47 per share for the Third Note. Each of the Notes may be prepaid, in whole or in part, at any time without premium or penalty upon fifteen days' written notice to AHP provided that the Company has not received written notice of AHP's intention to convert any of the Notes into Common Stock.

Pursuant to the Purchase Agreement:

(i) Each share of Common Stock purchased under the Purchase Agreement or upon conversion of any of the Notes is or will be restricted securities which have not been registered for sale in a public offering by the Company and may be resold without registration under the Securities Act of 1933, as amended (the "Securities Act") only in certain circumstances. In addition, AHP has agreed that, until the termination of the Research Agreement (the "Restricted Period"), without the prior written consent of the Company (which may be withheld in its sole discretion), neither AHP nor any affiliate shall directly or indirectly sell, offer to sell, contract to sell (including, without limitation, any short sale), grant any option to purchase or otherwise transfer or dispose of (other than to donees who agree to be similarly bound) any of the Purchased Common Stock, the Notes, any shares issuable upon conversion of the Notes (collectively, the "Note Shares"), securities purchased pursuant to AHP's Participation Right (as defined below) or securities issuable upon conversion of the Common Stock into Class B Common Stock ("Restricted Securities") other than to AHP affiliates or donees who agree to be bound by these restrictions.

(ii) In addition, during the Restricted Period, AHP (including all affiliates of AHP) shall not acquire beneficial ownership of any shares of Common Stock of the Company, any securities convertible into or exchangeable for Common Stock, or any other right to acquire Common Stock, except by way of stock dividends or other distributions or offerings made available to holders of Class A Common Stock (or Class B Common Stock issued upon conversion thereof) generally, from the Company or any other person or entity, without the prior written consent of the Company, which consent may be withheld in its sole discretion; provided, however, that in no event shall (i) the original purchase of securities pursuant to the Purchase Agreement, (ii) the conversion of the Notes, or (iii) the acquisition by AHP of another company that then owns securities of the Company, cause a violation of this provision.

(iii) AHP has agreed that it shall not make any disposition of all or any portion (or any interest) of the Purchased Common Stock, the Notes, the Note Shares, the securities purchased pursuant to AHP's Participation Right or the shares issuable upon conversion of the Class A Common Stock or any portion thereof, without first giving the Company the right to purchase such securities through the procedures set forth in the Purchase Agreement. However, the right of first offer shall not apply to (i) transfers to controlled affiliates of AHP or donees, provided the transferee agrees to be bound by the obligations of the Purchase Agreement, (ii) transactions involving a

merger, reorganization, recapitalization, exchange offer or sale of all or substantially all of the business or capital stock of the Company approved by the Company's board of directors or (iii) dispositions in open market transactions in which the aggregate number of such shares involved is less than 25,000 (subject to appropriate adjustment in the event of such stock splits, stock dividends, recapitalization and the like) during any 30 day period. The right of first offer will terminate upon the earlier to occur of (x) the tenth anniversary date of the Purchase Agreement or (y) the consummation of an acquisition or merger of the Company by or with a third party or the sale of all or substantially all of the assets of the Company. With respect to the Purchased Common Stock, shares issued upon conversion of the Purchased Common Stock to Class B Common Stock and shares purchased pursuant to AHP's Participation Right which are attributable to those shares (collectively, the "Equity Investment Shares"), the right of first offer shall lapse and cease to have any effect upon earlier to occur of (i) the time, if any, when such Equity Investment Shares owned by AHP represent less than two percent (2%) of the outstanding Common Stock of the Company (as derived from public reports filed by the Company with the Securities and Exchange Commission), or (ii) the second anniversary of the termination of the Research Agreement. With respect to the Notes, the Note Shares, shares issuable upon conversion of such Note Shares and shares purchased pursuant to AHP's Participation Right which are attributable to the Note Shares (collectively, the "Debt Investment Shares"), the right of first offer shall lapse and cease to have any effect upon the earlier to occur of (i) at such time when such Debt Investment Shares owned by AHP represent less than five percent (5%) of the outstanding Common Stock of the Company (as derived from public reports filed by the Company with the Securities and Exchange Commission), or (ii) the third anniversary of the conversion of the Notes.

The Company's right of first offer shall be assignable in whole or in part by the Company (but only after the Company receives notice of a transfer which is subject to a right of first offer and only with respect to that individual transaction). The Company's right of first offer shall be binding upon any transferee of the Offered Securities acquired pursuant to a disposition that is exempt from the right of first offer pursuant to the Purchase Agreement (including the Purchased Common Stocks, the Notes, the Note Shares, shares purchased pursuant to AHP's Participation Right and shares of Class B Common Stock issued or issuable upon conversion of the Class A Common Stock). However, the right of first offer shall not apply to any transferee of the Offered Securities if those Offered Securities were previously offered to the Company, the Company elected not to purchase such Offered Securities and AHP sold the Offered Shares to the transferee in compliance with the Purchase Agreement.

(iv) The Company granted to AHP the right to purchase, based upon its percentage ownership of the Company's outstanding shares, additional shares in connection with the offering by the Company of shares of any class of capital stock, but not including the issuance of shares (i) under any plan, agreement or arrangement, to employees, directors, consultants, customers, vendors, suppliers or other persons or organizations with which the Company has a commercial relationship provided that such issuances are for other than primarily equity financing purposes, (ii) pursuant to Regulation S (or successor rule or regulation) promulgated under the Securities Act so long as the Company in good

faith believes that such issuance or sale is in the best interest of the Company, (iii) pursuant to the conversion or exercise of convertible or exercisable securities, (iv) in connection with a bona fide business acquisition of or by the Company, whether by merger, consolidation, sale of assets, sale or exchange of stock or otherwise, (v) in connection with a transaction that has a substantial non-financing objective (for example, a research and development partnership, a SWORD transaction, or a collaboration or licensing arrangement), or (vi) to persons or entities with which the Company has business relationships provided such issuances are for other than primarily equity financing purposes ("AHP's Participation Right").

AHP's Participation Right shall terminate upon the earlier to occur of (i) the tenth anniversary date of the Purchase Agreement or (ii) the consummation of an acquisition or merger of the Company by or with a third party or the sale of all or substantially all of the assets of the Company.

(v) The Company agreed not consolidate with or merge with or into, or transfer all or substantially all of its assets to, any other person unless (i) such other person is a corporation organized or existing under the laws of the United States or a state thereof, (ii) if the surviving person is not the Company, such person expressly assumes all the obligations of the Company under the Notes, the Purchase Agreement and the other agreements related thereto, (iii) such surviving person (other than the Company) has a consolidated net worth immediately after such transaction at least equal to the consolidated net worth of the Company immediately prior to such transaction, (iv) immediately after such transaction no default or event of default under any of the Notes exists, (v) the successor corporation (or corporation controlling the successor corporation or the Company, as the case may be) shall enter into an agreement for the benefit of the holder of each Note which shall provide (a) that the holder of a Note may convert it into the kind and amount of securities and/or cash and/or other assets which such holder would have owned immediately after the consolidation, merger or transfer if he had converted the Note immediately before the effective date of such transaction and (b) for adjustments in the conversion price and terms which shall be as nearly equivalent as may be practical to the adjustments provided for in the Note; and (vi) the Company has delivered to AHP an officers' certificate and an opinion of counsel reasonably satisfactory to AHP each stating that such consolidation, merger or transfer comply with this section and that all conditions precedent herein provided for have been complied with.

Under the Registration Agreement and the Second Addendum:

(i) AHP and certain of the other shareholders of the Company (AHP and each of such other shareholders being referred to as a "Holder"), may make a written request that the Company effect a registration on Form S-3 with respect to all or a part of the Registrable Securities (as defined therein) owned by such Holder, subject to certain limitations and the Company shall as soon as practicable effect such registration as may be so requested and as would permit the sale and distribution of all or such portion of such Holder's Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holder or Holders joining in such request; provided, however, that the Company shall not be obligated to effect any such registration, qualification or compliance: (i) if Form S-3 is not available for such offering by the Holders (except under certain circumstances); (ii) if the Holder proposes to sell Registrable Securities at an aggregate price to the public (net of any underwriters' discounts or commissions) of less than \$500,000; (iii) if the Company shall

furnish to the Holder a certificate signed by the president of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be materially detrimental to the Company and its stockholders for such Form S-3 Registration to be effected at such time (without taking into account the costs to the Company), in which event the Company shall have the right to defer the filing for a period of not more than 60 days; provided, that the Company may not utilize this right more than once in any twelve month period; (iv) if the Company has, within the twelve month period preceding the date of such request, already effected two registrations on Form S-3 upon the demand of the Holders; or (v) in any particular jurisdiction in which the Company would be required to qualify to do business or execute a general consent to service of process in effecting such registration, qualification or compliance. In addition the Registration Agreement provides that the Company is obligated to effect only one such registration statement for all Holders every six months and provides other limitations on the Company's obligations.

(ii) If the Company proposes to register any of its stock or other securities under the Securities Act in connection with the public offering of such securities solely for cash (other than a registration relating solely to the sale of securities to participants in an Company stock plan, or a registration on any form which does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities), the Company shall at such time, promptly give each Holder written notice of such registration. Upon the written request of a Holder, the Company shall, subject to the provisions of the Registration Agreement relating to underwriting requirements, cause to be registered all of the Registrable Securities that such Holder has requested to be registered.

(iii) Each of the Holders agrees that, during a period not to exceed up to 180 days specified by the Company and an underwriter of Common Stock or other securities of the Company following the effective date of a registration statement of the Company, it shall not, to the extent requested by the Company and such underwriter (and provided the same restriction is agreed to by the officers and directors of the Company), directly or indirectly sell, offer to sell, contract to sell (including without limitation, any short sale but excluding private placements in reliance on the so-called "4(1-1/2)" exemption under the Securities Act), grant any option to purchase or otherwise transfer or dispose of (other than to donees who agree to be similarly bound) any securities of the Company held by it at any time during such period except Common Stock included in such registration.

AHP intends to continuously review its investment in the Company. In reaching any decision with respect to such investment, AHP will take into consideration various factors, such as the Company's business and prospects, the success of the research undertaken pursuant to the terms of the Research Agreement, other developments concerning the Company, other investment opportunities available to AHP, and general economic and market conditions. Depending on the result of its review of such factors, AHP may decide purchase additional equity securities of the Company, or AHP may decide to dispose of all or a portion of such securities (whether now or hereafter held), in each case, subject to the terms and conditions of the Purchase Agreement.

Except as set forth above or in any other item hereof, AHP does not have any present plans or proposals that would relate to or result in any of the actions required to be described in Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer.

As of September 2, 1994, AHP became the registered owner of

431,965 shares of Common Stock and, as a result, AHP holds approximately 5.9% of the outstanding Common Stock.

(a) Except as set forth herein, neither AHP nor, to its best knowledge, any of the persons named on Attachment A attached hereto, beneficially owns any Common Stock.

(b) AHP has the sole power to vote all of the Common Stock it beneficially owns without restriction, except as described above.

(c) Except as set forth herein, no transactions were effected in Common Stock during the past sixty (60) days by AHP nor, to the best of its knowledge, any person listed in Attachment A attached hereto that would require disclosure pursuant to Item 5(c).

(d) Neither AHP nor, to its best knowledge, any of the persons named on Attachment A attached hereto, has or knows of any other person who has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, any Common Shares beneficially owned by AHP.

(e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer.

There are no contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 or between any other person with respect to any securities of the Company except as referred to or described herein.

Item 7. Material to be Filed as Exhibits.

Attachment A Information concerning Executive Officers and Directors of American Home Products Corporation

Exhibit I Stock and Note Purchase Agreement, dated as of September 2, 1994, by and between American Home Products Corporation and Ligand Pharmaceuticals Incorporated

Exhibit II Unsecured Convertible Promissory Note in the amount of \$10 million by and between American Home Products Corporation and Ligand Pharmaceuticals Incorporated

Exhibit III Second Addendum to Amended Registration Rights Agreement by and between American Home Products Corporation and Ligand Pharmaceuticals Incorporated

Exhibit IV Amended Registration Rights Agreement made as of June 24, 1994 by and between the Company and a group of investors listed on a Schedule attached thereto is incorporated by reference to Exhibit 2 of the Report on Schedule 13D by Abbott Laboratories, dated July 14, 1994

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: September 12, 1994

AMERICAN HOME PRODUCTS CORPORATION

By: /s/ Robert G. Blount  
Robert G. Blount  
Executive Vice President

Attachment A

Executive Officers and Directors of  
American Home Products Corporation

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The names and titles of the executive officers and the names of the directors of American Home Products Corporation and its business addresses and principal occupations are set forth below. If no address is given, the director's or executive officer's business address is that of American Home Products Corporation. Unless otherwise indicated, each occupation set forth opposite an individual's name refers to American Home Products Corporation and each individual is a United States citizen.

EXECUTIVE OFFICERS      Position; Present Principal occupation

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John R. Stafford      Chairman, President and Chief  
Executive Officer

Robert G. Blount      Executive Vice President

Stanley F. Barshay      Senior Vice President

Joseph J. Carr      Senior Vice President

Fred Hassan      Senior Vice President

Louis L. Hoynes, Jr.      Senior Vice President and  
General Counsel

John R. Considine      Vice President - Finance

Rene R. Lewin      Vice President - Human Resources

Thomas M. Nee      Vice President - Taxes

DIRECTORS      Position; Present Principal Occupation

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Clifford L. Alexander, Jr.      President of Alexander &  
400 C Street, NE      Associates, Inc.(consulting firm  
Washington, D.C. 20002      specializing in Workforce

Inclusiveness)

Frank A. Bennack, Jr.      President and Chief Executive  
The Hearst Corporation      Officer of The Hearst Corporation  
959 Eighth Avenue      (owns and operates communications  
New York, New York 10019      media)

K. Roald Bergethon      Educational Consultant

Robert G. Blount      Listed above

John W. Culligan      Retired November 1988;  
former Chairman of the Board  
and Chief Executive Officer of AHP  
(from 1981 to 1986)

Robin Chandler Duke      National Chair, Population  
Action International

John D. Feerick      Dean, Fordham University  
Fordham University      School of Law since 1982  
School of Law  
140 West 62nd Street  
New York, New York 10023





attached as Exhibit C (the "Third Note"; the First Note, Second Note and Third Note shall collectively be referred to as the "Notes"). Within ten (10) days after the delivery of the Investor's written notice to the Company to extend the term of the Research and Development Agreement beyond the third year in accordance with Section 3.3 of the Research and Development Agreement, Investor shall pay the Third Installment to the Company. The Company shall deliver to Investor the original executed Third Note upon its receipt of the Third Installment.

1.2 Closing. The closing for the purchase and sale of the First Installment shall take place at the offices of Brobeck, Phleger & Harrison, 550 West "C" Street, Suite 1200, San Diego, California, on September 2, 1994, or at such other time and place as the Company and Investor mutually agree upon orally or in writing (which shall be designated as the "Closing"). At the Closing the Company shall deliver to Investor a certificate representing the Shares (free and clear of all liens, claims and other encumbrances except as otherwise provided herein and in the Registration Rights Agreement (as defined below)) and the original executed First Note. In consideration of such delivery, Investor shall make payment for the Shares by delivery to the Company of the Share Purchase Price and Investor shall make payment for the First Note by delivery to the Company of the First Note Installment Purchase Price. All such payments by Investor at the Closing and with respect to the Second Installment and Third Installment shall be in immediately available funds in the form of certified or cashier's check payable to the Company's order or by wire transfer of funds to the Company's designated bank account.

2. Representations and Warranties of the Company. The Company hereby represents and warrants to Investor that:

2.1 Organization, Good Standing and Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as now conducted and as proposed to be conducted. The Company is duly qualified to transact business and is in good standing in each jurisdiction in which the failure so to qualify would be reasonably expected to have a material adverse effect on the business, operations, properties, assets, prospects or condition (financial or otherwise) of the Company (a "Material Adverse Effect"). Except as disclosed in the Form 10-K (as defined herein), the Company has no subsidiaries.

2.2 Authorization. The Company has all requisite corporate power and authority (i) to execute, deliver and perform its obligations under this Agreement, the Registration Rights Agreement (as defined below) and the Research and Development Agreement; (ii) to issue the Securities (as defined herein) in the manner and for the purpose contemplated by this Agreement, and (iii) to execute, deliver and perform its obligations under all other agreements and instruments executed and delivered by it pursuant to or in connection with this Agreement, the Registration Rights Agreement and the Research and Development Agreement. All corporate action on the part of the Company, its officers, directors and shareholders necessary for the authorization, execution and delivery of this Agreement, the Notes, the Second Addendum to the Amended Registration Rights Agreement of even date herewith, which makes Investor a party to the Amended Registration Rights Agreement between the Company and certain of its stockholders (collectively, the "Registration Rights Agreement") and the Research and Development Agreement, the performance of all obligations of the Company hereunder and thereunder and the authorization, issuance (or reservation for issuance) and delivery of the Shares and the Notes, being sold and to be sold hereunder and pursuant to any conversion of the Notes has been taken or will be taken prior to the Closing, and this Agreement, the Notes (when issued and fully paid for), the Registration Rights Agreement and the Research and Development Agreement constitute valid and legally binding obligations of the

Company, enforceable in accordance with their respective terms, except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, and other laws of general application affecting enforcement of creditors' rights generally and (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies.

2.3 Valid Issuance of Shares. The Shares which are being purchased hereunder and the shares which are to be purchased by Investor pursuant to any conversion of the Notes, when issued, sold and delivered in accordance with the terms hereof and thereof for the consideration expressed herein and therein, will be duly and validly issued, fully paid and nonassessable and, based in part upon the representations of Investor in this Agreement, the Shares and the Notes will be issued in compliance with all applicable federal and state securities laws.

2.4 SEC Reports. The Company has heretofore filed with the Securities and Exchange Commission (the "SEC") pursuant to the Securities Exchange Act of 1934, as amended, all reports and other documents required to be filed, including an Annual Report on Form 10-K for the year ended December 31, 1993 (the "Form 10-K"). None of such reports, or any other reports, documents, registration statements, definitive proxy materials and other filings required to be filed with the SEC under the rules and regulations of the SEC ("SEC Filings") contains any untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary in order to make the statements made, at the time and in light of the circumstances under which they were made, not misleading. Since December 31, 1993, the Company has timely filed with the SEC all SEC Filings and all such SEC Filings complied with all applicable requirements of the Securities Act of 1933, as amended (the "Securities Act"), and the Securities Exchange Act of 1934, as amended, as applicable and the rules thereunder. The audited financial statements of the Company included or incorporated by reference in the 1993 Annual Report and the unaudited financial statements contained in the quarterly reports on Form 10-Q each have been prepared in accordance with such acts and rules and with United States generally accepted accounting principles applied on a consistent basis throughout the periods indicated therein and with each other, except as may be indicated therein or in the notes thereto and except that the unaudited interim financial statements may not contain all footnotes and adjustments required by United States generally accepted accounting principles, and fairly present the financial condition of the Company as at the dates thereof and the results of its operations and statements of cash flows for the periods then ended, subject, in the case of unaudited interim financial statements, to normal year-end adjustments. Except as reflected in such financial statements, the Company has no material liabilities, absolute or contingent, other than ordinary course liabilities incurred since the date of the last such financial statements in connection with the conduct of the business of the Company. Since December 31, 1993, and except for: (1) the Company's corporate partner transaction with Abbott Laboratories as documented by that certain Research, Development and License Agreement dated July 6, 1994, that certain Stock Purchase Agreement dated July 6, 1994 and that certain First Addendum to Amended Registration Rights Agreement dated July 6, 1994 which modified the Amended Registration Rights Agreement dated June 24, 1994, and (2) that certain Lease dated July 6, 1994 between Chevron/Nexus Partnership, as landlord, and the Company, as tenant, relating to the construction and lease of a facility in Torrey Science Center in San Diego, California, that certain Security Agreement (and Fixture Filing) between Chevron/Nexus Partnership and the Company dated July 6, 1994 and related UCC Financing Statements that created and perfected securities interests in favor of Chevron/Nexus Partnership in certain property of the Company that may be located in the new facility, there has been no:

(a) change in the assets, liabilities, financial condition or operating results of the Company from that reflected in the 1993 Annual Report, except changes in the ordinary course of business that have not, individually or in the aggregate, resulted in and are not reasonably expected to result in a Material Adverse Effect (and except that the Company expects to continue to incur substantial operating losses, which may be material);

(b) damage, destruction or loss, whether or not covered by insurance, materially and adversely affecting the business, properties or financial condition of the Company (and except that the Company expects to continue to incur substantial operating losses, which may be material);

(c) waiver or compromise by the Company of a material right or of a material debt owed to it;

(d) satisfaction or discharge of any lien, claim or encumbrance by the Company, except in the ordinary course of business and which is not material to the business, properties or financial condition of the Company (as such business is presently conducted);

(e) material change to a material contract or arrangement by which the Company or any of its assets is bound or subject;

(f) sale, assignment or transfer to a third party that is not an Affiliate (as hereafter defined) of any material patents, trademarks, copyrights, trade secrets or other intangible assets for compensation which is less than fair value;

(g) mortgage, pledge, transfer of a security interest in, or lien, created by the Company, with respect to any of its material properties or assets, except liens for taxes not yet due or payable;

(h) declaration, setting aside or payment or other distribution in respect of any of the Company's capital stock, except any direct or indirect redemption, purchase or other acquisition of any such stock by the Company; or

(i) event or condition of any type that has had or is reasonably expected to have a Material Adverse Effect.

For purposes of this Section 2.4 of this Agreement, the term "Affiliate" means any individual or entity directly or indirectly controlling, controlled by or under common control with, a party to this Agreement. Without limiting the foregoing, the direct or indirect ownership of 30% or more of the outstanding voting securities of any entity, or the right to receive 30% or more of the profits or earnings of an entity, shall be deemed to constitute control.

2.5 Contracts. With respect to each of the material contracts, commitments and agreements of the Company, the Company is not, and has no actual knowledge that any other party is, in default under or in respect of any such material contract, commitment or agreement, the result of which default would have a Material Adverse Effect. No party to any such material contract, commitment or agreement, would be authorized or permitted to terminate its obligations thereunder by reason of the execution and delivery of this Agreement or any of the transactions contemplated herein.

2.6 Compliance. The Company has complied with, and is not in default under or in violation of its Certificate of Incorporation, Bylaws or any and all laws, ordinances and regulations or other governmental restrictions, orders, judgments or decrees, applicable to the Company's business as presently conducted and as proposed to be conducted, including individual products marketed by it, where any such default or violation

would have a Material Adverse Effect. The Company has not received notice of any possible or actual violation of any applicable law, ordinance, regulation, or order, the result of which violation would be reasonably expected to have a Material Adverse Effect. The Company is not a party to any agreement or instrument, or subject to any charter or other corporate restriction, or any judgment, order, decree, law, ordinance, regulation or other governmental restriction which would prevent or impede, or be breached or violated by, or would result in the creation of any lien or encumbrance upon any assets of the Company by, the transactions contemplated in this Agreement, the execution, delivery or performance of the Registration Rights Agreement or the Research and Development Agreement, except that no representation or warranty is made with respect to filings required by the Hart-Scott-Rodino Antitrust Improvements Act of 1976 as amended.

2.7 Compliance with Other Instruments. The execution, delivery and performance of this Agreement and of the transactions contemplated hereby will not result in any violation of or constitute, with or without the passage of time and the giving of notice, either a default under any provision of its Certificate of Incorporation or Bylaws.

2.8 Governmental Consents. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority is required on the part of the Company in connection with the Company's valid execution, delivery and performance of this Agreement, the Registration Rights Agreement and the Research and Development Agreement, except for any filings under any applicable state securities laws and except for any filing under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 as amended. The filings under state securities laws, if any, will be effected by the Company at its cost within the applicable stipulated statutory period.

2.9 Litigation. There is no action, suit, proceeding or investigation pending or currently threatened against the Company which questions the validity of this Agreement, the Registration Rights Agreement or the Research and Development Agreement, or the right of the Company to enter into such instruments or to consummate the transactions contemplated hereby or thereby. Other than the lawsuit filed by the Company titled Ligand Pharmaceuticals Incorporated and Allergan Ligand vs. La Jolla Cancer Research Foundation, et al., there is no action, suit, proceeding or investigation pending or currently threatened against the Company, which singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would materially adversely affect the business, properties, operations, financial condition, income or business prospects of the Company as presently being conducted.

2.10 Permits. Except as disclosed in SEC Filings (including, inter alia, the lack of FDA approvals for the commercial sale of the Company's product candidates), the Company has all governmental franchises, permits, licenses, and any similar authority necessary for the conduct of its business as now being conducted by it or as proposed to be conducted by it, the lack of which could have a Material Adverse Effect. The Company is not in default in any material respect under any of such franchises, permits, licenses or other similar authority.

2.11 Taxes. The Company has filed all federal, state and other tax returns which are required to be filed and has heretofore paid all taxes which have become due and payable, except where the failure to file or pay would not be reasonably expected to have a Material Adverse Effect. The provision for taxes on the balance sheet as of December 31, 1993 is sufficient for the payment of all accrued and unpaid taxes of the Company with respect to the period then ended.

2.12 Title. The Company has good and marketable title

to all material property and assets reflected in the financial statements to the 1993 Annual Report (or as described in the SEC Filings). Except where the failure to do so would not have a Material Adverse Effect, the Company occupies its leased properties under valid and binding leases conforming to the description thereof set forth in the SEC Filings.

2.13 Intellectual Property. Except as disclosed in the SEC Filings, the Company owns, or possesses adequate rights to use, all of their patents, patent rights, trade secrets, know-how, proprietary techniques, including processes and substances, trademarks, service marks, trade names and copyrights described or referred to in the SEC Filings or owned or used by it or which is necessary for the conduct of its business as presently conducted, except where the failure to own or possess such patents, patent rights, trade secrets, know-how, proprietary techniques, including processes and substances, trademarks, service marks, trade names and copyrights would not have a material adverse effect on the business properties, operations, financial condition, income or business prospects of the Company.

Except as disclosed in the SEC Filings, the Company has not received any notice of infringement of or conflict with asserted rights of others with respect to any patents, patent rights, trade secrets, know-how, proprietary techniques, including processes and substances, trademarks, service marks, trade names and copyrights which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would be reasonably expected to have a Material Adverse Effect.

2.14 Capitalization; Options and Warrants. The authorized capital stock of the Company consists of sixty-five million (65,000,000) shares of which ten million (10,000,000) shares are Class A Common Stock, par value \$.001 per share, fifty million (50,000,000) shares are Class B Common Stock, par value \$.001 per share, and five million (5,000,000) shares are Preferred Stock, par value \$.001 per share. Except as disclosed in the SEC Filings, and except for the 429,553 shares of Class A Common Stock issued to Abbott Laboratories pursuant to that certain Stock Purchase Agreement dated July 6, 1994, and the obligation of Abbott Laboratories to purchase additional shares pursuant to Section 7.1 of such Stock Purchase Agreement and Abbott Laboratories' right to purchase additional shares pursuant to Section 9.11 of such Stock Purchase Agreement, and except for the transactions contemplated hereby, since December 31, 1993, the Company has not granted any option (except for stock options granted under the Company's stock option plans), warrants, rights (including conversion or preemptive rights, except for stock purchased under the Company's stock purchase plans), or similar rights to any person or entity to purchase or acquire any rights with respect to any shares of capital stock of the Company.

2.15 Nasdaq National Market Designation. Other than the automatic conversion of the Class A Common Stock into Class B Common stock as described in the Company's Certificate of Incorporation, the Class A Common Stock is currently included in the Nasdaq National Market of the Nasdaq Stock Market and the Company knows of no reason or set of facts which is likely to result in the termination or inclusion of the Class A Common Stock in the Nasdaq National Market or the inability of such stock to continue to be included in the Nasdaq National Market. The Company shall use all commercially reasonable efforts to maintain the Non-Quantitative Designation Criteria contained in Section 5 of Part III of Schedule D of the NASD's Bylaws to the extent such criteria are within the control of the Company. Nothing in this Section shall be interpreted to preclude the Company from listing its Class A Common stock on a national securities exchange in lieu of the Nasdaq National Market.

2.16 Accuracy of Representations and Warranties. No representation or warranty by the Company contained in this Agreement, and no statement contained in any exhibit, schedule, disclosure, certificate, list or other instrument delivered or to

be delivered to the Investor pursuant hereto or in connection with the transactions contemplated hereby contains any untrue statement of a material fact or omits to state any material fact necessary to make the statements contained herein or therein not misleading.

3. Representations and Warranties of Investor. Investor hereby represents and warrants that:

3.1 Organization, Good Standing and Qualification.

Investor is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as now conducted and as proposed to be conducted.

3.2 Authorization. All corporate action on the part of Investor, its officers and directors necessary for the authorization, execution and delivery of this Agreement, the Registration Rights Agreement and the Research and Development Agreement, the performance of all obligations of Investor hereunder and thereunder has been taken or will be taken prior to the Closing, and this Agreement, the Registration Rights Agreement and the Research and Development Agreement, constitute valid and legally binding obligations of Investor enforceable in accordance with their respective terms, except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium, and other laws of general application affecting the enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief, or other equitable remedies.

3.3 Purchase Entirely for Own Account. This Agreement is made with Investor in reliance upon Investor's representation to the Company, which by Investor's execution of this Agreement Investor hereby confirms, that the Shares and the Notes to be received by Investor and the shares issuable upon conversion of the Shares and any shares issuable upon conversion of the Notes (collectively, the "Securities") will be acquired for investment for Investor's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that Investor has no present intention of selling, granting any participation in, or otherwise distributing the same in violation of the Securities Act of 1933 or the California Corporate Securities Law of 1968. By executing this Agreement, Investor further represents that Investor does not have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participations to such person or to any third person, with respect to any of the Securities. Investor represents that it has full power and authority to enter into this Agreement.

3.4 Investment Experience. Investor acknowledges that it is able to fend for itself, can bear the economic risk of its investment and has such knowledge and experience in financial or business matters that it is capable of evaluating the merits and risks of the investment in the Securities. Investor also represents it has not been organized for the purpose of acquiring the Securities.

3.5 Accredited Investor. Investor is an "accredited investor" within the meaning of SEC Rule 501 of Regulation D, as presently in effect.

3.6 Restricted Securities. It understands that the Securities it is purchasing are characterized as "restricted securities" under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such laws and applicable regulations such Securities may be resold without registration under the Securities Act, only in certain limited circumstances. In this connection, Investor represents that it is familiar with SEC Rule 144, as presently in effect, and understands the resale limitations imposed thereby and by the

Securities Act.

3.7 Further Limitations on Disposition. Without in any way limiting the representations set forth above, Investor further agrees not to make any disposition of all or any portion of the Securities unless and until the transferee has agreed in writing for the benefit of the Company to be bound by Sections 3.7, 7.1 and 8 (except that Sections 7.1 and 8 shall not apply to a transferee in a registered public offering or a sale under Rule 144 or as provided in Section 8) of this Agreement, the Registration Rights Agreement and the Notes, if applicable, and:

(a) There is then in effect a Registration Statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with such Registration Statement; or

(b) (i) Investor shall have notified the Company of the proposed disposition and shall have furnished the Company with a reasonably detailed statement of the circumstances surrounding the proposed disposition (for purposes of securities law compliance), and (ii) if reasonably requested by the Company, such Investor shall have furnished the Company with an opinion of counsel (which may be Investor's inside counsel), in form and substance reasonably satisfactory to the Company, that such disposition will not require registration of such shares under the Securities Act. It is agreed that the Company will not require opinions of counsel for transactions made pursuant to Rule 144 except in unusual circumstances.

3.8 Legends. It is understood that the certificates evidencing the Securities may bear one or all of the following legends:

(a) "These securities have not been registered under the Securities Act of 1933. They may not be sold, offered for sale, pledged or hypothecated in the absence of a registration statement in effect with respect to the securities under such Act or an opinion of counsel satisfactory to the Company that such registration is not required or unless sold pursuant to Rule 144 of such Act."

(b) "These securities are subject to certain transfer restrictions contained in a certain Stock and Note Purchase Agreement dated September 2, 1994 as amended from time to time, a copy of which may be obtained from the corporation without charge."

(c) Any legend required by the laws of the State of California, including any legend required by the California Department of Corporations and Sections 417 and 418 of the Code.

To the extent that such legends are no longer applicable, the Company shall cause its transfer agent to remove the legends upon a permitted transfer by Investor.

3.9 Governmental Consents. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority is required on the part of Investor in connection with Investor's valid execution, delivery and performance of this Agreement, the Notes, the Registration Rights Agreement, or the Research and Development Agreement or the issuance of the Shares and the Notes, except for any filings under any applicable state securities laws and except for any filing under the Hart-Scott-Rodino Antitrust Improvements Act of 1976 as amended.

#### 4. California Commissioner of Corporations.

4.1 Corporate Securities Law. THE SALE OF THE SECURITIES WHICH ARE THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN

QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION FOR SUCH SECURITIES PRIOR TO SUCH QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102 OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON SUCH QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

5. Conditions of Investor's Obligations at Closing. The obligations of Investor under subsection 1.1(a) of this Agreement are subject to the fulfillment on or before the Closing of each of the following conditions, the waiver of which shall not be effective without the consent of Investor thereto:

5.1 Representations and Warranties. The representations and warranties of the Company contained in Section 2 shall be true on and as of the Closing with the same effect as though such representations and warranties had been made on and as of the date of such Closing.

5.2 Performance. The Company shall have performed and complied with all agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing, all corporate or other proceedings in connection with the transactions contemplated at the Closing and all documents incident thereto shall be reasonably satisfactory in form and in substance to Investor.

5.3 Compliance Certificate. An officer of the Company shall have delivered to Investor a certificate certifying that (a) the conditions specified in Sections 5.1 and 5.2 have been fulfilled; (b) the Company has not filed a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of its assets, nor is the Company aware of any events or action that would make any such filing or arrangement imminent; and (c) no action or event has occurred, nor is any action or event imminent, that would impair the Company's ability to perform as contemplated under the Research and Development Agreement.

5.4 Qualifications. The Commissioner of Corporations of the State of California shall have issued a permit qualifying the offer and sale of the Shares and the Notes to Investor pursuant to this Agreement, or such offer and sale when made shall be exempt from such qualification under the California Corporate Securities Law of 1968, as amended.

5.5 Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated at the Closing and all documents incident thereto shall be reasonably satisfactory in form and substance to Investor and they shall have received all such counterpart original and certified or other copies of such documents as they may reasonably request.

5.6 Shares and First Note. The Company shall have delivered to Investor the Shares and issued to Investor the First Note in the form attached as Exhibit A.

5.7 Research and Development Agreement. The Company and Investor shall have entered into the Research and Development Agreement of even date herewith.

5.8 Registration Rights Agreement. The Company and Investor shall have entered into the Registration Rights Agreement.

5.9 Opinion of Company Counsel. Investor shall have received an opinion from the Company's Vice President and General Counsel, dated as of the Closing, in form and substance reasonably acceptable to Investor.

6. Conditions of the Company's Obligations at Closing. The obligations of the Company to Investor under this Agreement are subject to the fulfillment on or before the Closing of each of the following conditions by Investor:

6.1 Representations and Warranties. The representations and warranties of Investor contained in Section 3 shall be true on and as of the Closing with the same effect as though such representations and warranties had been made on and as of the Closing.

6.2 Performance. Investor shall have performed and complied with all agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing, all corporate or other proceedings in connection with the transactions contemplated at the Closing and all documents incident thereto shall be reasonably satisfactory in form and in substance to the Company.

6.3 Compliance Certificate. An officer of Investor shall have delivered to the Company a certificate certifying that the conditions specified in Sections 6.1 and 6.2 have been fulfilled.

6.4 Payment of Purchase Price. Investor shall have delivered the First Installment purchase price specified in Section 1.1(a).

6.5 California Qualification. The Commissioner of Corporations of the State of California shall have issued a permit qualifying the offer and sale to Investor of the Shares and the Notes or such offer and sale when made shall be exempt from such qualification under the California Corporate Securities Law of 1968, as amended.

6.6 Research and Development Agreement. The Company and Investor shall have entered into the Research and Development Agreement of even date herewith.

6.7 Registration Rights Agreement. The Company and Investor shall have entered into the Registration Rights Agreement.

## 7. Covenants of Investor.

7.1 Transfer Restriction. Notwithstanding any rights under the Registration Rights Agreement, Investor hereby agrees that during the time period commencing as of the Closing until the termination of the Research and Development Agreement (with the time period being referred to as the "Restricted Period"), without the prior written consent of the Company (which may be withheld in its sole discretion), neither it nor any affiliate (as defined in Rule 144 of the Act promulgated by the SEC ("Affiliate")) shall, directly or indirectly sell, offer to sell, contract to sell (including, without limitation, any short sale), grant any option to purchase or otherwise transfer or dispose of (other than to donees who agree to be similarly bound) any of the Shares, the Notes, any shares issuable upon conversion of the Notes (collectively, the "Note Shares"), securities purchased pursuant to Section 9 or securities issuable upon conversion of the Class A Common Stock ("Restricted Securities"). Notwithstanding the foregoing, transfers solely among Investor Affiliates shall not be subject to the transfer restrictions set forth in this Section 7.1 provided the Affiliate transferee agrees in writing to be bound by this Section 7.1. In order to enforce the foregoing covenant, the Company may impose legends and/or stop-transfer instructions with respect to the Restricted Securities held by Investor or any Affiliate (and the Restricted Securities of every other person subject to the foregoing restriction) until the end of such period.

7.2 Standstill Provisions. Commencing as of the Closing and for the period until the termination of the Research and Development Agreement, Investor (including all Affiliates of Investor) shall not acquire beneficial ownership of any shares of Common Stock of the Company, any securities convertible into or exchangeable for Common Stock, or any other right to acquire Common Stock, except by way of stock dividends or other distributions or offerings made available to holders of Class A Common Stock (or Class B Common Stock issued upon conversion thereof) generally, from the Company or any other person or entity, without the prior written consent of the Company, which consent may be withheld in its sole discretion; provided, however, that in no event shall (i) the original purchase of securities pursuant to this Agreement including Section 1.1 and Section 9, (ii) the conversion of the Notes, or (iii) the acquisition by Investor of another company that then owns securities of the Company, cause a violation of this Section 7.2.

## 8. Right of First Offer.

### 8.1 Right of First Offer.

(a) The Investor shall not make any disposition of all or any portion (or any interest) of the Shares, the Notes, the Note Shares, securities purchased pursuant to Section 9 or shares issuable upon conversion of the Class A Common Stock or any portion thereof, without first giving the Company the right to accept an offer to purchase such securities, except for any dispositions that are exempt pursuant to the terms of Section 8.3. Subject to Section 7.1, at the time the Investor wishes to make a disposition of any or all of the securities (except for dispositions that are exempt pursuant to the terms of Section 8.3), it shall submit an offer to sell all, but not less than all, of such securities which Investor wishes to dispose (the "Offered Shares") to the Company (the "Offer") by telephonic communication with the Company's President or Chief Operating Officer (such telephonic communication to be confirmed in writing by notice pursuant to Section 11.6) as follows:

(i) If the Investor wishes to sell the Offered Shares in an open market disposition, the Offer shall disclose the number of Offered Shares proposed to be sold. As soon as practicable after receipt of the Offer, but in no event later than three business days after the Investor makes the Offer, the Company shall have the option to accept the Offer to purchase the Offered Shares at the closing market price on the business day next preceding the day of the Offer. In the event the Company does not purchase the Offered Shares offered by the Investor pursuant to the Offer, the Investor may sell the Offered Shares at any time within 90 days after the expiration of the Offer. Any such sale shall be made in the open market at the market prices prevailing at the time of the sale.

(ii) If the Investor wishes to sell or otherwise transfer the Offered Shares in a privately negotiated transaction, whether through broker-dealers who may act as agent or acquire the Offered Shares as principal, or otherwise, the Offer shall disclose the number of Offered Shares proposed to be sold or transferred and the price at which the Offered Shares are offered to the Company. As soon as practicable after receipt of the Offer, but in no event later than three business days after the Investor makes the Offer, the Company shall have the option to accept the Offer to purchase the Offered Shares at the price per share set forth in the Offer. In the event the Company does not purchase the Offered Shares offered by the Investor pursuant to the Offer, and provided that the price specified in the Offer is not greater than the closing market price on the business day next preceding the day of the Offer, the Investor may sell or transfer the Offered Shares at any time within 90 days after the expiration of the Offer for any price.

(iii) If the Investor wishes to effect an underwritten offering of the Offered Shares pursuant to

registration rights granted by the Company (if permitted thereby), the Offer shall disclose the number of Offered Shares proposed to be sold to the underwriters. The Company shall have the option to purchase the Offered Shares at the closing market price on the business day next preceding the day of the Offer. As soon as practicable after receipt of the Offer, but in no event later than three business days after the Investor makes the Offer, the Company shall have the option to accept the Offer to purchase the Offered Shares. In the event the Company does not purchase the Offered Shares offered by the Investor pursuant to the Offer, the Investor may sell the Offered Shares in an underwritten offering commenced within ninety (90) days after the expiration of the Offer.

(b) Any Offered Shares not sold in accordance with the applicable terms and within the applicable time periods provided in subsection (a) above shall continue to be subject to the requirements of a first offer pursuant to this Section.

(c) The provisions of Subsections (a) and (b) above shall not apply to any disposition of Shares, the Notes, the Note Shares, securities purchased pursuant to Section 9 or shares issuable upon conversion of the Class A Common Stock made in an open market transaction (or series of related transactions) in which the aggregate number of such shares involved in such disposition is less than 25,000 (subject to appropriate adjustment in the event of such stock splits, stock dividends, recapitalizations and the like) during any 30-day period.

(d) If the Company accepts an Offer under this Section, the Closing of such purchase shall occur within twenty (20) business days after acceptance of the Offer by the Company. Upon such acceptance, the Company and the Investor shall be legally obligated to consummate the purchase contemplated thereby.

(e) With respect to the Shares, shares issued upon conversion of the Shares and shares purchased pursuant to Section 9 which are attributable to the Shares (collectively, the "Equity Investment Shares"), the provisions of this Section shall lapse and cease to have any effect upon earlier to occur of (i) the time, if any, when such Equity Investment Shares owned by Investor represent less than two percent (2%) of the outstanding Common Stock of the Company (as derived from public reports filed by the Company with the Securities and Exchange Commission), or (ii) the second anniversary of the termination of the Research and Development Agreement. With respect to the Notes, the Note Shares, shares issuable upon conversion of such Note Shares and shares purchased pursuant to Section 9 which are attributable to the Note Shares (collectively, the "Debt Investment Shares"), the provisions of this Section shall lapse and cease to have any effect upon the earlier to occur of (i) at such time when such Debt Investment Shares owned by Investor represent less than five percent (5%) of the outstanding Common Stock of the Company (as derived from public reports filed by the Company with the Securities and Exchange Commission), or (ii) the third anniversary of the conversion of the Notes.

8.2 Binding Effect. The Company's right of first offer shall be assignable in whole or in part by the Company, (but only after the Company receives notice of a transfer which is subject to a right of first offer and only with respect to that individual transaction) shall inure to the benefit of its successors and assigns. The Company's right of first offer shall be binding upon any transferee of the Offered Securities acquired pursuant to a disposition that is exempt from the right of first offer pursuant to the terms of Section 8.3 (including the shares, the Notes, the Note Shares, shares purchased pursuant to Section 9 and shares of Class B Common Stock issued or issuable upon conversion of the Class A Common Stock). However, the Company's right of first offer shall not apply to any transferee of the Offered Securities if those Offered Securities were previously offered to the Company pursuant to Section 8.1, the Company

elected not to purchase such Offered Securities and the Investor sold the Offered Shares to the transferee in compliance with Section 8.1.

8.3 Exempt Transfers. Subject to Section 8.2, the right of first offer shall not apply to (i) transfers to controlled Affiliates of Investor or donees, provided the transferee agrees to be bound by the obligations of this Agreement, or (ii) transactions involving a merger, reorganization, recapitalization, exchange offer or sale of all or substantially all of the business or capital stock of the Company approved by the Company's board of directors.

8.4 Termination of Right of First Offer. The right of first offer under this Section 8 shall terminate upon the earlier to occur of (i) the tenth anniversary date of this Agreement or (ii) the consummation of an acquisition or merger of the Company by or with a third party or the sale of all or substantially all of the assets of the Company.

9. Right of Participation in Equity Financings. Subject to the terms and conditions specified in this Section 9, the Company hereby grants to Investor a right to purchase up to the number of Additional Shares (as defined below) in connection with any Equity Financing (as defined below) undertaken by the Company.

(a) Each time the Company proposes to offer shares of any class of its capital stock in a registered public offering or in a private placement of unregistered shares subject to the exceptions set forth in paragraph (c) below ("Equity Financing"), the Company shall deliver a notice in person, by air courier or by facsimile ("Notice") to Investor stating (i) its bona fide intention to undertake such Equity Financing, (ii) the number of shares to be offered in the Equity Financing (the "Equity Financing Shares"), (iii) the number of Additional Shares up to which Investor may elect to purchase in such Equity Financing which would be added to the Equity Financing Shares, and (iv) the price and terms, if any, upon which it proposes to offer such shares in the Equity Financing.

(b) Within ten (10) business days after giving of the Notice, Investor may elect to purchase, at the price and on the terms specified in the Notice, up to the number of Additional Shares set forth in the Notice. The number of shares of capital stock ("Additional Shares") that Investor may elect to purchase and include in the Equity Financing shall be calculated as follows:

$$\text{Additional Shares} = \frac{\text{Equity Financing Shares} - \text{Equity Financing Shares}}{1 - \text{\_\_\_\%}}$$

\\_\\_\\_\% represents the percentage of the outstanding shares of the Company held by Investor at the time of the Notice assuming full exercise of all options and warrants outstanding at the Closing (but excluding shares issuable upon conversion of the Notes unless the Notes have been converted into shares at the time Investor exercises its right under this Section 9).

In the event the number of Equity Financing Shares changes for any reason (other than including the Additional Shares) after the Notice is delivered to Investor, the number of Additional Shares shall be recalculated using the new number of Equity Financing Shares and the Company shall promptly provide a revised Notice to Investor reflecting such change.

(c) The right of Investor in this Section 9 shall not be applicable (i) to the issuance or sale of shares under any plan, agreement or arrangement, to employees, directors, consultants, customers, vendors, suppliers or other persons or organizations with which the Company has a commercial

relationship provided that such issuances are for other than primarily equity financing purposes, (ii) to the issuance or sale of stock pursuant to Regulation S (or successor rule or regulation) promulgated under the Securities Act of 1933, as amended, so long as the Company in good faith believes that such issuance or sale is in the best interest of the Company, (iii) to the issuance of shares pursuant to the conversion or exercise of convertible or exercisable securities, (iv) to the issuance of shares in connection with a bona fide business acquisition of or by the Company, whether by merger, consolidation, sale of assets, sale or exchange of stock or otherwise, (v) to the issuance or sale of shares in connection with a transaction that has a substantial non-financing objective (for example, a research and development partnership, a SWORD transaction, or a collaboration or licensing arrangement), or (vi) to the issuance of shares to persons or entities with which the Company has business relationships provided such issuances are for other than primarily equity financing purposes.

(d) Investor's rights and obligations under this Section 9 shall not be assignable. The Company shall have no obligation to register the shares purchased pursuant to this Section 9; provided, that in the event the Company shall grant registration rights on the Equity Financing Shares, the same such registration rights shall also be granted on the Additional Shares being purchased by Investor under this Section 9.

(e) The rights of Investor under this Section 9 shall terminate upon the earlier to occur of (i) the tenth anniversary date of this Agreement or (ii) the consummation of an acquisition or merger of the Company by or with a third party or the sale of all or substantially all of the assets of the Company.

## 10. Covenants

As long as any of the Notes are outstanding, the Company covenants as follows:

10.1 **Furnishing of Information.** The Company will promptly furnish to the Investor all SEC filings (or comparable information if the Company is not at the time required to file reports pursuant to Section 13(a) of the Securities Exchange Act of 1934) and all annual and quarterly reports furnished to stockholders. The Company will promptly furnish such other information respecting the business affairs, financial condition and/or operations of the Company as the Investor may from time to time reasonably request; provided, however, that as long as the Company is subject to the reporting requirements of Section 13(a) or 15(d) of the Exchange Act, the Company need only furnish such other information to the extent it is publicly available.

10.2 **Conduct of Business and Maintenance of Existence.** The Company will continue to engage in business of the same general type as now conducted and as contemplated to be conducted by it and preserve, renew and keep in full force and effect its corporate existence and take all reasonable action to maintain all rights, privileges and franchises necessary or desirable in the normal conduct of its businesses.

10.3 **When the Company May Merge, etc.** The Company shall not consolidate with or merge with or into, or transfer all or substantially all of its assets to, any other person unless (i) such other person is a corporation organized or existing under the laws of the United States or a state thereof, (ii) if the surviving person is not the Company, such person expressly assumes all the obligations of the Company under the Notes, this Agreement and the other agreements related thereto, (iii) such surviving person (other than the Company) has a consolidated net worth immediately after such transaction at least equal to the consolidated net worth of the Company immediately prior to such transaction, (iv) immediately after such transaction no default or event of default under any of the Notes exists, (v) the successor corporation (or corporation controlling the successor

corporation or the Company, as the case may be) shall enter into an agreement for the benefit of the holder of each Note which shall provide (a) that the holder of a Note may convert it into the kind and amount of securities and/or cash and/or other assets which such holder would have owned immediately after the consolidation, merger or transfer if he had converted the Note immediately before the effective date of such transaction and (b) for adjustments in the conversion price and terms which shall be as nearly equivalent as may be practical to the adjustments provided for in the Note; and (vi) the Company has delivered to the Investor an officers' certificate and an opinion of counsel reasonably satisfactory to the Investor, each stating that such consolidation, merger or transfer comply with this section and that all conditions precedent herein provided for have been complied with.

10.4 Actions Required to Issue Note Shares. The Company will at all times prior to repayment of the Notes reserve and keep available out of its authorized but unissued Common Stock solely for the purpose of issue upon conversion of the Notes, such number of shares of Common Stock as shall then be issuable upon the conversion of the Notes. The Company will use its reasonable efforts to comply with all applicable laws and regulations in connection with the conversion of the Notes including, without limitation, any filings required by the Hart-Scott-Rodino Antitrust Improvements Act of 1976 as amended.

## 11. Miscellaneous.

11.1 Survival of Warranties. The warranties, representations and covenants of the Company and Investor contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement and the Closing and shall in no way be affected by any investigation of the subject matter thereof made by or on behalf of the Investor or the Company.

11.2 Successors and Assigns. Except as otherwise provided herein, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties (including transferees of any of the Shares or the Notes sold hereunder or any shares issuable upon the conversion thereof). Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

11.3 Governing Law. This Agreement shall be governed by and construed under the laws of the State of California as applied to agreements among California residents entered into and to be performed entirely within California.

11.4 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

11.5 Titles and Subtitles. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

11.6 Notices. Unless otherwise provided, any notice required or permitted under this Agreement shall be given in writing by personal delivery to the party to be notified or by Federal Express or other overnight package delivery service or registered or certified mail, postage prepaid and addressed to the party to be notified at the following addresses, or at such other address as such party may designate by five (5) days' advance written notice to the other parties (with notice deemed given upon receipt):

If to the Company:

Ligand Pharmaceuticals Incorporated  
9393 Towne Centre Drive, Suite 100  
San Diego, California 92121  
Attn: William L. Respass, Esq.

If to Investor:

American Home Products Corporation  
5 Giralda Farms  
Madison, New Jersey 07940  
Attn: Senior Vice President  
and General Counsel

11.7 Finder's Fee. Each party represents that it neither is nor will be obligated for any finders' fee or commission in connection with this transaction. Each party agrees to indemnify and to hold harmless the other from any liability for any commission or compensation in the nature of a finders' fee (and the costs and expenses of defending against such liability or asserted liability) for which the indemnifying party or any of its officers, partners, employees, or representatives is responsible.

11.8 Expenses. Irrespective of whether the Closing is effected, each party shall pay all costs and expenses that it incurs with respect to the negotiation, execution, delivery and performance of this Agreement. Notwithstanding the foregoing, the Company shall pay any and all stamp, transfer and other similar taxes payable or determined to be payable in connection with the execution and delivery of this Agreement or the original issuance of the Securities including shares issuable upon conversion of the Notes, and shall save and hold the Investor harmless from and against any and all liabilities with respect to or resulting from any delay in paying, or omission to pay, such taxes.

11.9 Amendments and Waivers. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and Investor. Any amendment or waiver effected in accordance with this paragraph shall be binding upon each holder of any securities purchased under this Agreement at the time outstanding, each future holder of all such securities, and the Company.

11.10 Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

11.11 Entire Agreement. This Agreement and the documents referred to herein constitute the entire agreement among the parties and no party shall be liable or bound to any other party in any manner by any warranties, representations, or covenants except as specifically set forth herein or therein.

[Remainder of This Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

INVESTOR:

THE COMPANY:

AMERICAN HOME PRODUCTS  
CORPORATION

LIGAND PHARMACEUTICALS  
INCORPORATED

By:/s/ John R. Considine

By: /s/ William L. Respass

Title: Vice President-Finance

Title:Senior Vice President

and General Counsel

[SIGNATURE PAGE TO STOCK AND NOTE PURCHASE AGREEMENT]

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED OR UNLESS SOLD PURSUANT TO RULE 144 OF SUCH ACT.

THESE SECURITIES ARE SUBJECT TO CERTAIN TRANSFER RESTRICTIONS CONTAINED IN A CERTAIN STOCK AND NOTE PURCHASE AGREEMENT DATED SEPTEMBER 2, 1994, A COPY OF WHICH MAY BE OBTAINED FROM THE COMPANY WITHOUT CHARGE.

#### UNSECURED CONVERTIBLE PROMISSORY NOTE

First Note

\$10,000,000.00  
September 2, 1994

San Diego,  
California

Ligand Pharmaceuticals Incorporated, a Delaware corporation (the "Company"), for value received, hereby promises to pay to American Home Products Corporation, a Delaware corporation or its registered assigns ("Payee"), in lawful money of the United States at the address of Payee set forth below, the principal sum of Ten Million Dollars (\$10,000,000), together with all accrued but unpaid interest thereon. This Note is one of a series of three possible unsecured convertible promissory notes in the aggregate principal amount of \$20,000,000 that may be issued to Payee pursuant to that certain Stock and Note Purchase Agreement dated September 2, 1994 between the Company and Payee (the "Agreement"), all three such Notes shall be collectively referred to as the "Investor Notes."

Unpaid principal of this Note shall bear interest (computed on the basis of a year of 360 days of actual days elapsed), from the date hereof until such principal is due and payable, at a rate per annum which shall be equal to 7.75%. All payments with respect to this Note shall be credited first to the payment of accrued but unpaid interest and then to the repayment of principal. The rate of interest payable hereunder shall in no event exceed the maximum rate permitted by law.

The Company shall pay accrued but unpaid interest on this Note on a semi-annual basis on the fifteenth (15th) day of each January and July during the term hereof, commencing January 15, 1995. Subject to the Company's right to extend this Note as set forth below, the Company shall pay all outstanding principal and accrued but unpaid interest on this Note on the fifth anniversary date of this Note. In the event Payee does not exercise its Conversion Right (as defined below) with respect to all of the outstanding Investor Notes prior to the fifth anniversary date of this Note, the Company may elect to extend the term of this Note for an additional two-year period such that all outstanding principal and accrued but unpaid interest on this Note shall be due and payable on the seventh anniversary date of this Note. The Company shall make such election by delivering written notice to Payee at least six (6) months prior to the fifth anniversary date of this Note. During such extension, the Company shall continue to pay accrued but unpaid interest on the semi-annual payment schedule set forth above. This Note may be prepaid, in whole or in part, at any time without premium or penalty upon

fifteen (15) days' prior written notice by the Company to the Payee provided the Company has not received notice from Payee of its election to exercise its Conversion Right in accordance with the terms of this Note.

Any time on or after the third anniversary date of this Note up to the repayment of this Note Payee may elect to convert (the "Conversion Right") all, but not less than all, of the outstanding principal amount of this Note and accrued but unpaid interest thereon into the number of shares of the class of stock of the Company then publicly traded equal to the quotient of (x) the principal amount of this Note to be repaid and all accrued but unpaid interest on such principal amount as of the date the Company receives the written notice from Payee exercising its Conversion Right, divided by (y) \$13.311 (which is One Hundred Fifteen Percent (115%) of \$11.575 which is the average daily closing price of the Company's Class A Common Stock reported by the National Association of Securities Dealers ("NASD") on the ten (10) trading days preceding the fifth day prior to the date of this Note). Payee may exercise its Conversion Right by delivering written notice to the Company together with the original Note for cancellation and such other documents and certificates as the Company may reasonably request to comply with applicable securities and other laws and contractual obligations and such conversion shall be subject to the Company's compliance with applicable laws and regulations including, without limitation, any filings required by the Hart-Scott-Rodino Antitrust Improvements Act of 1976 as amended. If the Company: (1) pays a dividend in shares of its Common Stock or makes a distribution in shares of its Common Stock; (2) subdivides its outstanding shares of Common Stock into a greater number of shares; (3) combines its outstanding shares of Common Stock into a smaller number of shares; (4) pays a dividend on its Common Stock in shares of its capital stock other than Common Stock; or (5) issues by reclassification of its shares of Common Stock any shares of its capital stock, then the conversion privilege and the conversion price in effect immediately prior to such action shall be adjusted so that the holder of this Note thereafter converted may receive the number of shares of capital stock of the Company which such holder would have owned immediately following such action if such holder had converted the Note immediately prior to such action. For a dividend or distribution, the adjustment shall become effective immediately after the record date for the dividend or distribution. For a subdivision, combination or reclassification, the adjustment shall become effective immediately after the effective date of the subdivision, combination or reclassification.

By acceptance of this Note, Payee represents and acknowledges to the Company that (i) by reason of its business and financial experience it has the capacity to protect its own interests in this transaction and is accepting this Note and any shares issued under the terms of this Note for its own account and not with a view to distribution, (ii) the issuance of this Note and the stock issuable hereunder may only be effected in compliance with applicable state and federal securities laws, (iii) the holder of this Note is not entitled to any rights as a stockholder of the Company with respect to any shares of stock issuable hereunder until a certificate or certificates representing such shares is issued and delivered to the holder of this Note, and (iv) subject to Payee's rights under that certain Amended Registration Rights Agreement dated June 24, 1994, as amended from time to time, the Company is not required under the terms hereof to register the shares of stock issuable hereunder and the subsequent transfer of any such shares by the holder of this Note may require registration under the Securities Act of 1933, as amended, or other federal statutes, as well as under applicable state laws. Upon the request of the Company, Payee agrees to make such further representations in connection with the issuance of any stock as may be reasonably necessary in order to comply with the requirements of applicable securities laws as determined by counsel to the Company. The holder of this Note acknowledges that any stock certificate evidencing such shares

shall contain a legend in substantially the same form as set forth below (in addition to any legend required under applicable state securities laws):

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED OR UNLESS SOLD PURSUANT TO RULE 144 OF SUCH ACT.

THESE SECURITIES ARE SUBJECT TO CERTAIN TRANSFER RESTRICTIONS CONTAINED IN A CERTAIN STOCK AND NOTE PURCHASE AGREEMENT DATED SEPTEMBER 2, 1994, A COPY OF WHICH MAY BE OBTAINED FROM THE COMPANY WITHOUT CHARGE.

If any payment of principal or interest on this Note shall become due on a Saturday, Sunday, or a public holiday under the laws of the State of California, such payment shall be made on the next succeeding business day and such extension of time shall be included in computing interest in connection with such payment.

Upon payment in full of all principal and interest payable hereunder, this Note shall be surrendered to the Company for cancellation.

The Company waives presentment, demand for performance, notice of nonperformance, protest, notice of protest, and notice of dishonor. No delay on the part of Payee in exercising any right hereunder shall operate as a waiver of such right under this Note. This Note is being delivered in and shall be construed in accordance with the laws of the State of California.

In the case of the happening of any of the following events (herein called Events of Default):

(a) any representation or warranty made or deemed made in or in connection with this Note, the Agreement, or the borrowings hereunder or in any report, certificate, financial statement or other instrument or agreement furnished in connection with this Note, the Agreement or the borrowings hereunder shall prove to have been false or misleading in any material respect when made or deemed to be made and such false or misleading representation or warranty materially and adversely affects the Company's financial condition such that it impairs the Company's ability to meet its payment obligations under this Note when due.

(b) default shall be made in the payment of any principal or interest of this Note when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment thereof or by acceleration thereof or otherwise and such default shall continue for fifteen (15) days after written notice thereof;

(c) default shall be made in the due observance or performance of any material covenant or agreement contained in this Note or the agreement and such default shall continue for thirty (30) days after written notice thereof; provided, that if the Company is attempting in good faith to cure such default, but is unable to effect such cure within the thirty day period due to any reason or unforeseen circumstances beyond its reasonable control, then the obligations of the Company shall be extended on a day-to-day basis for the time period equal to the period of the excusable delay.

(d) the Company shall (i) voluntarily commence any proceeding or file any petition seeking relief under Title 11 of

the United States Code or any other federal, state or foreign bankruptcy, insolvency, liquidation or similar law, (ii) consent to the institution of, or fail to contravene in a timely and appropriate manner, any such proceeding or the filing of any such petition, (iii) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator or similar official for the Company or for a substantial part of its property or assets, (iv) file an answer admitting the material allegations of a petition filed against it in any such proceeding, (v) make a general assignment for the benefit of creditors, (vi) become unable, admit in writing its inability or fail generally, to pay its debts as they become due or (vii) take corporate action for the purpose of effecting any of the foregoing;

(e) an involuntary proceeding shall be commenced or an involuntary petition shall be filed in a court of competent jurisdiction seeking (i) relief in respect of the Company or of a substantial part of its property or assets under Title 11 of the United States Code or any other federal, state or foreign bankruptcy, insolvency, receivership or similar law, (ii) the appointment of a receiver, trustee, custodian, sequestrator or similar official for the Company or for a substantial part of the property of the Company, or (iii) the winding-up or liquidation of the Company; and such proceeding or petition shall continue undismissed for 60 days or an order or decree approving or ordering any of the foregoing shall continue unstayed and in effect for 30 days;

(f) this Note or the Agreement shall for any reason cease to be, or be asserted by the Company not to be, a legal, valid and binding obligation enforceable in accordance with its terms;

then, and in any such event (other than an event described in paragraph (d) or (e) above), and at any time thereafter during the continuance of such event, the holder of this Note may, by written or telegraphic notice to the Company, declare the Note to be forthwith due and payable whereupon the principal of the Note, together with accrued interest thereon and other liabilities of the Company accrued hereunder, shall become due and payable both as to principal and interest, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived by the Company, anything contained herein or in the Note to the contrary notwithstanding; provided, however, that with respect to a default described in paragraph (d) or (e) above, this Note, and any other liabilities of the Company accrued hereunder, shall automatically become due and payable, both as to principal and interest, without presentment, demand, protest or other notice of any kind, all of which are hereby expressly waived by the Company, anything contained herein or in the Note to the contrary notwithstanding. Notwithstanding anything to the contrary contained herein, if the Event of Default results from a breach of Section 10.3(i) of the Agreement, Payee's sole remedy shall be the acceleration of its Conversion Right in this Note.

If the indebtedness represented by this Note or any part thereof is collected at law or in equity or in bankruptcy, receivership or other judicial proceedings, the Company agrees to pay, in addition to the principal and interest payable hereon, reasonable attorneys' fees and costs incurred by Payee as determined by the court.

Unless otherwise provided, any notice required or permitted under this Note shall be given in writing by personal delivery to the party to be notified or by Federal Express or other overnight package delivery service or registered or certified mail, postage prepaid and addressed to the party to be notified at the following addresses, or at such other address as such party may designate by five (5) days' advance written notice to the other parties (with notice deemed given upon receipt):

If to Payee: American Home Products Corporation

5 Giralda Farms  
Madison, New Jersey 07940  
Attn: Senior Vice President  
and General Counsel

If to Company: Ligand Pharmaceuticals Incorporated  
9393 Towne Centre Drive, Suite 100  
San Diego, California 92121  
Attn: William L. Respass, Esq.

Any payment shall be deemed made upon receipt by Payee. Payee or the Company may change their address for purposes of this paragraph by giving to the other party notice in conformance with this paragraph of such new address.

This Note may be modified or amended only by a writing signed by the Company and the Payee.

The transfer of this Note (or any interest in it) is subject to transfer restrictions set forth in the Stock and Note Purchase Agreement of even date herewith. Subject to such restrictions, this Note may be transferred only upon surrender of the original Note for registration of transfer, duly endorsed, or accompanied by a duly executed written instrument of transfer in form satisfactory to the Company. Thereupon, a new Note for like principal amount and interest will be issued to, and registered in the name of, the transferee. Interest and principal are payable only to the registered holder of the Note.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Company has caused this Unsecured Convertible Promissory Note to be duly executed and delivered on and as of the day and year first written above.

LIGAND PHARMACEUTICALS INCORPORATED

By: /s/ William L. Respass  
Its: Senior Vice President  
and General Counsel

ACKNOWLEDGED AND AGREED TO:

AMERICAN HOME PRODUCTS CORPORATION

By: /s/ John R. Considine  
Its: Vice President-Finance

[SIGNATURE PAGE TO UNSECURED CONVERTIBLE PROMISSORY  
NOTE]

SECOND ADDENDUM TO  
AMENDED REGISTRATION RIGHTS AGREEMENT

This Second Addendum ("Second Addendum") to the Amended Registration Rights Agreement dated June 24, 1994 ("Registration Rights Agreement") is effective as of September 2, 1994.

RECITALS

A. The Company is issuing 431,965 shares of its Class A Common Stock and three unsecured convertible promissory notes (the "Notes") which are convertible into shares of Class A Common Stock (or shares of such other class of stock into which the Class A Common Stock is converted) to American Home Products Corporation ("Investor") pursuant to a certain Stock and Note Purchase Agreement of even date herewith (the "Purchase Agreement").

B. This Second Addendum serves to formally include Investor as a party to the Registration Rights Agreement and to include the 431,965 shares of Class A Common Stock and the shares of Class A Common Stock (or shares of such other class of stock into which the Class A Common Stock is converted) issuable upon conversion of the Notes within the definition of "Registrable Securities" under the Registration Rights Agreement and to modify Schedule A to the Registration Rights Agreement to include such shares, all pursuant to Section 2.6(a) of the Registration Rights Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants set forth in the Purchase Agreement and the Registration Rights Agreement, the parties agree as follows:

1. Section 1.1, paragraph (f) of the Registration Rights Agreement is hereby restated in its entirety as follows:

"(f) The term "Registrable Securities" means (i) the 1,939,435 shares of Class A Common Stock and 5,818,362 shares of Class B Common Stock (or that number of shares of such other class of stock into which the Class A Common Stock and Class B Common Stock are converted) issued upon conversion of the Company's Preferred Stock to the holders thereof and in the amounts set forth on Schedule A attached hereto, (ii) the Common Stock issuable or issued upon exercise of those warrants issued to certain Existing Investors and pursuant to which such Existing Investors were previously granted registration rights by the Company (iii) the 429,553 shares of Class A Common Stock (or that number of shares of such other class of stock into which the Class A Common Stock is converted) issued to Abbott Laboratories pursuant to a Stock Purchase Agreement dated July 6, 1994 which shares are reflected on Schedule A attached to the First Addendum to this Agreement, (iv) the 431,965 shares of Class A Common Stock (or that number of shares of such other class of stock into which the Class A Common Stock is converted) issued to American Home Products Corporation pursuant to a Stock and Note Purchase Agreement dated September 2, 1994 (the "Stock and Note Purchase Agreement") which shares are reflected on Schedule A attached to the Second Addendum to this Agreement, and the shares of Class A Common Stock (or the shares of such other class of stock into which the Class A Common Stock is converted) issuable upon conversion of those certain Unsecured Convertible Promissory Notes issued to American Home Products Corporation pursuant to the Stock and Note Purchase Agreement (and upon such conversion of the Notes, Schedule A shall be updated to include such shares) and (v) any Common Stock of the

Company issued as (or issuable upon the conversion or exercise of any warrant, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of the shares referenced in (i), (ii), (iii) and (iv) above, excluding in all cases, however, any Registrable Securities sold by a person in a transaction in which rights under this Agreement are not assigned."

2. Investor shall be included within the definition of "Restricted Investors" under Section 1.13 of the Registration Rights Agreement and shall be subject to the restrictions of the Restricted Investors contained in such Section 1.13.

3. Schedule A of the Registration Rights Agreement is hereby restated in its entirety as attached to this Second Addendum.

4. This Second Addendum shall serve as a counterpart signature page to the Registration Rights Agreement, and by executing this Second Addendum Investor hereby becomes a party to the Registration Rights Agreement.

5. This Second Addendum shall be binding upon the Company, Investor and each holder of Registrable Securities and each future holder of Registrable Securities pursuant to Section 2.6(a) of the Registration Rights Agreement.

IN WITNESS WHEREOF, the parties have executed this Second Addendum as of the date first above written.

INVESTOR:

THE COMPANY:

AMERICAN HOME PRODUCTS  
CORPORATION

LIGAND PHARMACEUTICALS  
INCORPORATED

By: /s/ John R. Considine

By: /s/ William L. Respass

Title: Vice President-Finance

Title: Senior Vice President

and General Counsel

[SIGNATURE PAGE TO SECOND ADDENDUM TO  
AMENDED REGISTRATION RIGHTS AGREEMENT]