AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON SEPTEMBER 25, 1996
REGISTRATION NO. 333-

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SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

LIGAND PHARMACEUTICALS INCORPORATED
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

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DELAWARE	77-0160744
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(I.R.S. EMPLOYER IDENTIFICATION NO.)

</TABLE>

9393 TOWNE CENTRE DRIVE, SAN DIEGO, CALIFORNIA 92121 (619) 535-3900
(ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

DAVID E. ROBINSON
CHAIRMAN, PRESIDENT AND CHIEF EXECUTIVE OFFICER
LIGAND PHARMACEUTICALS INCORPORATED
9393 TOWNE CENTRE DRIVE, SAN DIEGO, CALIFORNIA 92121
(619) 535-3900
(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF AGENT FOR SERVICE)

COPIES TO:

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CRAIG S. ANDREWS, ESQ. FAYE H. RUSSELL, ESQ. JOHN R. COOK, ESQ. BROBECK, PHLEGER & HARRISON LLP 550 WEST C STREET, SUITE 1300 SAN DIEGO, CALIFORNIA 92101	JEROME L. COBEN, ESQ. SKADDEN, ARPS, SLATE, MEAGHER & FLOM 300 SOUTH GRAND AVENUE LOS ANGELES, CALIFORNIA 90071

</TABLE>

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, check the following box: / /

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: / /

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

If this Form is a post-effective amendment filed pursuant to Rule 462(c)

under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: / / _____

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box: / /

CALCULATION OF REGISTRATION FEE

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TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED(1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE(2)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(2)	AMOUNT OF REGISTRATION FEE(3)
Common Stock, $0.001 par value per share.....	3,162,500 shares	$14.44	$45,666,500	$15,747

</TABLE>

(1) Includes 412,500 shares of Common Stock that the Underwriters have the option to purchase to cover over-allotments, if any.

(2) Estimated solely for the purpose of computing the amount of the registration fee in accordance with Rule 457(c) under the Securities Act of 1933.

(3) The Company paid a total of $16,903 in July 1996 in payment of the registration fee for this offering.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

INFORMATION CONTAINED HEREIN IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD NOR MAY OFFERS TO BUY BE ACCEPTED PRIOR TO THE TIME THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY NOR SHALL THERE BE ANY SALE OF THESE SECURITIES IN ANY STATE IN WHICH SUCH OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF ANY SUCH STATE.

SUBJECT TO COMPLETION, DATED SEPTEMBER 25, 1996

PROSPECTUS

2,750,000 SHARES

LOGO

COMMON STOCK

All of the shares of Common Stock offered hereby (the "Offering") are being issued and sold by Ligand Pharmaceuticals Incorporated ("Ligand" or the "Company"). The Common Stock is traded on the Nasdaq National Market under the symbol "LGND." On September 24, 1996, the last sale price of the Common Stock as reported on the Nasdaq National Market was $14.75 per share. See "Price Range of

Common Stock."

THE COMMON STOCK OFFERED HEREBY INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" STARTING ON PAGE 6 FOR A DISCUSSION OF CERTAIN FACTORS THAT SHOULD BE CONSIDERED BY PROSPECTIVE INVESTORS.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION, NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

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	PRICE TO PUBLIC	UNDERWRITING DISCOUNTS AND COMMISSIONS(1)	PROCEEDS TO COMPANY(2)
Per Share	$	$	$
Total(3)	$	$	$

</TABLE>

(1) The Company has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended. See "Underwriting."
(2) Before deducting expenses of the Offering estimated at $375,000.
(3) The Company has granted the Underwriters an option, exercisable within 30 days after the date hereof, to purchase up to an aggregate of 412,500 additional shares of Common Stock to cover over-allotments, if any. If such option is exercised in full, the total Price to Public, Underwriting Discounts and Commissions and Proceeds to Company will be $, $ and $, respectively. See "Underwriting."

The shares of Common Stock offered hereby are offered by the several Underwriters, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of certain legal matters by counsel for the Underwriters and certain other conditions. The Underwriters reserve the right to withdraw, cancel or modify such offer and to reject orders in whole or in part. It is expected that delivery of the shares of Common Stock will be made at the offices of Bear, Stearns & Co. Inc., 245 Park Avenue, New York, New York on or about , 1996.

BEAR, STEARNS & CO. INC.
ROBERTSON, STEPHENS & COMPANY
HAMBRECHT & QUIST

THE DATE OF THIS PROSPECTUS IS , 1996.

AVAILABLE INFORMATION

The Company is subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files annual and quarterly reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). Such reports, proxy statements and other information may be inspected at the Commission's Public Reference Section, Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549, as well as at the Commission's regional offices at 7 World Trade Center, 13th Floor, New York, New York 10048; and Northwest Atrium Center, 500 West Madison Street, Room 1400, Chicago, Illinois 60661-2511. Copies of such materials can also be obtained at prescribed rates from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549. In addition, the Commission maintains a World Wide Web site on the

Internet at http://www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. The Common Stock is traded on the Nasdaq National Market, and copies of such materials can also be inspected at the offices of the National Association of Securities Dealers, Inc., 1735 K Street, N.W., Washington, D.C. 20006.

INFORMATION INCORPORATED BY REFERENCE

The following documents filed by the Company with the Commission are hereby incorporated by reference in this Prospectus: (1) the Annual Report of the Company on Form 10-K for the fiscal year ended December 31, 1995; (2) the Quarterly Report of the Company on Form 10-Q for the quarter ended March 31, 1996; (3) the Quarterly Report of the Company on Form 10-Q for the quarter ended June 30, 1996; and (4) the description of the Common Stock contained in the Company's Registration Statement on Form 8-A filed on November 21, 1994.

All reports and other documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this Prospectus and prior to the termination of the Offering shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such reports and documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Prospectus.

The Company will provide without charge to each person to whom this Prospectus is delivered, upon written or oral request of such person, a copy of any or all of the foregoing documents incorporated by reference herein (other than exhibits to such documents, unless such exhibits are specifically incorporated by reference into any such document). Requests for such documents should be submitted in writing to the Secretary of the Company at the Company's principal executive offices at 9393 Towne Centre Drive, San Diego, California 92121, telephone number (619) 535-3900.

IN CONNECTION WITH THE OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE COMMON STOCK OF THE COMPANY AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH TRANSACTIONS MAY BE EFFECTED ON THE NASDAQ NATIONAL MARKET OR OTHERWISE. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

IN CONNECTION WITH THE OFFERING, CERTAIN UNDERWRITERS (AND SELLING GROUP MEMBERS) MAY ENGAGE IN PASSIVE MARKET MAKING TRANSACTIONS IN THE COMMON STOCK OF THE COMPANY ON THE NASDAQ NATIONAL MARKET IN ACCORDANCE WITH RULE 10B-6A UNDER THE SECURITIES EXCHANGE ACT OF 1934. SEE "UNDERWRITING."

Ligand(R) and Targretin(TM) are trademarks of the Company, Galardin(TM) is a trademark of the Company's wholly-owned subsidiary, Glycomed Incorporated, and Panretin(TM) is a trademark of Allergan Ligand Retinoid Therapeutics, Inc. Proleukin(R) is a registered trademark of Cetus Oncology Corporation, a wholly-owned subsidiary of Chiron Corporation, and PHOTOFRIN(R) is a registered trademark of QLT Phototherapeutics, Inc. All other brand names or trademarks appearing in this Prospectus are the property of their respective owners.

The Company was incorporated in Delaware in 1987. The Company's principal executive offices are located at 9393 Towne Centre Drive, San Diego, California 92121, and its telephone number is (619) 535-3900.

PROSPECTUS SUMMARY

The following summary is qualified in its entirety by the more detailed information and the Consolidated Financial Statements and Notes thereto appearing elsewhere and incorporated by reference in this Prospectus, including the information under "Risk Factors." Except as otherwise noted, all information in this Prospectus assumes no exercise of the Underwriters' over-allotment

option. Unless the context otherwise requires, references in this Prospectus to "Ligand" and the "Company" are to Ligand Pharmaceuticals Incorporated and its wholly-owned subsidiaries, Glycomed Incorporated, a California corporation ("Glycomed"), and Ligand Pharmaceuticals (Canada) Incorporated, a corporation organized under the laws of the Canadian province of Saskatchewan ("Ligand Canada"). This Prospectus contains, in addition to historical information, forward-looking statements that involve risks and uncertainties. The Company's actual results and the timing of certain events could differ materially from those discussed in or projected by the forward-looking statements. Factors that could cause or contribute to such differences include those discussed under "Risk Factors," as well as those discussed elsewhere in this Prospectus. See "Special Note Regarding Forward-Looking Statements."

THE COMPANY

Ligand is a leader in the discovery and development of small-molecule drugs which mimic or block the activities of various hormones and cytokines to regulate gene activity and the genetic processes affecting many diseases. The Company's drug discovery and development programs are based on its proprietary technologies involving two natural mechanisms that regulate gene activity: (i) hormone-activated Intracellular Receptors ("IRs") and (ii) cytokine-activated Signal Transducers and Activators of Transcription ("STATs"). IRs play key roles in many disease processes, including certain cancers, disorders of women's health, cardiovascular diseases, inflammatory disorders and skin diseases. Similarly, STATs influence many biological processes, including cancer, inflammation and blood cell formation. In programs acquired with Glycomed in 1995, Ligand is also seeking to develop orally active drugs to modulate biological processes involving complex carbohydrates and other cell surface components for the treatment of inflammation and cancer.

IRs are members of a family of hormone-activated proteins that act inside the cell to regulate directly gene expression and cellular function. Although the effectiveness of IRs as drug targets has been demonstrated by drugs acting through IRs already on the market, such as retinoids (e.g., Retin-A for acne and psoriasis) and sex steroid modulators (e.g., estrogens and progesterones for hormone replacement therapy and contraception, tamoxifen for breast cancer, flutamide for prostate cancer), the utility of these first-generation drugs has been limited by their often significant side effects. STATs are a recently discovered family of proteins that act inside cells to regulate gene expression in response to various cytokines such as interferons, interleukins and hematopoietic growth factors. Imbalances in the activity of these cytokines can lead to various pathological conditions, such as inflammation. While certain recombinant cytokines and other proteins which bind to cell surface receptors have proven to have clinical utility in the treatment of disease, they must be administered by injection and can be difficult to manufacture.

Ligand and its exclusive academic collaborators have been leaders in advancing the understanding of the activities of hormones and hormone-related drugs and have made major scientific discoveries relating to IR and STATs technologies. Ligand believes that its expertise in IR and STATs technologies will enable the Company to develop novel small-molecule pharmaceutical products acting through IRs or STATs with more target-specific properties than currently available products, resulting in either improved therapeutic and side effect profiles and new indications for IRs or novel mechanisms of action and oral bioavailability for STATs.

Ligand's business strategy is to develop new drugs using its IR and STATs technologies through both internal and collaborative programs. Ligand's internal programs focus on the discovery, development and marketing of small-molecule drugs that address cancer, gynecological diseases and male hormone imbalances, which are treated by medical specialists. Ligand also seeks to in-license or acquire products in these medical specialty markets which are in late-stage clinical development or which have been previously approved by regulatory authorities. As part of this business strategy, Ligand is building a specialized commercial sales and marketing organization for North America. In addition, Ligand Canada currently markets two in-licensed products, Proleukin(R) and PHOTOFRIN(R), to oncologists in Canada. Ligand's collaborative programs focus on building a royalty-based business through partnerships with large pharmaceutical companies that apply Ligand's technologies to discover drugs for primary care markets, such as markets for certain cardiovascular, inflammatory and other diseases, as well as broad applications for women's health.

Through a combination of internal and partnered programs, supplemented by selective in-licensing of approved cancer products, Ligand has built a pipeline of numerous products in advanced preclinical testing, clinical development or commercialization stages. The most advanced of these products are as follows:

PROGRAM	PRODUCT	DISEASE INDICATION	DEVELOPMENT PHASE(1)
Retinoids	Panretin(TM) (ALRT1057) Topical(2)	Kaposi's Sarcoma ("KS")	III
	Panretin(TM) (ALRT1057) Oral(2)	Acute Promyelocytic Leukemia ("APL"), KS, other cancers, psoriasis, eye disease, AIDS	IIB
	ALRT1550 Oral(2)(3)	Various cancers	Preclinical (IND 4Q 96)
	Targretin(TM) (LGD1069) Topical	Skin lymphoma, other malignancies of skin	III(4)
	Targretin(TM) (LGD1069) Oral	Lung cancer, other cancers, metabolic diseases	II/III(4)
Sex steroids	Droloxifene(5)	Breast cancer	III
	Droloxifene(5)	Osteoporosis	II
	CP336,156(6)	Osteoporosis	Preclinical (IND or foreign equivalent 4Q 96)
Inflammation	Galardin(TM)(7)	Eye injury	II/III
Oncology	Proleukin(8)	Kidney cancer	Marketed in Canada
	PHOTOFRIN(8)	Bladder cancer, esophageal cancer	Marketed in Canada

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(1) "Development Phase" refers to the current stage of development of the most advanced indication. See "Business -- Product Development Program" for a more detailed description of the stages of development for these compounds.

(2) All rights currently owned by Allergan Ligand Retinoid Therapeutics, Inc., an off-balance sheet financing entity. See "Business -- Strategic Alliances -- Allergan, Inc."

(3) The Company intends to file an Investigational New Drug application ("IND") for ALRT1550 Oral on behalf of ALRT in the fourth quarter of 1996. See "Risk Factors -- Uncertainties Related to Clinical Trials" and "Special Note Regarding Forward-Looking Statements."

(4) To date, no patients have been enrolled in the clinical trial for Targretin (LGD1069) Topical for skin lymphoma or in the clinical trial for Targretin (LGD1069) Oral for lung cancer.

(5) Droloxifene is a compound owned by Pfizer Inc ("Pfizer"). Ligand performed work on droloxifene at Pfizer's request. Ligand and Pfizer entered into a settlement agreement with respect to a lawsuit in April 1996. Under the terms of the settlement agreement, the Company is entitled to receive milestone payments if Pfizer continues development and royalties if Pfizer commercializes the product. See "Business -- Strategic Alliances -- Pfizer Inc."

(6) A compound discovered through the Company's collaborative relationship with Pfizer to which Pfizer has retained marketing rights. The Company has been informed by Pfizer that Pfizer intends to file an IND or foreign equivalent for CP336,156 in the fourth quarter of 1996. See "Business -- Strategic Alliances -- Pfizer Inc," "Risk Factors -- Uncertainties Related to Clinical Trials" and "Special Note Regarding Forward-Looking Statements."

(7) Ligand is seeking a partner to further the development and commercialization of Galardin for ophthalmic use. See "Business -- Product Development Program -- Inflammatory Disease."

(8) In-licensed product.

Ligand is conducting human clinical trials with four products. Panretin (ALRT1057) Oral and Panretin (ALRT1057) Topical are retinoids that may be useful for the treatment of various cancers, such as KS, and diseases of the skin and eyes and are being developed by Ligand and Allergan on behalf of Allergan Ligand Retinoid Therapeutics, Inc. ("ALRT"). See "Business -- Strategic Alliances -- Allergan, Inc." The Company has initiated pivotal Phase III trials for Panretin (ALRT1057) Topical in KS. Ligand intends to file a New Drug Application ("NDA") for this compound in 1997 on behalf of ALRT, in the event that Phase III trials demonstrate sufficient safety and efficacy. Panretin (ALRT1057) Oral has entered Phase IIB clinical trials in various cancers. Ligand is also performing clinical trials for the retinoids Targretin (LGD1069) Oral and Targretin (LGD1069) Topical, to which Ligand has worldwide exclusive rights. Interim evaluation of data from a Phase I/II study of Targretin (LGD1069) Topical in skin lymphoma has demonstrated significant activity, and based on

discussions with the U.S. Food and Drug Administration ("FDA") on trial design, the Company is launching pivotal Phase III clinical trials in this indication. The Company is also launching Phase II/III clinical trials with Targretin (LGD1069) Oral in various forms of cancer, including lung cancer. There can be no assurance that the clinical trials will proceed as planned or that any drugs will be successfully developed or commercialized. See "Risk Factors -- Uncertainties Related to Clinical Trials" and "Special Note Regarding Forward-Looking Statements."

To date, Ligand has entered into collaborations with seven corporate partners which include, in addition to ALRT: SmithKline Beecham Corporation (for hematopoietic growth factor mimetics for use in oncology and treatment of anemia), the Wyeth-Ayerst Laboratories division of American Home Products Corporation (for women's health, e.g., hormone replacement therapy, osteoporosis, fertility control), Abbott Laboratories (for inflammatory diseases, utilizing selected IR- and STAT-based approaches), Sankyo Company Limited (for inflammatory diseases, utilizing selected Glycomed technologies), Glaxo-Wellcome plc (for atherosclerosis and other diseases affecting the cardiovascular system) and Pfizer (for osteoporosis). These partners provide discovery resources complementary to those of Ligand and are expected to facilitate the development and commercialization of potential products for primary care markets. The collaborative partners have also been an important funding source for Ligand, contributing approximately two-thirds of its invested capital to date. In addition to ALRT, which was capitalized with $100.0 million to accelerate research and development of certain retinoid compounds, Ligand's research activities have been supported by commitments from its partners of up to $89.3 million for research funding. Ligand's collaborative partners have also committed up to $96.5 million of additional equity and convertible notes to Ligand, of which $81.5 million has been received through June 30, 1996, an additional $5.0 million is available to Ligand at its option, and the remaining $10.0 million is subject to Ligand attaining certain milestones.

THE OFFERING

Common Stock offered by the Company.....	2,750,000 shares
Common Stock to be outstanding after the Offering.....	30,860,700 shares(1)
Use of proceeds.....	For general corporate purposes, including product research and development programs, preclinical testing and clinical trials; the acquisition and in-licensing of products and complementary technologies; and capital expenditures and working capital. See "Use of Proceeds."
Nasdaq National Market symbol.....	LGND

SUMMARY CONSOLIDATED FINANCIAL DATA

The following summary consolidated financial data should be read in conjunction with Ligand's consolidated financial statements for each of the five years in the period ended December 31, 1995 and the notes thereto, Ligand's unaudited consolidated financial statements and the notes thereto for the six months ended June 30, 1995 and 1996 and "Management's Discussion and Analysis of Financial Condition and Results of Operations" which are included elsewhere in this Prospectus.

	YEARS ENDED DECEMBER 31,					SIX MONTHS ENDED JUNE 30,	
	1991	1992	1993	1994	1995	1995	1996
	(IN THOUSANDS, EXCEPT NET LOSS PER SHARE)						
CONSOLIDATED STATEMENT OF OPERATIONS DATA:							
Revenues:.....	$ 1,526	$ 5,883	$ 16,262	$ 13,309	$ 24,516	$ 9,967	$ 17,258
Costs and expenses:							

Research and development.....	6,228	14,220	24,301	27,205	41,636	16,026	27,081
Selling, general and administrative.....	1,568	4,144	6,192	6,956	8,181	3,769	5,172
Write-off of acquired in-process technology.....	--	--	--	--	19,564	19,869	--
ALRT contribution.....	--	--	--	--	17,500	17,500	--
Total operating expenses.....	7,796	18,364	30,493	34,161	86,881	57,164	32,253
Loss from operations.....	(6,270)	(12,481)	(14,231)	(20,852)	(62,365)	(47,197)	(14,995)
Interest income (expense), net.....	(4)	198	1,652	618	(1,807)	(100)	(2,125)
Equity in operations of Joint Venture.....	--	(1,724)	(6,879)	(6,845)	--	--	--
Net loss.....	$(6,274)	$(14,007)	$(19,458)	$(27,079)	$(64,172)	$(47,297)	$(17,120)
Net loss per share.....	$ (3.04)	$ (3.96)	$ (1.19)	$ (1.57)	$ (2.70)	$ (2.33)	$ (.61)
Shares used in computing net loss per share(2).....	2,067	3,537	16,357	17,241	23,792	20,271	27,990

	JUNE 30, 1996	
	ACTUAL	AS ADJUSTED(3)
	(IN THOUSANDS)	
CONSOLIDATED BALANCE SHEET DATA:		
Cash, cash equivalents and short-term investments(4).....	$ 60,447	$ 98,201
Working capital.....	46,837	84,591
Total assets.....	76,673	114,427
Long-term debt.....	18,714	18,714
Convertible subordinated debentures(5).....	32,616	32,616
Accumulated deficit.....	(157,401)	(157,401)
Total stockholders' equity.....	12,717	50,471

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(1) As of June 30, 1996. Excludes (a) 3,597,866 shares of Common Stock issuable upon the exercise of outstanding options under the Company's stock option plans (at a weighted average exercise price of $8.83 per share), (b) 874,074 shares of Common Stock available for future grants under such plans or issuance under the Company's stock purchase plan, (c) 6,671,922 shares of Common Stock issuable upon exercise of outstanding warrants (at a weighted average exercise price of $7.30 per share), (d) 999,001 shares of Common Stock issuable upon conversion of the principal amount outstanding under convertible promissory notes, (e) 1,885,370 shares of Common Stock issuable upon conversion of the principal amount outstanding under Glycomed's 7 1/2% Convertible Subordinated Debentures Due 2003 and (f) 35,686 shares of Common Stock held in treasury stock of which 28,283 shares received from Pfizer were retired in September 1996. Includes 72,728 shares of Common Stock received from Pfizer and retired in September 1996. See "Capitalization," "Business -- Strategic Alliances" and "Description of Capital Stock."

(2) Net loss per share is computed using the weighted average number of common shares outstanding (see Note 2 of Notes to Consolidated Financial Statements).

(3) Adjusted to reflect the sale of the 2,750,000 shares of Common Stock offered hereby at the public offering price of $14.75 per share and the receipt of the proceeds therefrom after deducting underwriting discounts and estimated Offering expenses. See "Use of Proceeds."

(4) Includes restricted cash of $3,746,000.

(5) See Note 6 of Notes to Consolidated Financial Statements.

RISK FACTORS

An investment in the Common Stock offered hereby involves a high degree of risk. In addition to the other information contained in this Prospectus, prospective investors should carefully consider the following risk factors before purchasing the Common Stock offered hereby.

EARLY STAGE OF PRODUCT DEVELOPMENT; TECHNOLOGICAL UNCERTAINTY

The Company was founded in 1987 and has not generated any revenues from the sale of products developed by Ligand or its collaborative partners. To achieve profitable operations, the Company, alone or with others, must successfully develop, clinically test, market and sell its products. Any products resulting from the Company's product development efforts are not expected to be available for sale for at least several years, if at all.

The development of new pharmaceutical products is highly uncertain and subject to a number of significant risks. Potential products that appear to be promising at early stages of development may not reach the market for a number of reasons. Such reasons include the possibilities that potential products are found during preclinical testing or clinical trials to be ineffective or to cause harmful side effects, that they fail to receive necessary regulatory approvals, are difficult or uneconomical to manufacture on a large scale, fail to achieve market acceptance or are precluded from commercialization by proprietary rights of third parties. To date, Ligand's resources have been substantially dedicated to the research and development of potential pharmaceutical products based upon its expertise in IR and STATs technologies. Even though certain pharmaceutical products act through IRs, some aspects of the Company's IR technologies have not been used to produce commercialized medicine. In addition, the Company is not aware of any drugs that have been developed and successfully commercialized that interact directly with STATs. Much remains to be learned about the location and function of IRs and STATs. Most of the Company's potential products will require extensive additional development, including preclinical testing and clinical trials, as well as regulatory approvals, prior to commercialization. No assurance can be given that the Company's product development efforts will be successful, that required regulatory approvals from the FDA or equivalent foreign authorities for any indication will be obtained or that any products, if introduced, will be capable of being produced in commercial quantities at reasonable costs or will be successfully marketed. Further, the Company has no sales and only limited marketing capabilities outside Canada, and even if the Company's products in internal development are approved for marketing, there can be no assurance that the Company will be able to develop such capabilities or successfully market such products.

HISTORY OF OPERATING LOSSES; ACCUMULATED DEFICIT; FUTURE CAPITAL NEEDS; UNCERTAINTY OF ADDITIONAL FUNDING

Ligand has experienced significant operating losses since its inception in 1987. As of June 30, 1996, Ligand had an accumulated deficit of approximately $157.4 million. To date, substantially all of Ligand's revenues have consisted of amounts received under collaborative arrangements. The Company expects to incur additional losses at least over the next several years and expects losses to increase as the Company's research and development efforts and clinical trials progress.

The discovery and development of products will require the commitment of substantial resources to conduct research, preclinical testing and clinical trials, to establish pilot scale and commercial scale manufacturing processes and facilities, and to establish and develop quality control, regulatory, marketing, sales and administrative capabilities. The future capital requirements of the Company will depend on many factors, including the pace of scientific progress in its research and development programs, the magnitude of these programs, the scope and results of preclinical testing and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims, competing technological and market developments, the ability to establish additional collaborations, changes in existing collaborations, the cost of manufacturing scale-up and the effectiveness of the Company's commercialization activities. To date, Ligand has not generated any revenue from the sales of products developed by Ligand or its collaborative partners. There can be no assurance that Ligand

independently or through its collaborations will successfully develop, manufacture or market any products or ever achieve or sustain revenues or profitability from the commercialization of such products. Moreover, even if profitability is achieved, the level of that profitability cannot be accurately

predicted. Ligand expects that operating results will fluctuate from quarter to quarter as a result of differences in the timing of expenses incurred and the revenues received from collaborative arrangements and other sources. Some of these fluctuations may be significant. The Company believes that its available cash, cash equivalents, marketable securities and existing sources of funding, in addition to the net proceeds of the Offering, will be adequate to satisfy its anticipated capital requirements through 1999, assuming the Company does not exercise for cash its options to acquire either the assets related to Panretin (ALRT1057) Oral and Panretin (ALRT1057) Topical or the outstanding callable common stock of ALRT. Glycomed's outstanding indebtedness includes $50 million principal amount of 7 1/2% Convertible Subordinated Debentures Due 2003 (the "Debentures"). There can be no assurance that Glycomed will have the funds necessary to pay the interest on and the principal of the Debentures or, if not, that it will be able to refinance the Debentures. The Company expects that it will seek any additional capital needed to fund its operations through new collaborations, the extension of existing collaborations, or through public or private equity or debt financings. There can be no assurance that additional financing will be available on acceptable terms, if at all. Any inability of the Company to obtain additional financing or of Glycomed to service its obligations under the Debentures could have a material adverse effect on the Company. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

UNCERTAINTIES RELATED TO CLINICAL TRIALS

Before obtaining required regulatory approvals for the commercial sale of each product under development, the Company and its collaborators must demonstrate through preclinical studies and clinical trials that such product is safe and efficacious for use. The results of preclinical studies and initial clinical trials are not necessarily predictive of results that will be obtained from large-scale clinical trials, and there can be no assurance that clinical trials of any product under development will demonstrate the safety and efficacy of such product or will result in a marketable product. The safety and efficacy of a therapeutic product under development by the Company must be supported by extensive data from clinical trials. A number of companies have suffered significant setbacks in advanced clinical trials, despite promising results in earlier trials. The failure to demonstrate adequately the safety and efficacy of a therapeutic drug under development would delay or prevent regulatory approval of the product and could have a material adverse effect on the Company. In addition, the FDA may require additional clinical trials, which could result in increased costs and significant development delays.

The rate of completion of clinical trials of the Company's products is dependent upon, among other factors, obtaining adequate clinical supplies and the rate of patient accrual. Patient accrual is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites and the eligibility criteria for the trial. Delays in planned patient enrollment in clinical trials may result in increased costs, program delays or both, which could have a material adverse effect on the Company. In addition, some of the Company's current corporate partners have certain rights to control the planning and execution of product development and clinical programs, and there can be no assurance that such corporate partners' rights to control aspects of such programs will not impede the Company's ability to conduct such programs in accordance with the schedules and in the manner currently contemplated by the Company for such programs. There can be no assurance that, if clinical trials are completed, the Company will submit an NDA with respect to any potential products or that any such application will be reviewed and approved by the FDA in a timely manner, if at all. See "Business -- Government Regulation."

RELIANCE ON COLLABORATIVE RELATIONSHIPS

The Company's strategy for the development, clinical testing, manufacturing and commercialization of certain of its potential products includes entering into collaborations with corporate partners, licensors, licensees and others. To date, Ligand has entered into drug discovery and development collaborations with SmithKline Beecham Corporation ("SmithKline Beecham"), the Wyeth-Ayerst Laboratories division of

American Home Products Corporation ("American Home Products"), Abbott Laboratories ("Abbott"), Sankyo Company Limited ("Sankyo"), Glaxo-Wellcome plc

("Glaxo"), ALRT (which collaboration continues the work previously undertaken with Allergan, Inc. ("Allergan") through the Allergan Ligand Joint Venture (the "Joint Venture")), and Pfizer. These collaborations provide Ligand with funding and research and development resources for potential products for the treatment or control of hematopoiesis, women's health disorders, inflammation, cardiovascular disease, cancer, eye and skin diseases and osteoporosis, respectively. The Company's collaborative agreements allow its collaborative partners significant discretion in electing to pursue or not to pursue any development program. There can be no assurance that the Company's collaborations will continue or that the collaborations will be successful. In addition, there can be no assurance that Ligand's collaborators will not pursue alternative technologies either on their own or in collaboration with others as a means of developing drugs competitive with the types of drugs currently being developed in collaboration with Ligand, and any such action may result in the withdrawal of support and increased competition for the Company's programs. In addition, if products are approved for marketing under these programs, any revenues to Ligand from these products will be dependent on the manufacturing, marketing and sales efforts of its collaborators, which generally retain commercialization rights under the collaborative agreements. Ligand's current collaborators also generally have the right to terminate their respective collaboration under certain circumstances. If any of the Company's collaborative partners were to breach or terminate its agreements with the Company or otherwise fail to conduct its collaborative activities successfully, the development of the Company's products under such agreements would be delayed or terminated. The delay or termination of any of the collaborations could have a material adverse effect on Ligand.

There can be no assurance that disputes will not arise in the future with Ligand's collaborators, including with respect to the ownership of rights to any technology developed. For example, the Company was involved in litigation with Pfizer, which was settled in April 1996, with respect to Ligand's rights to receive milestones and royalties based on the development and commercialization of droloxifene. These and other possible disagreements between collaborators and the Company could lead to delays in the achievement of milestones or receipt of milestone payments or research revenue, to delays or interruptions in, or termination of, collaborative research, development and commercialization of certain potential products, or could require or result in litigation or arbitration, which could be time consuming and expensive and could have a material adverse effect on the Company. See "Business -- Strategic Alliances" and "Business -- Litigation."

UNCERTAINTY OF PATENT PROTECTION; DEPENDENCE ON PROPRIETARY TECHNOLOGY

The patent positions of pharmaceutical and biopharmaceutical firms, including Ligand, are uncertain and involve complex legal and technical questions for which important legal principles are largely unresolved. In addition, the coverage sought in a patent application can be significantly reduced before or after a patent is issued. This uncertain situation is also affected by revisions to the United States patent law adopted in recent years to give effect to international accords to which the United States has become a party. The extent to which such changes in law will affect the operations of Ligand cannot be ascertained. In addition, there is currently pending before Congress legislation providing for other changes to the patent law which may adversely affect pharmaceutical and biopharmaceutical firms. If such pending legislation is adopted, the extent to which such changes would affect the operations of the Company cannot be ascertained.

Ligand's success will depend in part on its ability to obtain patent protection for its technology both in the United States and other countries. A number of pharmaceutical companies and research and academic institutions have developed technologies, filed patent applications or received patents on various technologies that may be related to Ligand's business. Some of these patent applications, patents or technologies may conflict with Ligand's technologies or patent applications. Any such conflict could limit the scope of the patents, if any, that Ligand may be able to obtain or result in the denial of Ligand's patent applications. In addition, if patents that cover Ligand's activities are issued to other companies, there can be no assurance that Ligand would be able to obtain licenses to such patents at a reasonable cost, if at all, or be able to develop or obtain alternative technology. The Company has from time to time had, continues to have and may have in the future discussions with its current and potential collaborators regarding the scope and validity of the Company's patent and other proprietary rights to its technologies, including the Company's co-transfection assay. If a collaborator or other party were successful in

having substantial patent rights of the Company

determined to be invalid, it could adversely affect the ability of the Company to retain existing collaborations beyond their expiration or, where contractually permitted, encourage their termination. Such a determination could also adversely affect the Company's ability to enter into new collaborations. If any disputes should arise in the future with respect to the rights in any technology developed with a collaborator or with respect to other matters involving the collaboration, there could be delays in the achievement of milestones or receipt of milestone payments or research revenues, or interruptions or termination of collaborative research, development and commercialization of certain potential products, and litigation or arbitration could result. Any of the foregoing matters could be time consuming and expensive and could have a material adverse effect on the Company. See "Business -- Strategic Alliances," "Business -- Patents and Proprietary Rights" and "Business -- Litigation."

Ligand owns or has exclusively licensed over 215 currently pending patent applications in the United States relating to Ligand's technology, as well as foreign counterparts of certain of these applications in many countries. There can be no assurance that patents will issue from any of these applications or, if patents do issue, that claims allowed will be sufficient to protect Ligand's technology. In addition, Ligand is the owner or exclusive licensee of rights covered by approximately 80 United States patents issued or allowed to it or to The Salk Institute of Biological Studies ("The Salk Institute"), Baylor College of Medicine ("Baylor") and other licensors. Further, there can be no assurance that any patents issued to Ligand or to licensors of Ligand's technology will not be challenged, invalidated, circumvented or rendered unenforceable based on, among other things, subsequently discovered prior art, lack of entitlement to the priority of an earlier, related application, or failure to comply with the written description, best mode, enablement or other applicable requirements, or that the rights granted under any such patents will provide significant proprietary protection or commercial advantage to Ligand. The invalidation, circumvention or unenforceability of any of Ligand's patent protection could have a material adverse effect on the Company.

The commercial success of Ligand will also depend in part on Ligand's not infringing patents issued to competitors and not breaching technology licenses that cover technology used in Ligand's products. It is uncertain whether any third-party patents will require Ligand to develop alternative technology or to alter its products or processes, obtain licenses or cease certain activities. If any such licenses are required, there can be no assurance that Ligand will be able to obtain such licenses on commercially favorable terms, if at all. Failure by Ligand to obtain a license to any technology that it may require to commercialize its products could have a material adverse effect on Ligand. Litigation, which could result in substantial cost to Ligand, may also be necessary to enforce any patents issued or licensed to Ligand or to determine the scope and validity of third-party proprietary rights. There can be no assurance that Ligand's patents or those of its licensors, if issued, would be held valid by a court or that a competitor's technology or product would be found to infringe such patents. If any of its competitors have filed patent applications in the United States which claim technology also invented by Ligand, Ligand may be required to participate in interference proceedings declared by the PTO in order to determine priority of invention and, thus, the right to a patent for the technology, which could result in substantial cost to Ligand to determine its rights.

Ligand has learned that a United States patent has issued to, and foreign counterparts have been filed by, Hoffman LaRoche ("Roche") that include claims to a formulation of 9-cis-Retinoic acid (Panretin (ALRT1057)) and use of that compound to treat epithelial cancers. Ligand had previously filed an application which has an earlier filing date than the Roche patent and which has claims that the Company believes are broader than but overlap in part with claims under the Roche patent. Ligand's rights under its patent application have been exclusively licensed to ALRT. Ligand and ALRT are currently investigating the scope and validity of this patent to determine its impact upon the Panretin (ALRT1057) Oral and Topical products. The PTO has informed Ligand that the overlapping claims are patentable to Ligand and stated its intention to initiate an interference proceeding to determine whether Ligand or Roche is entitled to a patent by having been first to invent the common subject matter. The Company cannot be assured of a favorable outcome in the interference proceeding because

of factors not known at this time upon which the outcome may depend. In addition, the interference proceeding may delay the decision of the PTO regarding the Company's application for the Panretin (ALRT1057) Oral and Topical products. While the Company believes that the Roche patent does not cover the use of Panretin (ALRT1057) Oral and Topical to treat

leukemias such as Acute Promyelecytic Leukemia ("APL") and sarcomas such as KS, or the treatment of skin diseases such as psoriasis, if the Company does not prevail in the interference proceeding, the Roche patent might block the Company's use of Panretin (ALRT1057) Oral and Topical in certain cancers, and the Company may not be able to obtain patent protection for the Panretin (ALRT1057) Oral and Topical products.

Ligand also relies upon trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain its competitive position. There can be no assurance that others will not independently develop substantially equivalent proprietary information or otherwise gain access to or disclose such information of Ligand. It is Ligand's policy to require its employees, certain contractors, consultants, members of its Scientific Advisory Board and parties to collaborative agreements to execute confidentiality agreements upon the commencement of employment or consulting relationships or a collaboration with Ligand. There can be no assurance that these agreements will not be breached, that they will provide meaningful protection of Ligand's trade secrets or adequate remedies in the event of unauthorized use or disclosure of such information or that Ligand's trade secrets will not otherwise become known or be independently discovered by its competitors. See "Business -- Patents and Proprietary Rights."

LACK OF MANUFACTURING CAPABILITY; RELIANCE ON THIRD-PARTY MANUFACTURERS

Ligand currently has no manufacturing facilities and, accordingly, relies on third parties, including its collaborative partners, for clinical or commercial production of any compounds under consideration as products. Ligand is currently constructing and validating a current Good Manufacturing Practices ("cGMP") pilot manufacturing capability in order to produce sufficient quantities of products for preclinical testing and initial clinical trials. If Ligand is unable to develop or contract on acceptable terms for manufacturing services, Ligand's ability to conduct preclinical testing and human clinical trials will be adversely affected, resulting in the delay of submission of products for regulatory approval and delay of initiation of new development programs, which in turn could materially impair Ligand's competitive position. Although drugs acting through IRs and STATs have been manufactured on a commercial scale by other companies, there can be no assurance that Ligand will be able to manufacture its products on a commercial scale or that such products can be manufactured by Ligand or any other party on behalf of Ligand at costs or in quantities to make commercially viable products. See "Business -- Manufacturing" and "Business -- Government Regulation."

LIMITED SALES AND MARKETING CAPABILITY

The creation of infrastructure to commercialize pharmaceutical products is a difficult, expensive and time-consuming process. Ligand currently has no sales and only limited marketing capability outside Canada. In Canada Ligand has been appointed as the sole distributor of two oncology products, Proleukin, which was developed by Cetus Oncology Corporation ("Cetus Oncology"), and PHOTOFRIN, which was developed by QLT PhotoTherapeutics, Inc. ("QLT"). To market any of its products directly, the Company will need to develop a marketing and sales force with technical expertise and distribution capability or contract with other pharmaceutical and/or health care companies with distribution systems and direct sales forces. There can be no assurance that the Company will be able to establish direct or indirect sales and distribution capabilities or be successful in gaining market acceptance for proprietary products or for other products. To the extent the Company enters into co-promotion or other licensing arrangements, any revenues received by the Company will be dependent on the efforts of third parties, and there can be no assurance that any such efforts will be successful. See "Business -- Sales and Marketing."

SUBSTANTIAL COMPETITION; RISK OF TECHNOLOGICAL OBSOLESCENCE

Some of the drugs which Ligand is developing will compete with existing therapies. In addition, a number of companies are pursuing the development of

novel pharmaceuticals which target the same diseases that Ligand is targeting as well as IR-related, STAT-related and complex carbohydrate-related approaches to drug discovery and development. Many of Ligand's existing or potential competitors, particularly large pharmaceutical companies, have substantially greater financial, technical and human resources than Ligand and may be better equipped to develop, manufacture and market products. In addition, many of these companies have

extensive experience in preclinical testing and human clinical trials, obtaining FDA and other regulatory approvals and manufacturing and marketing pharmaceutical products. Academic institutions, governmental agencies and other public and private research organizations are conducting research to develop technologies and products that may compete with those under development by the Company. These institutions are becoming increasingly aware of the commercial value of their findings and are becoming more active in seeking patent protection and licensing arrangements to collect royalties for the use of technology that they have developed. These institutions also may market competitive commercial products on their own or through joint ventures and will compete with the Company in recruiting highly qualified scientific personnel. Any of these companies, academic institutions, government agencies or research organizations may develop and introduce products and processes competitive with or superior to those of Ligand. The development by others of new treatment methods for those indications for which Ligand is developing products could render Ligand's products noncompetitive or obsolete.

Ligand's products under development target a broad range of markets. Ligand's competition will be determined in part by the potential indications for which Ligand's products are developed and ultimately approved by regulatory authorities. For certain of Ligand's potential products, an important factor in competition may be the timing of market introduction of Ligand's or competitors' products. Accordingly, the relative speed at which Ligand or its existing or future corporate partners can develop products, complete the clinical trials and regulatory approval processes, and supply commercial quantities of the products to the market is expected to be an important competitive factor. Ligand expects that competition among products approved for sale will be based, among other things, on product efficacy, safety, reliability, availability, price and patent position.

Ligand's competitive position also depends upon its ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary products or processes, and secure sufficient capital resources. See "Business -- Competition."

EXTENSIVE GOVERNMENT REGULATION; NO ASSURANCE OF REGULATORY APPROVAL

The manufacturing and marketing of Ligand's products and its ongoing research and development activities are subject to regulation for safety and efficacy by numerous governmental authorities in the United States and other countries. Prior to marketing, any drug developed by the Company must undergo rigorous preclinical and clinical testing and an extensive regulatory approval process mandated by the FDA and equivalent foreign authorities. These processes can take a number of years and require the expenditure of substantial resources.

The time required for completing such testing and obtaining such approvals is uncertain, and there is no assurance that any such approval will be obtained. The Company or its collaborative partners may decide to replace a compound in testing with a modified or optimized compound, thus extending the test period. In addition, delays or rejections may be encountered based upon changes in FDA policy during the period of product development and FDA review of each submitted new drug application or product license application. Similar delays may also be encountered in other countries. There can be no assurance that even after such time and expenditures, regulatory approval will be obtained for any products developed by the Company. Moreover, prior to receiving FDA or equivalent foreign authority approval to market its products, the Company may be required to demonstrate that its products represent improved forms of treatment over existing therapies. If regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which the product may be marketed. Further, even if such regulatory approval is obtained, a marketed product, its manufacturer and its manufacturing facilities are subject to continual review and periodic inspections, and subsequent discovery of previously unknown problems with a product, manufacturer or facility may result

in restrictions on such product or manufacturer, including withdrawal of the product from the market. See "Business -- Government Regulation."

DEPENDENCE ON THIRD-PARTY REIMBURSEMENT AND HEALTH CARE REFORM

Ligand's commercial success will be heavily dependent upon the availability of reimbursement for the use of any products developed by the Company. There can be no assurance that Medicare and third-party payors will authorize or otherwise budget reimbursement for the prescription of any of Ligand's potential products. Additionally, third-party payors, including Medicare, are increasingly challenging the prices charged for medical products and services and may require additional cost-benefit analysis data from the Company in order to demonstrate the cost-effectiveness of its products. There can be no assurance that the Company will be able to provide such data in order to gain market acceptance of its products with respect to pricing and reimbursement.

In the United States, the Company expects that there will continue to be a number of federal and state proposals to implement government control of pricing and profitability of prescription pharmaceuticals. In addition, increasing emphasis on managed health care will continue to put pressure on such pricing. Cost control initiatives could decrease the price that the Company or any of its collaborative partners or other licensees receives for any drugs it may discover or develop in the future and, by preventing the recovery of development costs, which could be substantial, and an appropriate profit margin, could have a material adverse effect on the Company. Further, to the extent that cost control initiatives have a material adverse effect on the Company's collaborative partners, the Company's ability to commercialize its products and to realize royalties may be adversely affected. Furthermore, federal and state regulations govern or influence the reimbursement to health care providers of fees and capital equipment costs in connection with medical treatment of certain patients. If any actions are taken by federal and/or state governments, such actions could adversely affect the prospects for sales of the Company's products. There can be no assurance that action taken by federal and/or state governments, if any, with regard to health care reform will not have a material adverse effect on the Company. See "Business -- Government Regulation."

PRODUCT LIABILITY AND INSURANCE RISKS

Ligand's business exposes it to potential product liability risks which are inherent in the testing, manufacturing and marketing of human therapeutic products. Certain of the compounds the Company is investigating could be injurious to humans. For example, retinoids as a class are known to contain compounds which can cause birth defects. Ligand currently has limited product liability insurance; however, there can be no assurance that Ligand will be able to maintain such insurance on acceptable terms or that such insurance will provide adequate coverage against potential liabilities. The Company expects to procure additional insurance when its products progress to a later stage of development and if any rights to later-stage products are in-licensed in the future. To the extent that product liability insurance, if available, does not cover potential claims, the Company will be required to self-insure the risks associated with such claims. A successful product liability claim or series of claims brought against the Company could have a material adverse effect on the Company. See "Business -- Product Liability and Insurance."

EXERCISE OF PANRETIN (ALRT1057) OPTION AND ALRT STOCK PURCHASE OPTION

As part of the public rights offering to the stockholders of Ligand and Allergan pursuant to which ALRT was funded (the "ALRT Offering"), all of the technologies previously developed by the Joint Venture were contributed to ALRT, an off-balance sheet entity all of the equity of which is owned by the public. In exchange for Ligand's and Allergan's contributions of cash and technology, they each received an option to acquire 50% of the assets related to Panretin (ALRT1057) Oral and Panretin (ALRT1057) Topical (the "ALRT1057 Option"). The ALRT1057 Option is exercisable at prices ranging from $21.4 million to $36.2 million (of which $18.7 million to $31.7 million is payable by Ligand) at any time beginning June 1997 and ending the earlier of 90 days after regulatory approval for the commercial sale of Panretin (ALRT1057) Oral or Panretin (ALRT1057) Topical and June 2000. The ALRT1057 Option must be exercised by both Ligand and Allergan. As a result, Ligand can exercise the ALRT1057 Option only if Ligand and Allergan each conclude that the exercise of the ALRT1057 Option is in both of their best interests. In addition, Ligand received an option to

acquire all of the outstanding shares of ALRT callable common stock (the "ALRT Stock Purchase Option"). The ALRT Stock Purchase Option is exercisable at prices ranging from $71.4

million to $120.7 million at any time between June 1997 and June 2000. If Ligand exercises the ALRT Stock Purchase Option, Allergan has an option to purchase an undivided 50% interest in all of the assets of ALRT at prices ranging from $8.9 million to $15.0 million. The purchase prices for the ALRT1057 Option and the ALRT Stock Purchase Option may be paid by Ligand and Allergan in shares of Common Stock, Allergan common stock, cash or any combination thereof. If Ligand exercises the ALRT1057 Option or the ALRT Stock Purchase Option, it will be required to make a substantial cash payment or to issue shares of Common Stock, or both. Any cash payment would reduce Ligand's capital resources. The Company may not have sufficient capital resources to exercise the ALRT1057 Option or the ALRT Stock Purchase Option for cash, which will require the Company to issue shares of Common Stock to exercise either of such options. Any payment in shares of Common Stock would result in a decrease in the percentage ownership of the Company held by Ligand's stockholders at that time. The exercise of the ALRT1057 Option may result in, and the exercise of the ALRT Stock Purchase Option will likely require, the recording of a significant charge to the Company's earnings. In addition, continuation of development and commercialization of Panretin (ALRT1057) Oral and Panretin (ALRT1057) Topical and other products under development by ALRT may require substantial additional expenditures by Ligand. If Ligand does not exercise the ALRT1057 Option or ALRT Stock Purchase Option prior to expiration, the Company may lose valuable rights, including rights to Panretin (ALRT1057) Oral and Panretin (ALRT1057) Topical and other ALRT assets. Ligand and Allergan also have the option to provide funding for the development of ALRT products in certain circumstances. In the event that such funding is not provided and other funds available to ALRT are less than $10.0 million, the contractual relationship among ALRT, Allergan and Ligand may be terminated by ALRT. In such an event, ALRT would retain its rights to the products currently under development by ALRT, which could have a material adverse effect on Ligand. As of the date of this Prospectus, Ligand has no plans to provide additional funding to ALRT and has made no determination concerning the exercise of either the ALRT1057 Option or the ALRT Stock Purchase Option. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business -- Strategic Alliances -- Allergan, Inc."

DEPENDENCE ON KEY EMPLOYEES

Ligand is highly dependent on the principal members of its scientific and management staff, the loss of whose services might impede the achievement of development objectives. Furthermore, Ligand is currently experiencing a period of rapid growth which requires the hiring of significant numbers of scientific, management and operational personnel. Accordingly, recruiting and retaining qualified management, operations and scientific personnel to perform research and development work in the future will also be critical to Ligand's success. Although Ligand believes it will be successful in attracting and retaining skilled and experienced management, operational and scientific personnel, there can be no assurance that Ligand will be able to attract and retain such personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies, universities and other research institutions for such personnel. See "Business -- Human Resources" and "Management."

USE OF HAZARDOUS MATERIALS

Ligand's research and development involves the controlled use of hazardous materials, chemicals and various radioactive compounds. For example, retinoids as a class are known to contain compounds which can cause birth defects. Although the Company believes that its current safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of any accident, the Company could be held liable for any damages that result and any such liability could be significant. The Company may incur substantial costs to comply with environmental regulations. Any such event could have a material adverse effect on the Company.

VOLATILITY OF STOCK PRICE

The market prices and trading volumes for securities of emerging companies, like Ligand, have historically been highly volatile and have experienced significant fluctuations unrelated to the operating performance of such companies. Future announcements concerning the Company or its competitors may have

a significant impact on the market price of the Common Stock. Such announcements might include the results of research, development testing, technological innovations, new commercial products, government regulation, developments concerning proprietary rights, litigation or public concern as to the safety of the products. See "Price Range of Common Stock."

ABSENCE OF CASH DIVIDENDS

No cash dividends have been paid on the Common Stock to date, and Ligand does not anticipate paying cash dividends in the foreseeable future. See "Dividend Policy."

EFFECT OF SHAREHOLDER RIGHTS PLAN AND CERTAIN ANTI-TAKEOVER PROVISIONS

In September 1996, the Company's Board of Directors adopted a preferred shares rights plan (the "Shareholder Rights Plan") which provides for a dividend distribution of one preferred share purchase right (a "Right") on each outstanding share of the Common Stock. Each Right entitles stockholders to buy 1/1000th of a share of Ligand Series A Participating Preferred Stock at an exercise price of $100, subject to adjustment. The Rights will become exercisable following the tenth day after a person or group announces acquisition of 20% or more of the Common Stock, or announces commencement of a tender offer, the consummation of which would result in ownership by the person or group of 20% or more of the Common Stock. The Company will be entitled to redeem the Rights at $0.01 per Right at any time on or before the earlier of the tenth day following acquisition by a person or group of 20% or more of the Common Stock and September 13, 2006.

Ligand's Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") includes a provision that requires the approval of the holders of 66 2/3% of Ligand's voting stock as a condition to a merger or certain other business transactions with, or proposed by, a holder of 15% or more of Ligand's voting stock, except in cases where certain directors approve the transaction or certain minimum price criteria and other procedural requirements are met (the "Fair Price Provision"). The Certificate of Incorporation also requires that any action required or permitted to be taken by stockholders of Ligand must be effected at a duly called annual or special meeting of stockholders and may not be effected by any consent in writing. In addition, special meetings of the stockholders of Ligand may be called only by the Board of Directors, the Chairman of the Board or the President of Ligand or by any person or persons holding shares representing at least 10% of the outstanding Common Stock. The Shareholder Rights Plan, the Fair Price Provision and other charter provisions may discourage certain types of transactions involving an actual or potential change in control of Ligand, including transactions in which the stockholders might otherwise receive a premium for their shares over then current market prices, and may limit the ability of the stockholders to approve transactions that they may deem to be in their best interests. In addition, the Board of Directors has the authority to fix the rights and preferences of and issue shares of preferred stock, which may have the effect of delaying or preventing a change in control of Ligand without action by the stockholders. See "Description of Capital Stock -- Preferred Stock" and "Description of Capital Stock -- Delaware Law, the Shareholder Rights Plan and Certain Charter Provisions."

POTENTIAL ADVERSE MARKET IMPACT OF SHARES ELIGIBLE FOR FUTURE SALE

Sales of a substantial number of shares of the Common Stock in the public market following the Offering could adversely affect the market price of the Common Stock. Upon completion of the Offering, there will be approximately 30.9 million shares of Common Stock outstanding. Of those shares, approximately 22.8 million, including the 2.75 million shares offered hereby, but excluding shares subject to contractual restrictions discussed below or held by affiliates of the Company, will be immediately eligible for resale in the public market without restriction. In addition, approximately 6.4 million shares are subject to registration rights that are currently exercisable. The holders of approximately

8.1 million of the shares of Common Stock which will be outstanding after the Offering (and holders of approximately 1.0 million shares of Common Stock issuable upon exercise of outstanding options and warrants) have agreed not to sell any shares of Common Stock for a period of at least 90 days after the date of this Prospectus pursuant to agreements with the Company or the Underwriters. The agreements with the Underwriters provide that the holder will not sell any shares of

Common Stock without the prior written consent of Bear, Stearns & Co. Inc., acting alone, or the representatives of the Underwriters, acting jointly. See "Underwriting."

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements contained or incorporated by reference in this Prospectus, including without limitation, statements containing the words "believes," "anticipates," "expects" and words of similar import, constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 (the "Reform Act"). Such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Ligand, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, among others, the following: early stage of product development; technological uncertainty; history of operating losses; accumulated deficit; future capital needs; uncertainty of additional funding; uncertainties related to clinical trials; reliance on collaborative relationships; uncertainty of patent protection; dependence on proprietary technology; lack of manufacturing capability; reliance on third-party manufacturers; limited sales and marketing capability; substantial competition; risk of technological obsolescence; extensive government regulation; no assurance of regulatory approval; dependence on third party reimbursement and health care reform; product liability and insurance risks; exercise of Panretin (ALRT 1057) Option and ALRT Stock Purchase Option; dependence on key employees; use of hazardous materials; volatility of stock price; absence of cash dividends; effect of Shareholder Rights Plan and certain anti-takeover provisions; potential adverse market impact of shares eligible for future sale; and other factors referenced in this Prospectus. Certain of these factors are discussed in more detail elsewhere in this Prospectus, including without limitation, under the captions "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Business." Given these uncertainties, prospective investors are cautioned not to place undue reliance on such forward-looking statements. Ligand disclaims any obligation to update any such factors or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future events or developments.

USE OF PROCEEDS

The net proceeds to the Company from the sale of the 2,750,000 shares of Common Stock offered hereby, assuming a public offering price of $14.75 per share and after deducting underwriting discounts and estimated Offering expenses, are estimated to be $37,753,750 ($43,473,063 if the Underwriters' over-allotment option is exercised in full).

The Company expects to use the net proceeds, including the interest thereon, for general corporate purposes, including product research and development programs, preclinical testing and clinical trials, the acquisition and in-licensing of products and complementary technologies, and capital expenditures and working capital. The amounts actually expended for each purpose may vary significantly depending upon numerous factors, including the pace of scientific progress in the Company's research and development programs, the magnitude of these programs, the scope and results of preclinical testing and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims, competing technological and market developments, the ability to establish additional collaborations, changes in existing collaborations, the cost of manufacturing scale-up and the effectiveness of the Company's commercialization activities. In addition, expenditures will also depend upon

the establishment of collaborative research agreements with other companies, the availability of additional financing and other factors. The Company believes that its available cash, cash equivalents, marketable securities and existing sources of funding, in addition to the net proceeds of the Offering, will be adequate to satisfy its anticipated capital requirements through 1999, assuming the Company does not exercise for cash either the ALRT1057 Option or the ALRT Stock Purchase Option. The Company has made no determination concerning the exercise of either the ALRT1057 Option or the ALRT Stock Purchase Option.

Pending application of the net proceeds of the Offering as described above, the Company plans to invest such proceeds principally in United States government and investment-grade corporate debt securities.

PRICE RANGE OF COMMON STOCK

The Company's Class A Common Stock was traded in the over-the-counter market and prices were quoted on the Nasdaq National Market under the symbol "LGNDA" from its initial public offering on November 17, 1992 until November 24, 1994. On November 24, 1994, each outstanding share of Class A Common Stock was automatically converted into 1.33 shares of Class B Common Stock (now designated "Common Stock"). Since November 24, 1994, the Company has had only one class of Common Stock outstanding. Prices for the Common Stock are quoted on the Nasdaq National Market under the symbol "LGND." The following table sets forth the high and low sales prices for the Class A Common Stock (adjusted to reflect the automatic 1.33 for 1 share conversion in November 1994) and Common Stock on the Nasdaq National Market for the periods indicated.

CLASS A COMMON STOCK SALES PRICES(1)

<TABLE>
<CAPTION>

	PRICE RANGE	
	HIGH	LOW
<S>	<C>	<C>
YEAR ENDED DECEMBER 31, 1994:		
1st Quarter	$10 7/8	$ 8 1/4
2nd Quarter	10 3/8	7 3/4
3rd Quarter	10	7 7/8
4th Quarter (through November 23)	9 3/4	7 3/4

</TABLE>

COMMON STOCK SALES PRICES

<TABLE>

<S>	<C>	<C>
YEAR ENDED DECEMBER 31, 1994:		
4th Quarter (November 25 through December 31)	$10	$ 6
YEAR ENDED DECEMBER 31, 1995:		
1st Quarter	$ 8 1/2	$ 6
2nd Quarter	8 3/4	5 1/2
3rd Quarter	10 1/4	7 3/4
4th Quarter	11 3/8	7 5/8
YEAR ENDING DECEMBER 31, 1996:		
1st Quarter	$13 3/4	$ 9 3/4
2nd Quarter	19 3/4	11 1/8
3rd Quarter (through September 24)	16 1/8	10 3/8

</TABLE>

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(1) The 1994 share prices have been restated to reflect the 1.33 for 1 conversion of the Company's Class A Common Stock into Common Stock on November 24, 1994, and rounded to the nearest 1/8.

On September 24, 1996, the last reported sale price of the Common Stock on the Nasdaq National Market was $14.75 per share. As of June 30, 1996, there were approximately 950 holders of record of the Common Stock.

DIVIDEND POLICY

The Company has never declared or paid any cash dividends on its capital

stock and does not intend to pay any cash dividends in the foreseeable future. The Company currently intends to retain its earnings, if any, to finance future growth.

CAPITALIZATION

The following table sets forth the capitalization of the Company at June 30, 1996, and as adjusted to reflect the sale of the 2,750,000 shares of Common Stock offered hereby at an assumed public offering price of $14.75 per share and the receipt of the net proceeds of such sale. See "Use of Proceeds." This table should be read in conjunction with the Company's consolidated financial statements, including the notes thereto, included elsewhere herein. See "Notes to Consolidated Financial Statements."

<TABLE>
<CAPTION>

	JUNE 30, 1996	
	ACTUAL	AS ADJUSTED
	(IN THOUSANDS)	
<S>	<C>	<C>
Cash, cash equivalents, and short-term investments(1).....	$ 60,447	$ 98,201
Current portion of obligations under capital leases and equipment notes payable.....	$ 2,551	$ 2,551
Long-term debt, less current portion:		
Long-term obligations under capital leases and equipment notes payable.....	8,714	8,714
Convertible subordinated debentures(2).....	32,616	32,616
Convertible notes.....	10,000	10,000
Total long-term debt.....	51,330	51,330
Stockholders' equity:		
Convertible Preferred Stock, $0.001 par value; 5,000,000 shares authorized; no shares issued or outstanding actual and as adjusted.....	--	--
Common Stock, $0.001 par value; 80,000,000 shares authorized; 28,146,386 shares issued; 30,896,386 shares as adjusted(3)....	28	31
Paid-in capital.....	175,102	212,853
Warrant subscription receivable.....	(3,718)	(3,718)
Adjustment for unrealized losses on available for sale securities.....	(266)	(266)
Accumulated deficit.....	(157,401)	(157,401)
Deferred compensation and consulting fees.....	(565)	(565)
Less treasury stock, at cost (35,686 shares).....	(463)	(463)
Total stockholders' equity.....	12,717	50,471
Total capitalization.....	$ 64,047	$ 101,801

</TABLE>

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(1) Includes restricted cash of $3,746,000.
(2) See Note 6 of Notes to Consolidated Financial Statements.
(3) As of June 30, 1996. Excludes (a) 3,597,866 shares of Common Stock issuable upon the exercise of outstanding options under the Company's stock option plans (at a weighted average exercise price of $8.83 per share), (b) 874,074 shares of Common Stock available for future grants under such plans or issuance under the Company's stock purchase plan, (c) 6,671,922 shares of Common Stock issuable upon exercise of outstanding warrants (at a weighted average exercise price of $7.30 per share), (d) 999,001 shares of Common Stock issuable upon conversion of the principal amount outstanding under convertible promissory notes and (e) 1,885,370 shares of Common Stock issuable upon conversion of the principal amount outstanding under Glycomed's 7 1/2% Convertible Subordinated Debentures Due 2003. Includes

101,011 shares of Common Stock received from Pfizer and retired in September 1996. See "Business -- Strategic Alliances" and "Description of Capital Stock."

SELECTED CONSOLIDATED FINANCIAL DATA

The selected financial data set forth below with respect to the Company's consolidated statements of operations for each of the years in the three-year period ended December 31, 1995, and with respect to the consolidated balance sheets at December 31, 1994 and 1995, are derived from the audited financial statements that have been examined by Ernst & Young LLP, independent auditors, which are included elsewhere in this Prospectus and are qualified by reference to such financial statements. The statements of operations data for the years ended December 31, 1991 and 1992, and the balance sheet data at December 31, 1991, 1992 and 1993, are derived from audited financial statements not included in this Prospectus. The management of the Company believes that the unaudited data at June 30, 1996, and for the six-month periods ended June 30, 1995 and 1996, contains all adjustments, consisting of only normal recurring accruals, necessary for a fair presentation of the financial position at such date and the results of operations for such periods. Operating results for the six-month period ended June 30, 1996, are not necessarily indicative of results to be expected for the fiscal year ending December 31, 1996 or any other interim period. The data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Company's consolidated financial statements and related notes included elsewhere in this Prospectus.

<TABLE>
<CAPTION>

	YEARS ENDED DECEMBER 31,					SIX MONTHS ENDED JUNE 30,	
	1991	1992	1993	1994	1995	1995	1996
	(IN THOUSANDS, EXCEPT NET LOSS PER SHARE)						
<S>	<C>	<C>	<C>	<C>	<C>	<C>	<C>
CONSOLIDATED STATEMENT OF OPERATIONS DATA:							
Revenues:							
Collaborative research and development							
Related parties	$ 1,526	$ 2,128	$ 9,974	$ 8,342	$ 11,972	$ 4,455	$ 7,262
Unrelated party	--	3,417	6,138	4,893	12,424	5,476	9,878
Other	--	338	150	74	120	36	118
Total revenues	1,526	5,883	16,262	13,309	24,516	9,967	17,258
Costs and expenses:							
Research and development	6,228	14,220	24,301	27,205	41,636	16,026	27,081
Selling, general and administrative	1,568	4,144	6,192	6,956	8,181	3,769	5,172
Write-off of acquired in-process technology	--	--	--	--	19,564	19,869	--
ALRT contribution	--	--	--	--	17,500	17,500	--
Total operating expenses	7,796	18,364	30,493	34,161	86,881	57,164	32,253
Loss from operations	(6,270)	(12,481)	(14,231)	(20,852)	(62,365)	(47,197)	(14,995)
Interest income	211	523	2,005	1,297	3,603	1,192	1,999
Interest expense	(215)	(325)	(353)	(679)	(5,410)	(1,292)	(4,124)
Equity in operations of Joint Venture	--	(1,724)	(6,879)	(6,845)	--	--	--
Net loss	$(6,274)	$(14,007)	$(19,458)	$(27,079)	$(64,172)	$(47,297)	$(17,120)
Net loss per share	$ (3.04)	$ (3.96)	$ (1.19)	$ (1.57)	$ (2.70)	$ (2.33)	$ (.61)
Shares used in computing net loss per share	2,067	3,537	16,357	17,241	23,792	20,271	27,990

</TABLE>

<TABLE>
<CAPTION>

DECEMBER 31,					JUNE 30,
1991	1992	1993	1994	1995	1996

<S>	<C>	<C>	<C>	<C>	<C>	<C>
	(IN THOUSANDS)					
CONSOLIDATED BALANCE SHEET DATA:						
Cash, cash equivalents and short-term investments(1)	$ 4,111	$ 55,605	$ 42,354	$ 38,403	$ 76,903	$ 60,447
Working capital	3,124	55,117	40,588	33,567	57,349	46,837
Total assets	6,607	62,261	50,790	46,696	93,594	76,673
Long-term debt	1,180	1,750	2,324	12,285	18,585	18,714
Convertible subordinated debentures	--	--	--	--	31,279	32,616
Accumulated deficit	(15,564)	(29,571)	(49,029)	(76,108)	(140,281)	(157,401)
Total stockholders' equity	4,033	57,250	42,934	26,335	28,071	12,717

</TABLE>

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(1) Includes restricted cash of $6,759,000 and $3,746,000 at December 31, 1995 and June 30, 1996, respectively.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

Since January 1989, the Company has devoted substantially all of its resources to its IR and STATs drug discovery and development programs. The Company has been unprofitable since its inception and expects to incur substantial additional operating losses for the next several years, due to continued requirements for research and development, preclinical testing, regulatory activities, and establishment of manufacturing processes and sales and marketing capabilities. The Company expects that losses will fluctuate from quarter to quarter as a result of differences in the timing of expenses incurred and the revenues earned from collaborative arrangements. Some of these fluctuations may be significant. As of June 30, 1996, the Company's accumulated deficit was approximately $157.4 million.

In May 1995, Glycomed became a wholly-owned subsidiary of the Company pursuant to the merger of a subsidiary of the Company with and into Glycomed ("the Merger"). Glycomed is a biopharmaceutical company conducting research and development of pharmaceuticals based on biological activities of complex carbohydrates. Each outstanding share of Glycomed Common Stock was converted into 0.5301 shares of Common Stock, resulting in the issuance of 6,942,911 shares of the Common Stock to Glycomed shareholders. The Merger was accounted for using the purchase method of accounting. The excess of the purchase price over the fair value of the net assets acquired was allocated to in-process technology and was written off, resulting in a one-time non-cash charge to operations of approximately $20.0 million. The results of operations of Glycomed are included in the Company's results of operations from the date of the Merger.

In December 1994, the Company and Allergan formed ALRT to continue the research and development activities previously conducted by the Joint Venture. In June 1995, the Company and ALRT completed the ALRT Offering of 3,250,000 units (the "Units") with aggregate proceeds of $32.5 million and cash contributions by Allergan and the Company of $50.0 million and $17.5 million, respectively, providing for net proceeds of $94.3 million for retinoid product research and development. Each Unit consisted of one share of ALRT's callable common stock and two warrants, each warrant entitling the holder to purchase one share of Common Stock of the Company. Immediately prior to the consummation of the ALRT Offering, Allergan Pharmaceuticals (Ireland) Ltd., Inc. ("Allergan Ireland") made a $6.0 million investment in the Common Stock. The Company's $17.5 million cash contribution resulted in a one-time charge to operations. The Company also recorded a warrant subscription receivable and corresponding increase in paid-in capital of $5.9 million pursuant to the ALRT Offering. In 1995 and for the first six months of 1996, $1.3 million and $806,000, respectively, of the proceeds received from ALRT were applied to the warrant subscription receivable. In conjunction with the consummation of the ALRT Offering, all rights held by the Joint Venture were licensed to ALRT. The Company, Allergan and ALRT entered into various agreements in connection with the funding of ALRT. After June 3, 1995, cash received from ALRT pursuant to the agreement was prorated between contract revenue and the warrant subscription receivable based on their respective values. Contributions made by the Company to the Joint Venture related to the period from January 1, 1995, through June

30, 1995 were retroactively reimbursed by ALRT, and previous equity losses recognized for the six month period from the Joint Venture operations were reversed. See "Business -- Strategic Alliances -- Allergan, Inc." and Note 9 of Notes to Consolidated Financial Statements.

RESULTS OF OPERATIONS

Six months ended June 30, 1996, as compared to the six months ended June 30, 1995

The Company had revenues of $17.3 million for the six months ended June 30, 1996 compared to revenues of $10.0 million for the same period in 1995. The increase in revenues is due to an expanded and amended research and development agreement entered into in January 1996 with American Home Products (which began in September 1994), a full six-month effect of the collaborative research agreement with Sankyo (which became effective the date of the Merger), a full six-month effect of the collaboration with SmithKline Beecham (which began in February 1995), and increased revenue from ALRT. Revenues for the

six months ended June 30, 1996 were derived from the Company's research and development agreements with (i) ALRT of $7.3 million, (ii) American Home Products of $4.4 million, (iii) Abbott of $1.4 million, (iv) Sankyo of $1.4 million, (v) SmithKline Beecham of $1.2 million, (vi) Glaxo of $1.1 million, as well as from milestone revenue from Pfizer of $438,000, and product sales of Ligand Canada in-licensed products of $118,000. Revenues for the six months ended June 30, 1995 were derived from the Company's research and development agreements with (i) ALRT of $4.4 million, (ii) American Home Products of $2.0 million, (iii) Glaxo of $1.1 million, (iv) Abbott of $1.2 million, (v) SmithKline Beecham of $910,000, (vi) Sankyo of $311,000 and from products sales of Ligand Canada in-licensed product of $36,000.

For the six months ended June 30, 1996, research and development expenses increased to $27.1 million from $16.0 million for the same period in 1995. These expenses increased primarily due to expansion of the Company's research and development programs, additions of research and development personnel, and inclusion of the cost of Glycomed's operations for a full six months in 1996. Selling, general and administrative expenses increased to $5.2 million for the six months ended June 30, 1996 from $3.8 million for the same period in 1995. The increase was primarily attributable to legal expenses related to the litigation with Pfizer, expansion of the Company's sales and marketing activities, and additions to personnel to support expanded research and development programs. Interest income increased to $2.0 million for the six months ended June 30, 1996 from $1.2 million for the same period in 1995. The increase in interest income was a result of an increase in cash balances due to the Merger, increased research revenues and additional equity investments, offset by net usage of cash to support expansion activities. Interest expense increased to $4.1 million for the six months ended June 30, 1996 from $1.3 million for the same period in 1995. The increase was primarily due to interest required under the Debentures, accretion of debt discount of the Debentures and additional capital lease obligations used to finance equipment.

One time charges of $19.9 million and $17.5 million were incurred for the six months ended June 30, 1995 due to the Merger and the ALRT Offering, respectively.

Year ended December 31, 1995, as compared to the year ended December 31, 1994

The Company had revenues of $24.5 million for 1995 compared to revenues of $13.3 million for 1994. The increase is due to the full year effect of new collaborative research agreements with American Home Products (which began in September 1994), SmithKline Beecham (which began in February 1995), Abbott (which began in July 1994), Sankyo (which became effective on the date of the Merger), as well as increased revenue from ALRT. Revenues in 1995 were derived from the Company's research and development agreements with (i) ALRT of $12.0 million, (ii) American Home Products of $4.0 million, (iii) Abbott of $2.6 million, (iv) SmithKline Beecham of $2.1 million, (v) Glaxo of $2.1 million, (vi) Sankyo of $1.7 million, and (vii) product sales of Ligand Canada in-licensed products of $120,000. Revenues in 1994 were derived from the Company's research and development agreements with (i) the Joint Venture of $8.3 million, (ii) American Home Products of $1.7 million, (iii) Glaxo of $2.0

million, (iv) Abbott of $1.2 million and (v) other research grants of $74,000.

For 1995, research and development expenses increased to $41.6 million from $27.2 million in 1994. These expenses increased primarily due to additions of research and development personnel, expansion of the Company's research and development programs, and inclusion of the cost of Glycomed's operations from the date of the Merger. Selling, general and administrative expenses increased to $8.2 million in 1995 from $7.0 million in 1994. The increase was attributable to additions to personnel to support expanded research and development programs and expansion of the Company's sales and marketing activities. Interest income increased to $3.6 million in 1995 from $1.3 million in 1994. The increase in interest income was a result of an increase in cash balances due to the Glycomed Merger, increased research revenues, additional purchases of Common Stock and convertible notes by collaborators, offset by net usage of cash to support expansion activities. Interest expense increased to $5.4 million in 1995 from $679,000 in 1994. The increase was primarily due to interest required under the Debentures, accretion of debt discount of the Debentures as well as interest required under a convertible note issued in connection with the American Home Products collaborative agreement. The 1994 equity loss in the Joint Venture of $6.8 million was the Company's share of the losses of the Joint Venture.

One-time charges of $19.6 million and $17.5 million were incurred in 1995 due to the Merger and the ALRT Offering, respectively.

Year ended December 31, 1994, as compared to the year ended December 31, 1993

The Company had revenues of $13.3 million for 1994 compared to revenues of $16.3 million for 1993. The decrease is due to revenue fluctuations from collaborative research agreements, including wind up of the agreement with Pfizer, the research phase of which was completed in December of 1993 due to early success in meeting research stage objectives for drug candidates. Revenues in 1994 were derived from the Company's (i) research and development agreement with the Joint Venture of $8.3 million, (ii) collaborative research and development agreement with Glaxo of $2.0 million, (iii) research and development agreement with Abbott (which began in July 1994) of $1.2 million, (iv) research and development agreement with American Home Products (which began in September 1994) of $1.7 million and (v) other income of $74,000. Revenues in 1993 were derived from the Company's (i) research and development agreement with the Joint Venture of $10.0 million, (ii) research agreement with Pfizer, of which the research phase of the agreement was completed in December of 1993, of $4.9 million, (iii) collaborative research and development agreement with Glaxo of $1.2 million and (iv) other research grants of $150,000.

For 1994, research and development expenses increased to $27.2 million from $24.3 million in 1993. These expenses increased primarily due to additions to research and development personnel and expansion of the Company's research and development programs. General and administrative expenses increased to $7.0 million in 1994 from $6.2 million in 1993. This increase was primarily attributable to increases in staffing to support increased research and development programs as well as to expand investor relations and business development activities in 1994. Interest income decreased to $1.3 million in 1994 from $2.0 million in 1993. The decrease in interest income was a result of a reduction in available cash for investment due to the net usage of cash to support expansion activities offset by an increase in cash from new collaborative research agreements, which commenced in the third quarter of 1994. Interest expense increased to $679,000 in 1994 from $353,000 in 1993. The increase was due to additional capital lease obligations used to finance equipment in addition to interest on the American Home Products convertible note. The Company's losses for its share of the Joint Venture's operations for 1994 and 1993 were $6.8 million and $6.9 million, respectively.

LIQUIDITY AND CAPITAL RESOURCES

The Company has financed its operations through private and public offerings of its equity securities, collaborative research revenues, capital and operating lease transactions, issuance of convertible notes, product sales and investment income. From inception through June 1996, the Company has raised $121.2 million from sales of equity securities: $43.0 million from the Company's initial public offering in November 1992 (of which $7.5 million was provided by the Company's collaborators) and an aggregate of $78.2 million from private

placements (of which $64.0 million was provided by the Company's collaborators, $11.4 million was provided through venture capital financing and $2.8 million was provided by other investors).

As of June 30, 1996, the Company had acquired an aggregate of $17.1 million in laboratory and office equipment and $3.8 million in tenant improvements, substantially all of which has been funded through capital lease and equipment note obligations and which includes laboratory and office equipment acquired in the Merger. In addition, the Company leases its office and laboratory facilities under operating leases. In July 1994, the Company entered into a 20-year lease related to the construction of a new laboratory facility, which was completed and occupied in August 1995. In May 1996, the Company signed a master lease agreement to finance future capital equipment up to $2.5 million.

Working capital decreased to $46.8 million as of June 30, 1996, from $57.3 million at the end of 1995. The decrease in working capital resulted from an increase in cash from collaborative research agreements, offset by an increase in research and development program expenses, the related increase in selling, general and administrative expenses as described above, semi-annual interest payments due on the Debentures and interest paid on the convertible note. For the same reasons, cash and cash equivalents, short-term investments, and restricted cash decreased to $60.4 million at June 30, 1996 from $76.9 million at December 31, 1995. The

Company invests its cash principally in United States government debt securities and investment-grade corporate debt securities.

The Company believes that its available cash, cash equivalents, marketable securities and existing sources of funding, in addition to the net proceeds of the Offering, will be adequate to satisfy its anticipated capital requirements through 1999, assuming the Company does not exercise either the ALRT1057 Option or the ALRT Stock Purchase Option for cash. The Company has made no determination concerning the exercise of either the ALRT1057 Option or the ALRT Stock Purchase Option. The Company's future capital requirements will depend on many factors, including the pace of scientific progress in its research and development programs, the magnitude of these programs, the scope and results of preclinical testing and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims, competing technological and market developments, the ability to establish additional collaborations, changes in existing collaborations, the cost of manufacturing scale-up and the effectiveness of the Company's commercialization activities.

BUSINESS

OVERVIEW

Ligand is a leader in the discovery and development of small-molecule drugs which mimic or block the activities of various hormones and cytokines to regulate gene activity and the genetic processes affecting many diseases. The Company's drug discovery and development programs are based on its proprietary technologies involving two natural mechanisms that regulate gene activity: (i) hormone-activated Intracellular Receptors ("IRs") and (ii) cytokine-activated Signal Transducers and Activators of Transcription ("STATs"). IRs play key roles in many disease processes, including certain cancers, disorders of women's health, cardiovascular diseases, inflammatory disorders and skin diseases. Similarly, STATs influence many biological processes, including cancer, inflammation and blood cell formation. In programs acquired with Glycomed in 1995, Ligand is also seeking to develop orally active drugs to modulate biological processes involving complex carbohydrates and other cell surface components for the treatment of inflammation and cancer.

IRs are members of a family of hormone-activated proteins that act inside the cell to regulate directly gene expression and cellular function. Although the effectiveness of IRs as drug targets has been demonstrated by drugs acting through IRs already on the market, such as retinoids (e.g., Retin-A for acne and psoriasis) and sex steroid modulators (e.g., estrogens and progesterones for hormone replacement therapy and contraception, tamoxifen for breast cancer, flutamide for prostate cancer), the utility of these first-generation drugs has

been limited by their often significant side effects. STATs are a recently discovered family of proteins that act inside cells to regulate gene expression in response to various cytokines such as interferons, interleukins and hematopoietic growth factors. Imbalances in the activity of these cytokines can lead to various pathological conditions, such as inflamation. While certain recombinant cytokines and other proteins which bind to cell surface receptors have proven to have clinical utility in the treatment of disease, they must be administered by injection and can be difficult to manufacture.

Ligand and its exclusive academic collaborators have been leaders in advancing the understanding of the activities of hormones and hormone-related drugs and have made major scientific discoveries relating to IR and STATs technologies. Ligand believes that its expertise in IR and STATs technologies will enable the Company to develop novel small-molecule pharmaceutical products acting through IRs or STATs with more target-specific properties than currently available products, resulting in either improved therapeutic and side effect profiles and new indications for IRs or novel mechanisms of action and oral bioavailability for STATs.

BUSINESS STRATEGY

Ligand's business strategy is to develop new drugs using its IR and STATs technologies through both internal and collaborative programs. Ligand's internal programs focus on the discovery, development and marketing of small-molecule drugs that address cancer, gynecological diseases and male hormonal imbalances, which are treated by medical specialists. Ligand also seeks to in-license or acquire products in these medical specialty markets which are in late-stage clinical development or which have been previously approved by regulatory authorities. Ligand's collaborative programs focus on building a royalty-based business through partnerships with large pharmaceutical companies that apply Ligand's technologies to discover drugs for primary care markets, such as markets for certain cardiovascular, inflammatory and other diseases, as well as broad applications for women's health.

Ligand's internal efforts have been focused primarily on the discovery and development of improved retinoids, sex steroid receptor agonists and antagonists and cytokine agonists for use in specialty market applications, principally cancer, gynecological disorders and male hormonal imbalances. Products for these specialty markets typically require less resource-intensive clinical trials and can be marketed by a targeted sales force. Ligand is conducting human clinical trials with four products, the retinoids Panretin (ALRT1057) Oral and Panretin (ALRT1057) Topical, on behalf of ALRT, and Ligand's first products, Targretin (LGD1069) Oral and Targretin (LGD1069) Topical. Glycomed internal programs focus on the development of small molecules for the treatment of inflammation and cancer.

The Company has utilized collaborative arrangements with leading pharmaceutical companies to leverage the application of its IR and STATs technologies in disease categories treated by primary care physicians. Ligand believes its collaborators have the significant resources, including clinical and regulatory experience, manufacturing capabilities and marketing infrastructure, needed to develop and commercialize drugs for these markets. Ligand's partners include, in addition to ALRT, SmithKline Beecham, American Home Products, Abbott, Sankyo, Glaxo and Pfizer. In general, drugs resulting from these collaborations will be developed, manufactured and marketed by the corporate partners, with Ligand receiving research revenue during the drug discovery stage, additional milestone revenue as compounds move through clinical development and royalty revenue on sales of drugs marketed by its collaborators. Ligand has retained certain product rights for its niche markets within several of these collaborations.

SCIENTIFIC BACKGROUND AND DRUG DISCOVERY OPPORTUNITIES

INTRACELLULAR RECEPTORS ("IRS")

Hormones are natural chemicals within the body that control important physiological processes, including reproduction and cell growth and differentiation. The known non-peptide hormones are the retinoids, the sex steroids (estrogens, progesterones, and androgens), the adrenal steroids (glucocorticoids and mineralocorticoids), vitamin D and thyroid hormone. The understanding of hormones and their actions has increased substantially in the

last 10 years. Driving this rapid expansion of knowledge has been the discovery of the family of IRs through which all the known small-molecule (i.e., non-peptide) hormones act. Dr. Ronald Evans at The Salk Institute, Ligand's scientific co-founder and exclusive consultant, was the first to clone and characterize an IR in 1985. Since that time, approximately 75 IRs have been defined and characterized, many by Ligand's scientists or its exclusive collaborators. IRs play key roles in a variety of diseases, including certain cancers, gynecological disorders, and cardiovascular, inflammatory, and skin diseases.

Hormones act by binding to their corresponding IRs to regulate the expression of genes in order to maintain and restore balanced cellular function within the body. Hormonal imbalances can lead to a variety of diseases. The hormones themselves and drugs which mimic or block hormone action may be useful in the treatment of these diseases. Furthermore, hormone mimics (agonists) or blockers (antagonists) can be used in the treatment of diseases in which the underlying cause is not hormonal imbalance.

The effectiveness of the IRs as drug targets has been demonstrated by currently available drugs acting through IRs for many of these diseases. However, the use of most of these drugs has been limited by their often significant side effects. Examples of currently marketed hormone-related drugs acting on IRs are glucocorticoids (steroids used to treat inflammation), estrogens and progesterones (used for hormone replacement therapy and contraception), tamoxifen (an estrogen antagonist used in the treatment of breast cancer), and various retinoids such as Accutane and Retin-A (used to treat acne and psoriasis).

Ligand's early recognition of the drug discovery opportunities inherent in emerging IR research has enabled it to build a strong proprietary position and accumulate substantial expertise in IRs applicable to drug discovery and development. Building on its recent scientific findings about the molecular basis of hormone action, Ligand has created proprietary new tools to explore and manipulate non-peptide hormone action for potential therapeutic benefit. The Company has exclusive relationships in the field of IRs with Dr. Ronald Evans, a professor in the Gene Expression Laboratory of The Salk Institute, and Dr. Bert O'Malley, Professor and Chairman of the Center for Reproductive Biology at Baylor, where many of the core discoveries in IR research have been made. The Company has exclusively licensed most of these discoveries. Ligand has also developed proprietary IR assays that it believes can rapidly and accurately predict the probable therapeutic and side effect profiles of compounds with potential as drugs. The Company believes that its IR expertise will enable it to discover and develop drugs that have equal or greater therapeutic efficacy and reduced incidence and severity of side effects compared to existing drugs acting through IRs. The Company also believes these drugs will be orally bioavailable.

Ligand and its collaborators have made major discoveries pertaining to IRs and small molecule hormones and compounds which interact with these IRs. These discoveries include: (i) the identification of the IR

superfamily, (ii) the recognition of IR subtypes and (iii) the discovery of orphan IRs. Ligand believes that each of these broad areas of knowledge provides important opportunities for drug discovery.

IR Superfamily. The receptors for all the non-peptide hormones are closely related members of a superfamily of proteins known as IRs. The IRs are similar in both structure and mechanisms of action. Human IRs for all of the known non-peptide hormones have now been cloned, primarily by Ligand's scientists or its collaborators, building an understanding of the similar underlying mechanisms of action shared by the non-peptide hormones.

Ligand believes that the relatedness of the IRs for the non-peptide hormones has major implications for drug discovery. IRs share a common mechanism of action, which often enables drug discovery insights about one IR to be directly applied to other members of the IR superfamily, bringing synergy to Ligand's IR-focused drug discovery efforts. First generation drugs were developed and commercialized for their therapeutic benefits prior to the discovery of IRs and often cross-react with the IRs for hormones other than the intended target, resulting in often significant side effects. The understanding that the IRs are structurally similar has enabled Ligand to determine the basis for the side effects of some first generation drugs and to discover improved

drug candidates.

IR Subtypes. For some of the non-peptide hormones, several closely related but non-identical IRs, known as IR subtypes, have been discovered. These include six subtypes of the IRs for retinoids and four subtypes of the IRs for thyroid hormone. Patent applications covering most of these IR subtypes have been exclusively licensed by Ligand. Ligand believes that drugs that activate a subset of IR subtypes will allow more specific pharmacological intervention better matched to therapeutic need. Ligand's clinical candidate Targretin (LGD1069) was discovered as a result of Ligand's understanding of retinoid receptor subtypes.

Orphan IRs. Over 50 additional members of the IR superfamily which do not interact with the known non-peptide hormones or vitamin derivatives have been discovered. Ligand has an exclusive license to many of these orphan IRs. Ligand believes that among the orphan IRs may be receptors for uncharacterized small molecule hormones and that the physiological roles of the various orphan IRs are likely to be diverse. Ligand has devised strategies to isolate small molecules that interact with orphan IRs and is working to identify new orphan IRs as drug targets and to identify their natural and synthetic modulators as possible drug candidates. For example, the Retinoid X Receptors ("RXRs"), one subfamily of IRs activated by certain retinoids, were orphan IRs when initially discovered. Panretin (ALRT1057), a compound being developed on behalf of ALRT, was discovered by virtue of its activation of the RXR retinoid receptors.

SIGNAL TRANSDUCERS AND ACTIVATORS OF TRANSCRIPTION ("STATS")

STATs are a recently discovered family of proteins that are a key part of the signal transduction pathway for a variety of biologically important peptide hormones (e.g., interferons, interleukins, leptin and hematopoietic growth factors) collectively termed Extracellular Signaling Proteins ("ESPs"). STATs play a role in the biology of ESPs functionally analogous to that played by IRs in the biology of the non-peptide hormones: both STATs and IRs are families of transcription factors which change cell function by selectively turning on particular genes in response to circulating signals which impinge on cells. When various cytokines bind to their receptors on the cell surface, this triggers the activation of specific members of the Janus Kinase family of tyrosine protein kinases ("JAKs"), which in turn activate specific STATs. The activated STATs enter the cell nucleus and bind to the control regions of specific target genes and increase their expression, thereby modulating physiologic or pathophysiologic processes.

In many diseases, there is an imbalance of cytokine action. For example, some inflammatory conditions may represent excessive actions of certain interleukins or interferons. In these conditions it may prove beneficial to block the actions of specific cytokines. In other pathological states there is insufficient activity of specific cytokines. For example, in patients with chronic renal failure, diminished erythropoietin ("EPO") release by the damaged kidneys results in the inadequate production of red blood cells, causing anemia. Recombinant human EPO protein (Epogen) can be administered to correct this anemia effectively, but must be injected. Many other cytokines are useful as injected protein medicines, including interferons (Intron-A, Roferon, Betaseron), interleukins (e.g., Proleukin, which Ligand markets in Canada), hematopoietic growth

factors (Epogen, Neupogen) and others. Each of these and many other cytokines appear to exert their actions through STAT/JAK signal transduction pathways.

Ligand believes that its STAT/JAK technologies may lead to the discovery of low molecular weight compounds able to mimic or block the actions of medically relevant cytokines for uses in various pathological conditions, including cancer, inflammation, and disorders of blood cell formation. Because these compounds are small molecules, whereas the cytokines themselves are proteins, they offer potentially significant advantages, including oral bioavailability, greater ease of manufacture and improved stability.

The discovery of STATs, the elucidation of their roles in interferon signal transduction, and the first cloning of genes encoding STATs were all accomplished by Ligand's exclusive collaborators Dr. James Darnell at Rockefeller University and Dr. David Levy at New York University ("NYU"), and were described initially in August 1992. Since then, over half a dozen members

of the STAT family have been identified and a large number of ESPs in addition to interferons have also been shown to utilize STAT signal transduction. Among the ESPs which have been shown to use STAT signaling pathways are the interferons (alpha, beta and gamma), the hematopoietic colony stimulating factors (interleukin-3, erythropoietin, G-CSF, GM-CSF and thrombopoietin), many of the interleukins (including IL-2, IL-4, IL-6, IL-12 and IL-13, the related ESPs Oncostatin M and Leukemia Inhibitory Factor), the cytokine leptin and several protein hormones (growth hormone and prolactin).

Based on insights into STAT/JAK signal transduction and the generation of the necessary reagents, Ligand has developed STAT technologies for drug discovery which include cell culture-based high throughput screens to identify small molecule drugs and biochemical assays that define where in the STAT/JAK signal transduction pathways the small molecules act. Ligand believes that its STAT/JAK drug discovery technology can produce drug candidates to control gene expression to address a broad range of uses, including treating cancer, providing hematopoietic support for cancer patients undergoing chemotherapy or bone marrow transplantation, combating inflammation and viral or other infections, treating anemia in chronically ill patients (e.g., those with renal failure), treating dwarfism and related disorders of stature and enhancing immune function.

Ligand is using its high throughput screening assays to discover small molecule drugs to act as interferon agonists for potential application in various cancers and viral diseases. Ligand has also established collaborations with Abbott using its STAT/JAK technology to discover small molecule antagonists of interferons for the treatment of inflammation and with SmithKline Beecham to discover and characterize small molecule drugs to modulate specific STAT/JAK pathways to control the formation of red and white blood cells for treating patients with cancer or anemia. Ligand has additional assays under development to allow high throughput screening for and subsequent optimization of small molecule drugs to act through STAT/JAK signaling pathways to block or mimic other medically significant ESPs. See "-- Strategic Alliances."

GLYCOMED'S COMPLEX CARBOHYDRATES PROGRAMS

Ligand, through its wholly-owned subsidiary Glycomed, is seeking drugs that modulate processes involving complex carbohydrates and other components of the extracellular matrix. The cells in the body are in many cases embedded in various gelatinous or fibrous background substances such as proteins (e.g., collagen) or glycoproteins and mucopolysaccharides (various complex biological polymers containing amino acid and sugar building blocks). This background substance, termed extracellular matrix, can exert important effects on cells, modifying their function and controlling their migration. Additionally, related complex carbohydrates, glycoproteins and mucopolysaccharides are located on the surfaces of cells, where they can play important roles in controlling interactions among various cells, including for example, the attachment of white blood cells to the inner linings of blood vessels, a necessary part of some inflammatory responses.

Glycomed has expertise and core technology relating to the biology and chemistry of complex carbohydrates and related components of the extracellular matrix. Ligand is focusing Glycomed's expertise and core technologies to seek small molecule, potentially orally active drugs to modulate the biological processes involving complex carbohydrates and other cell surface and extracellular matrix components for the treatment of inflammation and cancer. Since the Merger, Glycomed's research has been focused on two programs: (1) selectin antagonists for the treatment of inflammation in a collaboration with Sankyo and

(2) matrix metalloproteinase inhibitors ("MMPIs") for the treatment of inflammation and cancer. See "-- Product Development Program."

LIGAND'S PROPRIETARY DRUG DISCOVERY ASSAYS

Ligand has developed a proprietary cell-culture based assay system for IR-modulating small molecules, referred to as the co-transfection assay, that simulates the actual cellular processes controlled by IRs. The system is (i) fast, compared to animal models; (ii) capable of cost-effective, high throughput screening of thousands of compounds per week; (iii) highly predictive of in vivo pharmacology of both agonists and antagonists; (iv) able to separate complex

targets, such as receptor subtypes; and (v) conducted using the actual human receptors which are the ultimate drug targets. Ligand's co-transfection assay is a key component of Ligand's IR drug discovery and development programs, and facilitates both the identification of lead compounds and their optimization as clinical candidates.

The co-transfection assay is able to preclinically detect both agonists and antagonists of specific IRs. It determines not only whether a compound interacts with a particular human IR, but also whether this interaction mimics or blocks the effects of the natural regulatory molecules on target gene expression. The Company's assays also enable the Company to detect useful lead compounds which could be missed by alternative biochemical screens or animal models. Ligand has successfully automated its co-transfection assays for high throughput screening of thousands of compounds per week. Ligand's screening in co-transfection assays has resulted in the identification of lead compounds for novel estrogen agonists, non-steroidal progestins and antiprogestins, non-steroidal antiandrogens, non-steroidal glucocorticoid agonists, new retinoid analogues and PPAR agonists that are now undergoing further investigation.

Ligand has developed similar automated high throughput assays to identify lead compounds acting as agonists or antagonists of selected STAT/JAK signaling pathways for particular ESPs such as interferons, certain interleukins and selected hematopoietic growth factors. Additional STAT-based screening assays are under development.

Ligand believes that its combination of modern molecular and traditional approaches to drug discovery will accelerate its progress to develop new drug candidates. To that end, Ligand has built a strong multidisciplinary team, consisting of molecular biologists, medicinal chemists, pharmacologists and specialists in drug metabolism and distribution, and other pharmaceutical scientists. Ligand believes the similarities between hormone and cytokine mechanisms of action allow it to leverage its drug discovery resources efficiently in the IR and STATs areas.

PRODUCT DEVELOPMENT PROGRAM

Ligand is currently pursuing seven major internally-funded and collaborative drug discovery programs: two are based on specific IRs (the retinoid and sex steroid receptor programs for cancer, skin and eye disease, and women's health); two are based on a combination of disease indications and transcription factor targets (cardiovascular and inflammatory diseases); one is based on STATs; and two are based on Glycomed technologies -- MMPIs and inhibitors of cell adhesion. Additionally, Ligand has in-licensed and is distributing two anti-cancer products in Canada.

The following table summarizes the current status of Ligand's product research, development and marketing programs, either alone or through its collaborations, and is qualified in its entirety by reference to the more detailed descriptions elsewhere in this Prospectus:

<TABLE>
<CAPTION>

PROGRAM	DISEASE INDICATION	DEVELOPMENT PHASE(1)	MARKETING RIGHTS
<S>	<C>	<C>	<C>
ALRT RETINOIDS(2)			
Panretin (ALRT1057) Topical(3)	KS	Phase III	ALRT
Panretin (ALRT1057) Oral(3)	Cancers, including, kidney cancer, non-Hodgkin's lymphoma, KS	APL, Phase IIB	ALRT
	Psoriasis	Phase II	ALRT
	Proliferative vitreo-retinopathy	Phase II	ALRT
ALRT1550 Oral(3)(4)	Cancer	Preclinical (IND 4Q 96)	ALRT
ALRT1109 & analogues(3)	Skin diseases and cancer	Preclinical	ALRT
ALRT1455 & analogues(3)	Leukemia, lymphoma, breast cancer	Preclinical	ALRT
ALRT620(3)	Cancer, skin and metabolic diseases	Preclinical	ALRT

LIGAND RETINOIDS				
Targretin (LGD1069)	Topical	Cutaneous T-cell lymphoma and other malignancies of skin	Phase III	Ligand worldwide
		Skin disease	Preclinical	Ligand worldwide
Targretin (LGD1069)	Oral	Lung cancer	PhaseII/III	Ligand worldwide
		Cancers, including cutaneous T-cell lymphoma, kidney, head and neck, KS	Phase IIB	Ligand worldwide
		Skin and metabolic diseases (diabetes)	Preclinical	Ligand worldwide
SEX STEROIDS				
Droloxifene (5)		Breast Cancer	Phase III	Pfizer
		Osteoporosis	Phase II	Pfizer
Estrogen agonist (CP336,156) (6)		Osteoporosis	Preclinical (IND or foreign equivalent 4Q 96)	Pfizer
Progesterone antagonists (LG1447 series)		Cancer, endometriosis, uterine fibroids	Lead compounds selected	American Home Products/Ligand(7)
Progesterone agonists (LG2527/2716 series)		Breast cancer, hormone replacement therapy	Lead compounds selected	American Home Products/Ligand(7)
Estrogen agonists		Osteoporosis	Lead compounds selected	American Home Products
Tissue selective estrogen or progesterone agonists and antagonists		Gynecological disease, cardiovascular disease, hormone replacement therapy	Lead compounds selected	American Home Products/Ligand(7)
Androgen antagonists (LG2293 series)		Prostate cancer, skin disease	Lead compounds selected	Ligand worldwide
Androgen agonists		Male hormone replacement therapy, osteoporosis	Lead compounds identified	Ligand worldwide
CARDIOVASCULAR/METABOLIC DISEASE				
Lipid regulators - LDL lowering		Atherosclerosis	Lead compounds selected	Glaxo
PPAR modulators		Atherosclerosis and other disorders affecting the cardiovascular system	Lead compounds selected	Glaxo
Lipid regulators - HDL elevation		Atherosclerosis	Research	Glaxo
INFLAMMATORY DISEASE				
Glucocorticoid agonists		Rheumatoid arthritis, inflammatory bowel disease, asthma, dermatitis	Lead compounds selected	Abbott/Ligand(7)
Interferon antagonists		Rheumatoid arthritis, inflammatory bowel disease, asthma, dermatitis	Lead compounds selected	Abbott/Ligand(7)

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PROGRAM		DISEASE INDICATION	DEVELOPMENT PHASE(1)	MARKETING RIGHTS
<S>		<C>	<C>	<C>
GLYCOMED INFLAMMATORY DISEASE				
Galardin MMPI (GM6001) Matrix metalloproteinase inhibitor(8)		Ophthalmic inflammation	Phase II/III completed	Ligand; Sankyo in Far East (ophthalmic indications)
GM1998 Cell adhesion inhibitor		Acute and chronic inflammation	Lead compounds selected	Ligand; Sankyo in Far East
GM1925, GM2296, GM1380 & analogues Cell adhesion inhibitors		Acute and chronic inflammation	Lead compounds selected	Ligand; Sankyo in Far East
GM1892 Endothelial protective agent		Reperfusion injury	Lead compounds selected	Ligand worldwide
GLYCOMED CANCER				
GM1474, GM1306 Growth factor modulators		Cancer	Lead compounds selected	Ligand worldwide
GM6001 & analogues Matrix metalloproteinase		Cancer	Lead compounds selected	Ligand worldwide

inhibitors			
GM1603 & analogues	Cancer	Lead compounds	Ligand worldwide
Heparinase inhibitors		selected	
STATS			
Interferon agonists	Cancer, infectious disease	Lead compounds selected	Ligand worldwide
Hematopoietic growth factors	Oncological uses, anemia	Lead compounds selected	SmithKline Beecham/Ligand(7)
Other cytokine agonists and antagonists	Cancer, immunology, growth control	Research	Ligand worldwide
IN-LICENSED			
PHOTOFRIN	Esophageal cancer, superficial bladder cancer	Market	Ligand (Canada only)
Proleukin	Kidney cancer	Market	Ligand (Canada only)

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(1) "Development Phase" refers to the current stage of development of the most advanced indication. "Research" activities include research related to specific IR and STATs targets and the identification of lead compounds. "Lead compounds" are chemicals that have been identified that meet preselected criteria in cell culture models for activity and potency against IR or STATs targets. More extensive evaluation is then undertaken to determine if the compound should be selected to enter into preclinical development. Once a lead compound is selected, chemical modification of the compound is then undertaken to create an optimal drug candidate. "Preclinical" includes pharmacology and toxicology testing in preclinical models (in vitro and animal), formulation work and manufacturing scale-up to gather necessary data to comply with applicable regulations prior to commencement of human clinical trials. "IND/foreign equivalent" means the initial regulatory filing required prior to commencement of human clinical trials. Clinical trials are typically conducted in three sequential phases that may overlap. In "Phase I," the initial introduction of the pharmaceutical into healthy human volunteers, the emphasis is on testing for safety (adverse effects), dosage tolerance, metabolism, distribution, excretion and clinical pharmacology. "Phase II" involves studies in a limited patient population to determine the efficacy of the pharmaceutical for specific targeted indications, to determine dosage tolerance and optimal dosage and to identify possible adverse side effects and safety risks. In the development of drugs for the treatment of cancer, the initial studies are often conducted in patients with otherwise untreatable cancers rather than in healthy volunteers. These trials are referred to as "Phase I/II" trials and are primarily intended to determine side effects, human pharmacokinetics and maximum tolerated dose. Once a suitable dose is established, limited trials in specific types of cancer to evaluate efficacy are conducted. These are referred to as "Phase IIB" trials. Once a compound is found to be effective and to have an acceptable safety profile in Phase II evaluations, "Phase III" trials (or "Phase II/III" trials for certain life-threatening indications) are undertaken to evaluate clinical efficacy further and to test further for safety within an expanded patient population at multiple clinical study sites. The FDA reviews both the clinical plans and the results of the trials and may discontinue the trials at any time if there are significant safety issues.

(2) Ligand and Allergan are engaged by ALRT to discover and develop retinoid-related drugs. If Ligand and Allergan repurchase Panretin (ALRT1057) or all of the outstanding callable common stock of ALRT, the parties will share profits, if any, from any products commercialized resulting from their activities.

(3) All rights currently owned by ALRT.

(4) The Company intends to file an IND for ALRT1550 Oral on behalf of ALRT in the fourth quarter of 1996. There can be no assurance that the clinical trials will proceed as planned or that any new drugs will be successfully developed. See "-- Government Regulation."

(5) Droloxifene is a Pfizer compound. Ligand performed work on droloxifene at Pfizer's request. Ligand and Pfizer entered into a settlement agreement with respect to a lawsuit in April 1996. Under the terms of the settlement agreement, the Company is entitled to receive milestones if Pfizer continues development and royalties if Pfizer commercializes the product. See

"-- Strategic Alliances -- Pfizer Inc."

(6) A compound discovered through the Company's collaborative relationship with Pfizer to which Pfizer has retained marketing rights. The Company has been informed by Pfizer that Pfizer intends to file an IND or foreign equivalent for CP336,156 in the fourth quarter of 1996. There can be no assurance that clinical trials will proceed as planned or that any new drugs will be successfully developed. See "-- Government Regulation."

(7) Ligand has retained certain compound rights. See "-- Strategic Alliances."

(8) Ligand is seeking a partner to further the development and commercialization of Galardin for ophthalmic use. See "-- Inflammatory Disease."

RETINOIDS

Retinoic acid, a derivative of Vitamin A, is one of the body's natural regulatory hormones and has a broad range of biological actions, influencing cell growth, differentiation, apoptosis and embryonic development. Many chemical analogues of retinoic acid, also called retinoids, also have biological activity. Specific retinoids have been approved by the FDA for the treatment of psoriasis and certain severe forms of acne. Evidence also suggests that retinoids can be used to arrest and, to an extent, reverse the effects of skin damage arising from prolonged exposure to the sun. Other evidence suggests that retinoids are useful in the treatment of a variety of cancers, including kidney cancer and certain forms of leukemia. For example, all-trans-Retinoic-acid ("ATRA") has been approved by the FDA for the treatment of APL. Retinoids have also shown an ability to reverse precancerous (premalignant) changes in tissues, reducing the risk of development of cancer, and have potential as preventive agents for a variety of epithelial malignancies, including skin, head and neck, bladder and prostate cancer.

Despite the therapeutic benefits of currently-marketed retinoids, their use to date has been limited by their propensity to cause significant side effects, such as severe birth defects if fetal exposure occurs, severe irritation of the skin and mucosal surfaces, elevation of plasma lipids, headache and skeletal abnormalities. Currently-marketed retinoids were developed and commercialized for their therapeutic benefits prior to the discovery of retinoid-responsive IRs ("RRs"), and were developed with suboptimal tools.

The six RRs that have been identified to date can be grouped in two subfamilies: Retinoic Acid Receptors ("RARs") and RXRs. Patent applications covering members of both families of RRs have been licensed exclusively to Ligand primarily from The Salk Institute, and have been further sublicensed to ALRT as part of the ALRT Offering. The RR subtypes appear to have different functions, based on their distribution in the various tissues within the body and data arising from in vitro studies and from studies of transgenic mice.

Several of the retinoids currently in commercial use are either non-selective in their pattern of RR subtype activation or are not ideal drugs for other reasons. Ligand, on its own and on behalf of ALRT, is developing chemically synthesized retinoids which, by selectively activating RR subtypes, may preserve desired therapeutic effects while reducing side effects. Because of their subtype selectivity or other desirable activities, Ligand's and ALRT's retinoid agonists are expected to have more specific pharmacological effects and less side effects, thus providing a better therapeutic index than currently used retinoids, many of which are not RR subtype specific or are suboptimal for other reasons.

Ligand, on behalf of ALRT, has two retinoid products in clinical trials, Panretin (ALRT1057) Topical and Panretin (ALRT1057) Oral, and six retinoid compounds in preclinical evaluation. In addition, Ligand has two retinoid products in clinical trials, Targretin (LGD1069) Topical and Targretin (LGD1069) Oral, which are the sole property of Ligand and have not been licensed to ALRT.

Panretin (ALRT1057) Topical. 9-cis-Retinoic acid (Panretin (ALRT1057)) is a non-peptide hormone isolated and characterized by Ligand in 1992 in collaboration with scientists at The Salk Institute and Baylor. This is the first non-peptide hormone discovered in over 25 years and appears to be a natural ligand for the RAR and RXR subfamilies of retinoid receptors. 9-cis-Retinoic acid has pharmacological properties which ALRT and Ligand believe

give it therapeutic utility.

In June 1994, prior to the formation of ALRT, Ligand initiated a Phase I/II human clinical trial for Panretin (ALRT1057) Topical in AIDS-related, cutaneous KS. Interim results of this Phase I/II clinical trial reported in January 1996 showed that, when evaluated at 12 weeks after the start of each patient's therapy, Panretin (ALRT1057) Topical induced a partial or complete clinical response in 30% of 43 patients with AIDS-related, cutaneous KS evaluated by AIDS Clinical Trial Group ("ACTG") criteria as applied to topical therapy, compared with 9% of patients with untreated control lesions. This interim assessment supports results of an earlier assessment reported in September 1995. Following a meeting with the FDA in November 1995, ALRT launched in the second quarter of 1996 a pivotal Phase III study to evaluate Panretin (ALRT1057) Topical in over 200 patients with AIDS-related, cutaneous KS. In addition, Panretin (ALRT1057) Topical is scheduled to begin Phase III trials for KS in Europe in the fourth quarter of 1996. The Company intends to file an NDA for Panretin (ALRT1057) Topical on behalf of ALRT for treating KS in 1997 in the event that Phase III trials demonstrate sufficient safety and efficacy.

Panretin (ALRT1057) Oral. In completed Phase I/IIA human clinical trials, Panretin (ALRT1057) Oral was well tolerated at doses as high as 140 mg/m(2)/day (milligram per square meter of body surface, per day), the maximum tolerated dose ("MTD"). At the MTD level, side effects, including headaches, elevated triglyceride levels, hypercalcemia and mucocutaneous irritation, were dose limiting toxicities. Memorial Sloan-Kettering Cancer Center ("Sloan-Kettering") interim data indicate that nine of 39 patients with advanced or otherwise untreatable cancer treated with Panretin (ALRT1057) Oral experienced no disease progression for periods ranging from 14 to 28 weeks. The Phase I/IIA clinical data also indicate that Panretin (ALRT1057) Oral has good bioavailability. Patient exposure to Panretin (ALRT1057) Oral is proportional to the administered dose of the compound over a broad range of doses. Clinical results to date show that, unlike ATRA, Panretin (ALRT1057) Oral at doses up to 83 mg/m(2)/day does not induce its own inactivating metabolism, indicating that it may be more suitable than ATRA for chronic administration for the treatment of certain cancers, including APL.

United States and international Phase IIB trials have been launched with Panretin (ALRT1057) Oral in a number of cancer indications, including kidney cancer (in combination with interferon alpha), KS, prostate cancer, non-Hodgkin's lymphoma and multiple myeloma. In addition, a Phase III trial with Panretin (ALRT1057) Oral in APL is scheduled to begin in the fourth quarter of 1996. In a Phase I/IIA trial, six out of 15 patients with APL treated with Panretin (ALRT1057) Oral had complete remissions, of which three had relapsed from previous ATRA treatment and/or chemotherapy and three were newly diagnosed. Cell culture based analysis of leukemia cells from some of the patients in this study indicated that resistance to ATRA was not overcome by Panretin (ALRT1057) Oral. Additional Phase IIB trials of Panretin (ALRT1057) Oral in other indications including ovarian cancer (with cis-platin) are scheduled to be launched in the fourth quarter of 1996. Panretin (ALRT1057) Oral entered a Phase II trial for psoriasis in the United States in September 1995, a Phase IIB trial for myelodysplastic syndrome in Europe in the second quarter of 1996 and a Phase II trial for proliferative vitreo-retinopathy, a serious complication of retinal detachment which can lead to blindness, in the United States in the third quarter of 1996. The FDA has approved an application by Ligand, on behalf of ALRT, to have Panretin (ALRT1057) Oral designated an "Orphan Drug" for the treatment of APL.

There is currently substantial interest among oncologists in the potential of retinoids, as evidenced by the existence of over 60 open protocols at the National Cancer Institute ("NCI") to examine the effects of retinoids on a variety of cancers. Additionally, a protocol for Panretin (ALRT1057) Oral in KS has been accepted by the newly-formed AIDS-Related Malignancy Consortium under the sponsorship of the NCI and patient accrual under this protocol is expected in the fourth quarter of 1996. In addition, Panretin (ALRT1057) Oral will be evaluated in HIV-positive patients in a trial planned by the NCI to examine its ability to help sustain helper T-cell (CD4) levels. A Phase I/II study is currently being conducted by the NCI to evaluate the safety and efficacy of Panretin (ALRT1057) Oral in children with malignancies, and trials are underway sponsored by the NCI to evaluate Panretin (ALRT1057) Oral in patients with cervical cancer and those with breast cancer.

ALRT1550 Oral and Other ALRT Compounds. ALRT's drug development pipeline includes six additional retinoid compounds in preclinical evaluation. One of these, ALRT1550, is a very potent and selective RAR agonist which strongly inhibits growth of several human cancer cell lines. Animal studies and formulation work are underway in preparation for an IND submission in the fourth quarter of 1996. ALRT has several additional retinoid compound series in advanced preclinical evaluation to identify suitable development candidates. These include: (i) ALRT1109 and analogues, RAR antagonists for topical use to ameliorate mucocutaneous irritation accompanying therapy for cancer or skin disease with systemic retinoids such as Accutane, Vesanoid, and Panretin (ALRT1057) Oral, and (ii) ALRT1455 and analogues, RAR-alpha-selective retinoids for possible use in treating leukemias, lymphoma, and breast cancer. Preclinical studies with RXR-selective retinoids such as ALRT620 indicate possible utilities in various metabolic disorders such as diabetes mellitus.

Targretin (LGD1069) Topical and Targetin (LGD1069) Oral. Ligand has created synthetic retinoids that show distinctive patterns of RR subtype selectivity. Ligand's research indicates that one of these retinoids, Targretin (LGD1069), has a beneficial effect in squamous epithelial growth, showing activity with human

skin cells in culture and in a preclinical model of psoriasis. Targretin (LGD1069), which is the first RXR-selective retinoid in clinical development, has shown anti-cancer activity in vitro and in vivo preclinically. Because Targretin (LGD1069) has attractive preclinical effects to induce programmed cell death (apoptosis) in cancer cell lines, Ligand believes it may have utility in solid tumors, such as breast, colon or lung cancer, which grow relatively slowly and therefore respond poorly to conventional cytotoxic chemotherapeutic agents. In vivo preclinical data indicate that Targretin (LGD1069) is orally and topically active and well tolerated. Ligand's research indicates that Targretin (LGD1069) has a pattern of RR subtype activation distinct from that of ALRT1057.

Preclinical studies with RXR-selective retinoids such as Targretin (LGD1069) Oral indicate possible utilities in breast cancer and metabolic disorders such as diabetes mellitus. Preclinical studies in mouse models of human type II diabetes, a subset of diabetes mellitus, and obesity demonstrated the ability of Targretin (LGD1069) to decrease blood glucose, triglyceride and insulin levels. In a rat model of breast cancer prevention, Targretin (LGD1069) reduced incidence and tumor frequency at least as well as an estrogen antagonist compared to control, without the undesirable reduction in mean body weight produced by the estrogen antagonist.

In June 1994, Ligand initiated Phase I/II clinical trials in patients with a form of skin lymphoma or with cutaneous KS with Targretin (LGD1069) Topical. In interim data presented by the Company in September 1996, Targretin (LGD1069) Topical induced responses in 37% of 30 patients with cutaneous T-cell lymphoma ("CTCL"). In January 1996, the Company presented interim data which showed that Targretin (LGD1069) Topical induced responses in 15% of 46 patients with AIDS-related KS, a result which confirmed earlier interim results presented in September 1995. The Company has met with the FDA on trial design and is launching a pivotal Phase III clinical trial in CTCL. All rights to Targretin (LGD1069) Topical are the sole property of Ligand and have not been licensed to ALRT.

Ligand initiated clinical trials for Targretin (LGD1069) Oral for cancer indications in January 1994. Phase I/IIA trials in patients with advanced cancer were conducted at centers including Sloan-Kettering and the Lombardi Comprehensive Cancer Center at Georgetown University. These studies were designed to gather human safety data and to determine the maximum tolerated dose of Targretin (LGD1069) Oral to facilitate design of Phase IIB and later studies. Phase I/IIA interim trial results of Targretin (LGD1069) Oral were presented by Sloan-Kettering investigators at ASCO in May 1995. The Sloan-Kettering team reported on 33 patients with various cancers treated at oral daily doses up to 140 mg/m(2)/day. No dose limiting toxicities were reported in the study and investigators reported that the bioavailability of the drug is excellent. To date, in three Phase I/IIA trials over 115 patients with advanced cancers have been treated at doses up to 1000 mg/m(2)/day. Fifteen lung cancer patients have been treated for over 90 days (the longest for 56 weeks) and one head and neck cancer patient has continued treatment for over 80 weeks and remains on treatment with stable disease. The safety profile of Targretin (LGD1069) Oral remains favorable. The drug also has displayed milder side effects than those

often seen with other retinoids, and it appears to be well-tolerated at doses which are clinically active. Phase I/IIA studies are continuing. A Phase II/III clinical trial has begun in lung cancer, Phase IIB clinical trials have begun in KS and prostate cancer, a Phase II clinical trial has begun in kidney cancer (in combination therapy with interferon alpha), a Phase I/II clinical trial has begun in head and neck cancer and a Phase II/III clinical trial in CTCL is expected to begin in the fourth quarter of 1996. All rights to Targretin (LGD1069) Oral are the sole property of Ligand and have not been licensed to ALRT.

SEX STEROIDS

The primary objective of Ligand's sex steroid program is to define agonists, partial agonists and antagonists of the sex steroid receptors as drugs for hormonally-responsive cancers of men and women, hormone replacement therapies and the treatment and prevention of diseases affecting women's health as well as hormonal disorders prevalent in men. Ligand's programs in the sex steroid areas target (i) development of tissue-selective modulators of the progesterone receptor ("PR") and estrogen receptor ("ER") for uses including various chronic disease indications and (ii) the development of androgen receptor ("AR") agonists and antagonists for use in cancer and other indications. Lead compounds have been identified in each of these project areas. Substantial medicinal chemistry efforts have yielded compounds active in animals as PR and AR modulators. Ligand is pursuing these programs alone and in collaboration with certain partners. In the

research phase of a collaboration with Pfizer, potentially attractive ER modulators were identified as development candidates and backup candidates. In a collaboration with American Home Products, several advanced sex hormone receptor modulators are advancing in preclinical evaluation. Ligand has filed a patent application on fundamental advances made in understanding sex steroid receptor function with significant drug discovery implications.

Progesterone Receptor Antagonists and Agonists. The objective of this program is to develop novel PR antagonists, partial agonists and agonists for chronic therapies. As part of this program, Ligand is also pursuing PR agonists and partial agonists with related chemical structures for use in hormone replacement therapy, breast cancer, contraception and other applications in women's health.

Exploratory clinical research indicates that PR antagonists may have utility in a variety of chronic diseases, including endometriosis and cancer. Although PR antagonists currently are used clinically for acute indications, their use in chronic diseases is likely to be limited by their cross-reaction with the glucocorticoid receptor, which is anticipated to produce adverse side effects with chronic administration. Ligand believes that more selective PR antagonists will be useful in the treatment of many hormone responsive diseases, including gynecological and malignant disorders, such as breast and uterine cancer, uterine fibroids (benign smooth muscle tumors) and endometriosis. Because of the very close structural similarity of the IRs for progesterone and glucocorticoids, it has proven difficult to find noncross-reactive compounds. This has been made more difficult because medicinal chemists have been largely constrained to steroid structures as lead compounds.

Ligand believes that it has an excellent opportunity, based on its proprietary tools and approaches, to develop a specific PR antagonist that does not cross-react with the IR for glucocorticoids. Ligand has discovered several non-steroidal lead compounds that are PR antagonists. Ligand has also discovered closely related compounds that are full agonists of the PR, which may be useful in breast cancer, contraception and hormone replacement therapy. These lead compounds were detected in Ligand's natural product and defined chemical screening programs using the co-transfection assay and the cloned human PR. Medicinal chemistry efforts at Ligand based on one of these non-steroidal antiprogestin leads have yielded potent, selective compounds with demonstrable antiprogestin pharmacological effects both in vitro in human breast cancer cells and in vivo in rodents.

In January 1996, American Home Products exercised its option to include compounds that Ligand had discovered that modulate PRs and to expand the collaboration to encompass the treatment or prevention of osteoporosis through the ER. Ligand's proprietary PR modulators added to the collaboration include

three series: LG1447 PR antagonists, and LG2527 and LG2716 PR agonists. In May 1996, American Home Products expanded the collaboration further to include four advanced chemical compound series from the Wyeth-Ayerst internal ER-osteoporosis program. See "-- Tissue Selective Estrogen and Progesterone Agonists."

Estrogen Agonists. Osteoporosis is a disease characterized by significant loss of bone mass. The disease, which predominantly affects post-menopausal women, leads to a greater susceptibility to traumatic bone fractures and can lead to curved spine ("dowager's hump") or hip fractures in elderly women. The disease is ordinarily treated by giving women therapeutic doses of estrogen or other steroidal analogues of estrogen. Estrogen therapy is a suboptimal treatment of the disease because of significant side effects, including an increased risk of developing uterine cancer. Estrogen therapy is not well tolerated, and over 60% of women abandon the therapy within the first year. Nevertheless, the market for estrogen therapy in the United States alone exceeds $850 million annually and is estimated by Ligand to approximate $1.4 billion worldwide.

The objective of the collaboration between Ligand and Pfizer was to discover and develop novel therapies for osteoporosis acting through IRs. The program focused on estrogen agonists that have greater tissue specificity for bone than current forms of estrogen replacement therapy. In November 1993, Ligand and Pfizer announced the successful completion of the research phase of their alliance with the identification of a development candidate and backups for the prevention and treatment of osteoporosis. In preclinical studies, the candidates from the program mimic the beneficial effects of estrogen on bone (stabilization of bone mineral density and skeletal integrity) and have an impact on serum lipids often associated with cardioprotec-

tion without increasing uterine or breast tissue proliferation. Ligand has been informed that Pfizer intends to file an IND or foreign equivalent for CP336,156 in the fourth quarter of 1996.

Tissue Selective Estrogen and Progesterone Agonists. In addition to the effects of estrogens and progesterones on the reproductive system, estrogens exert a number of other influences in the body, including beneficial effects on the cardiovascular and skeletal systems. After menopause, replacement of lost estrogens is effective but not well tolerated due to adverse side effects. Building on insights emerging from its research, Ligand believes that it has developed a novel approach to achieving tissue selective estrogen or progesterone agonist action. Ligand's approach is not dependent on the existence of receptor subtypes, although subtypes have been demonstrated for the ER and PR which may offer other drug discovery opportunities. Ligand has designed and implemented novel screens which Ligand believes will detect sex steroid receptor agonists with desirable pharmacological profiles. Ligand believes that these compounds will be useful in treating a variety of hormone-responsive diseases, such as endometriosis, uterine fibroids and cancers of the uterus and breast. Additionally, Ligand believes that the compounds emerging from this program can be used in reproductive medicine and hormone replacement therapy.

In September 1994, Ligand entered into a collaboration with American Home Products in the area of ER and PR modulators for use in women's health. The objective of this collaborative program is to discover and develop drugs which interact with the ER or PR to produce tissue-selective actions. An important additional aspect of this collaboration is Ligand's right to assay American Home Products' extensive chemical library for activity against a selected set of targets of Ligand's internal programs. Ligand may select up to 24 lead compounds for internal development to which Ligand has worldwide rights. American Home Products has agreed to provide up to $21.5 million in research funding to support up to 18 Ligand scientists during the term of the collaboration.

Androgen Receptor Agonists and Antagonists. The primary objective of this project is to develop novel AR agonists or antagonists for male hormone replacement therapy and the treatment of skin disorders, osteoporosis, prostate cancer and other diseases. The growth of most prostate cancers appears to be stimulated by or dependent upon androgens. The use of androgen antagonists has shown efficacy in the treatment of prostate cancer. Currently, the FDA has approved two androgen antagonists for use in the treatment of prostate cancer and a third is in clinical development. None of these are Ligand compounds. These agents appear to have significant side effects. Ligand believes that there is a substantial medical need for improved androgen modulators for use in the

treatment of prostate cancer.

AR agonists and antagonists with an improved side effect profile may also provide utility in the treatment of benign prostatic hypertrophy, acne, hirsutism, male-pattern baldness and cachexia associated with chronic disease (e.g., cancer, auto-immune disorders and AIDS). Ligand has exclusively licensed patent applications for the cloned human AR and is employing it to identify novel AR agonists and antagonists. Ligand has identified non-steroidal lead compounds from its internal screening programs. An internally directed medicinal chemistry effort has produced potent, selective, patentable AR agonists and antagonists which show pharmacological activity in vivo in rodents. Compounds from these series are being optimized and will be further evaluated as potential preclinical candidates. Ligand intends to pursue the specialty applications emerging from these projects internally, but may seek a collaboration with a pharmaceutical company to exploit broader clinical applications.

CARDIOVASCULAR/METABOLIC DISEASE

Ligand scientists are exploring the role of certain orphan IRs in disorders affecting the cardiovascular system. Data suggest that these receptors regulate the expression of apolipoprotein A1 ("ApoA1"). ApoA1 is the major protein constituent of high-density lipoprotein ("HDL"), and recent data link increased levels of ApoA1 to prevention of atherosclerosis.

Another subfamily of orphan IRs, Peroxisome Proliferator Activated Receptors ("PPARs"), have been implicated in lowering plasma levels of very low density lipoproteins and triglycerides. Data implicate PPARs in the mechanism of action of lipid lowering drugs such as Lopid. Ligand has discovered three subtypes of this PPAR class and defined novel aspects of their action. The subtype PPAR alpha appears to regulate the

metabolism of certain lipids. PPAR alpha agonists may be useful to treat atherosclerosis and diabetes mellitus. PPAR gamma plays roles in fat cell differentiation and cellular responses to insulin. Modulators of PPAR gamma activity (e.g., the glitazone class of insulin sensitizers) may have utilities in the management of diabetes mellitus and/or obesity.

PPARs function in cells with RXRs as partner proteins. In addition to compounds that act directly on PPARs, which may have utility in various cardiovascular and metabolic disorders, certain retinoids able to activate RXRs (e.g., Targretin (LGD1069) Oral and ALRT620) and indirectly activate PPARs may also have utilities in these disorders. Preclinical animal studies have demonstrated that Targretin (LGD1069) has beneficial effects in animal models of diabetes.

Ligand has established sophisticated high throughput assays to screen for drug selectivity associated with structural classes of thyroid hormone receptors to identify compounds which could selectively mimic thyroid hormone's cardioprotective lipid lowering effects without its impact on heart rate and nervous system activity.

In September 1992, Ligand entered into a collaboration with Glaxo to discover and develop drugs for the prevention or treatment of atherosclerosis and other disorders affecting the cardiovascular system. In collaboration with Glaxo, Ligand is working to discover drugs which produce beneficial alterations in lipid and lipoprotein metabolism in projects focused on (i) regulation of cholesterol biosynthesis and expression of a receptor which removes cholesterol from the blood stream, (ii) the IRs influencing circulating HDL levels and (iii) PPARs, the subfamily of IRs activated by the clofibrate class of lipid lowering drugs, Lopid and Atromid-S. The collaboration with Glaxo has also identified a novel lead structure that activates selected PPAR subfamily members.

The collaboration with Glaxo significantly enhances Ligand's pharmacological, medicinal chemistry and clinical development resources related to cardiovascular disease. Ligand and Glaxo have screened compounds to identify potential lead compounds. A lead compound showing in vivo activity in rodents has been selected for lowering low-density lipoprotein ("LDL") cholesterol by up-regulating LDL receptor gene expression in liver cells. Once leads are identified, Glaxo has primary responsibility for pharmacology, medicinal chemistry to optimize the drug candidates, preclinical testing and for conducting clinical trials of the drug candidates for marketing approval by the

FDA and certain other regulatory agencies.

INFLAMMATORY DISEASE

Ligand is utilizing four innovative approaches to discover drugs for the treatment of inflammation. Two approaches are being pursued in partnership with Abbott, a third approach is being pursued in collaboration with Sankyo, and a fourth approach uses Glycomed technology. These programs and approaches target diseases such as rheumatoid arthritis, asthma, and reperfusion injury.

In collaboration with Abbott, Ligand is seeking novel small molecule anti-inflammatory drugs. The collaborative program includes (i) several approaches to discovering modulators of glucocorticoid receptor activity that are better than currently known anti-inflammatory steroids such as hydrocortisone and dexamethasone and (ii) approaches to the discovery of blockers of the actions of the inflammation-promoting cytokines, interferon alpha and interferon gamma, through inhibition of their STAT-mediated signal transduction. A number of lead compounds have been identified and are currently being optimized for further drug development.

In collaboration with Sankyo, Glycomed scientists are synthesizing and testing compounds that block the adhesion of white blood cells to tissue. Some forms of inflammation are thought to be maintained by continued accumulation of white blood cells at sites of tissue injury. This accumulation is caused by adhesion of the white cells to the endothelial linings of blood vessels in the injured tissue. Research suggests the inflammatory process can be blocked by interfering with white blood cell adhesion, thus reducing tissue localization of the white cells. Inhibiting this process at its early stages by blocking the action of selectins (cell surface proteins mediating adhesion) may provide potent treatments for a variety of acute and chronic inflammatory diseases such as rheumatoid arthritis and asthma. Two lead compound series show improved potency over the natural adhesion ligands and a potential third lead series is currently under evaluation.

Glycomed is also conducting a research program directed toward the discovery of MMPIs, orally available molecules which inhibit the action of enzymes that facilitate the spread of tumor or inflammatory cells. Evaluation of defined structural analogues which may enhance oral availability is in progress. Several analogues demonstrate improved oral availability and current efforts are directed at optimizing this characteristic. Glycomed has begun in vivo tests of selected MMPIs in models of arthritis and cancer.

Galardin (GM6001). MMPIs are also potent inhibitors of a class of enzymes involved in the degradation of proteoglycans and collagen. Galardin, a metalloproteinase inhibitor, is a small, easily-synthesizable molecule that has demonstrated effectiveness at very low concentrations in the prevention of corneal ulceration in animals following alkali injury to the eye. The MMPI Galardin was the first compound for which Glycomed filed an IND. Glycomed received Orphan Drug designation for Galardin in December 1991 and completed enrollment for the Phase II/III clinical trials in July 1994. The study, involving over 500 patients with corneal injury, produced the statistically significant finding that Galardin treatment reduced the number of patients in which perforation of the cornea developed in the period after injury. In contrast, the results of this Phase II/III study of Galardin in corneal injury did not demonstrate a statistically significant impact of Galardin, applied topically in the eye, on the rate of healing of corneal ulcers, the principal intended study endpoint. Perforation is caused by destruction of the full thickness of the cornea. It is one of the most serious complications associated with corneal ulcers and can lead to blindness. Corneal perforation is a significant risk for an estimated 120,000 of the patients with corneal ulcers in the United States each year. Ligand is seeking a partner to further the development and commercialization of Galardin for ophthalmic use. Composition of matter and use patents (in corneal ulceration) have been issued in the United States.

In February 1994, Glycomed signed a License Agreement with Sankyo for all ophthalmic indications in the Far East for Galardin and analogues, while Glycomed has retained rights in the rest of the world.

STATS

The recent discovery of the role of STATs and JAKs explains the mechanism through which many cytokines modulate gene expression and cellular function. The cytokines that produce cellular responses through the STAT/JAK pathway include the interferons, most of the interleukins, the hematopoietic growth factors, growth hormone and leptin.

Ligand's STAT/JAK signaling programs are focused on applications for inflammation, infection, transplant rejection, allergy and blood cell deficiencies induced in patients receiving chemotherapy. Ligand's first collaborative effort to utilize the STAT/JAK approach to drug discovery is with Abbott in the field of inflammation. Ongoing screening in this program has led to the selection of a lead compound for interferon antagonist activity.

Ligand's second collaboration in the STAT/JAK area is with SmithKline Beecham to discover and characterize small molecule, orally bioavailable drugs to enhance the formation and development of blood cells (hematopoiesis). Working together, Ligand and SmithKline Beecham scientists were able to validate a STAT/JAK-based high throughput screen for hematopoietic growth factors, thus achieving the first milestone of the collaboration in under nine months. Based on this and additional collaborative work, the research teams of SmithKline Beecham and Ligand are exploiting recent insights into the roles of JAKs and STATs in mediating hematopoietic growth factor signal transduction and blood cell formation. The Company's goal is to discover orally active compounds that effectively enhance blood cell formation in a variety of anemias and after cancer therapy. Several lead compounds have been identified.

Ligand's internal STATs research group is focused on the discovery of new leads with potential utility as cancer therapeutics, and the development of high throughput screens for agonists and/or antagonists of therapeutically relevant cytokines that use the STAT/JAK pathway. Current efforts have allowed the Company to identify the components required for high throughput screening for thrombopoietin agonists to stimulate blood platelet production and IL-4 antagonists to treat allergy and asthma.

IN-LICENSED PRODUCTS

PHOTOFRIN. In March 1995, Ligand acquired from QLT exclusive Canadian marketing rights to PHOTOFRIN, porfimer sodium, a laser-activated drug for use in photodynamic therapy for esophageal and

superficial bladder cancer. In July 1995, Ligand, through its wholly-owned Canadian subsidiary Ligand Canada, began distribution of PHOTOFRIN. There are over 3,500 new cases of superficial bladder cancer and 1,200 new cases of esophageal cancer diagnosed each year in Canada. Ligand Canada also has rights to sell the product for any other approved indications in Canada. PHOTOFRIN has been approved in the United States in esophageal cancer, in the Netherlands for lung and esophageal cancers and in Japan for early-stage lung, esophageal, gastric and cervical cancers.

Proleukin. In September 1994, Ligand entered into an agreement with Cetus Oncology to exclusively market in Canada Proleukin, its recombinant human Interleukin-2 (aldesleukin) for the treatment of kidney cancer. In April 1995, Ligand Canada began distribution of Proleukin. It is also being tested with alpha interferon to determine if additional indications are feasible. There are nearly 5,000 new cases of kidney cancer reported in Canada each year.

The Company has initiated Phase IV trials in Canada with both Proleukin and PHOTOFRIN to further characterize the drugs clinically and facilitate broader acceptance of both products.

STRATEGIC ALLIANCES

SmithKline Beecham Corporation. In February 1995, Ligand entered into a collaborative agreement with SmithKline Beecham providing for a three-year research program (with an option to extend the program for two years at SmithKline Beecham's election) to utilize Ligand's proprietary STATs technology to discover and characterize small molecule, orally bioavailable drugs to control hematopoiesis (the formation and development of blood cells). Under the terms of the agreement, SmithKline Beecham has been granted exclusive worldwide rights for products resulting from the collaboration in certain targeted areas. In exchange, SmithKline Beecham has agreed to provide Ligand up to $9.0 million

in research funding and up to $12.5 million in equity investments. This amount includes an initial equity investment of $5.0 million in Common Stock. In November 1995, a second installment of equity investment of $2.5 million was provided to Ligand upon the achievement of certain milestones. The final two installments of $2.5 million each will be provided, the third as an equity investment and the final at SmithKline Beecham's option as a convertible note or an equity investment, if SmithKline Beecham elects to further expand the scope of research as defined or elects to extend the collaboration. SmithKline Beecham will make additional milestone payments to Ligand as compounds progress in clinical development and will also make royalty payments on product sales. Ligand has the right to select up to three compounds related to hematopoietic targets for development as anti-cancer products other than those compounds selected for development by SmithKline Beecham. SmithKline Beecham has the option to co-promote these products with Ligand in North America and to develop and market them outside North America. SmithKline Beecham can terminate the research program upon 60 days notice in the event of any breach by Ligand or upon six months notice at any time after August 1996. As of June 30, 1996, SmithKline Beecham had funded approximately $3.3 million of the total of $9.0 million in potential research funding under the agreement.

American Home Products Corporation. In September 1994, Ligand entered into a collaborative agreement with American Home Products providing for a three-year research program (with an option to extend the program for two years at American Home Product's election) to discover and develop drugs which interact with estrogen or progesterone receptors for use in hormone replacement therapy, anti-cancer therapy, gynecological diseases, central nervous system disorders associated with menopause and fertility control. American Home Products has been granted exclusive worldwide rights to all products discovered in the collaboration that are agonists or antagonists to the PRs and ERs for application in the fields of women's health and cancer therapy. Under the agreement, American Home Products agreed to provide up to $19.0 million in research funding and up to $25.0 million in equity and convertible notes, in addition to milestone and royalty payments to Ligand for such products. An important additional aspect of this collaboration is Ligand's right to assay American Home Products' extensive chemical library for activity against a selected set of targets of Ligand's internal programs. Ligand may select up to 24 lead compounds for internal development to which Ligand has worldwide rights. American Home Products made a $5.0 million equity investment in Ligand and provided $10.0 million to Ligand in the form of a convertible note. A second convertible note installment of $5.0 million is also available to Ligand due to the achievement of certain

milestones in the second quarter of 1995. A final convertible note installment of $5.0 million will be provided if American Home Products exercises its option to extend the period of collaboration from three to five years. The notes issued to American Home Products are convertible into Common Stock at $10.01 per share for the first two installments and at $10.88 per share for the final installment. The conversion prices are subject to adjustment if certain dilutive events occur to outstanding Common Stock. In August 1996, Ligand elected to convert an aggregate of $3.8 million of the $10.0 million convertible note into 374,626 shares of Common Stock at the $10.01 conversion price.

In January 1996, American Home Products exercised its option to include compounds discovered by Ligand that modulate PRs and to expand the collaboration to encompass the treatment or prevention of osteoporosis through the ER. In connection with the exercise of the option, the Company received $2.5 million in additional research revenue and funding commitments. Ligand's proprietary PR modulators added to the collaboration include three series: LG1447 PR antagonists, LG2527 and LG2716 PR agonists. In May 1996, American Home Products expanded the collaboration to include four advanced chemical compound series from its internal ER-osteoporosis program. As of June 30, 1996, American Home Products had funded approximately $10.1 million of the total of $21.5 million in potential research funding under the agreement.

Abbott Laboratories. In July 1994, Ligand entered into a collaborative agreement with Abbott providing for a five-year research program to discover and develop small molecule compounds for the prevention or treatment of inflammatory diseases. Under the agreement, research funding provided by Abbott may total up to approximately $16.0 million. Abbott has also committed significant internal resources to the collaboration. Abbott was granted exclusive worldwide rights for all products discovered in the collaboration for use in inflammation. Ligand

was granted exclusive worldwide rights for all anti-cancer products discovered in the collaboration. Abbott will make milestone and royalty payments on products targeted at inflammation resulting from the collaboration, while Ligand will make milestone and royalty payments on products targeted at anti-cancer resulting from the collaboration. Each party will be responsible for the development, registration and commercialization of the products in its respective field. Abbott made an initial $5.0 million equity investment in Ligand and purchased an additional $5.0 million of equity in August 1995. Abbott can terminate the research program at any time upon 90 days notice in the event of any breach by Ligand or upon four months notice at any time. As of June 30, 1996, Abbott had funded approximately $5.2 million of the total of $16.0 million in potential research funding under the agreement.

Sankyo Company Limited. As part of the Glycomed merger, the Company acquired a collaborative research agreement with Sankyo which Glycomed had entered into in June 1994 providing for a three-year research program. Under the agreement, Sankyo reimburses a portion of the Company's research expenses related to the collaboration up to an aggregate of $8.0 million. The agreement also provides that upon being presented with a target compound arising from the research collaboration with the Company, Sankyo will notify the Company whether it wishes to pursue development of the compound. If Sankyo exercises its option to develop the compound, the Company and Sankyo will negotiate in good faith the terms and conditions for an option and license agreement and Sankyo will make additional milestone payments. In connection with the collaborative research agreement, in September 1995, Sankyo made an equity investment of $1.5 million in the Company. Sankyo can terminate the research program at any time upon 30 days notice in the event of any breach by Glycomed. As of June 30, 1996, Sankyo had funded approximately $5.4 million, of which $3.1 million has been funded since the Merger, of the total of $8.0 million in potential research funding under the agreement.

Glaxo-Wellcome plc. In September 1992, Ligand entered into a collaborative agreement with Glaxo providing for a five-year research program to discover and develop drugs for the prevention or treatment of cardiovascular disease. The collaboration significantly enhances Ligand's pharmacological, medicinal chemistry and clinical development resources related to cardiovascular disease. Glaxo has committed significant internal resources to the collaboration and will fund one-half of Ligand's research expenses to support 18 Ligand scientists assigned to the collaboration. Ligand and Glaxo will screen compounds to identify potential lead compounds. Once leads have been identified, Glaxo will have primary responsibility for pharmacology, medicinal chemistry to optimize the drug candidates and preclinical testing. Glaxo also has responsibility for conducting clinical trials of the drug candidates for marketing approval by the FDA and certain other regulatory agencies. Ligand will receive milestone payments as compounds progress through the development cycle and a royalty on any commercialized products. Ligand has retained the right to develop and

commercialize products arising from the collaboration in markets not exploited by Glaxo or where Glaxo is not developing a product for the same indication. Glaxo has made a total of $10.0 million in equity investments in Ligand. Glaxo can terminate the research program at any time upon 180 days notice in the event of any breach by Ligand. As of June 30, 1996, Glaxo had funded approximately $6.9 million of the total of $10.0 million in potential research funding under the agreement.

Allergan, Inc. In June 1992, Ligand and Allergan formed the Joint Venture, owned 50 percent by each party, to discover, develop and commercialize retinoid drugs. As of December 31, 1994, Ligand and Allergan had each contributed $14.625 million in research funding to the Joint Venture. Allergan and Ligand shared losses equally from the Joint Venture. In December 1994, the Company and Allergan formed ALRT to continue the research and development activities previously conducted by the Joint Venture. In June 1995, the Company and ALRT completed the ALRT Offering of 3,250,000 Units with aggregate proceeds of $32.5 million and cash contributions by Allergan and Ligand of $50.0 million and $17.5 million, respectively, providing for net proceeds of $94.3 million for retinoid product research and development. Each Unit consisted of one share of ALRT's callable common stock and two warrants, each warrant entitling the holder to purchase one share of Common Stock. Immediately prior to the consummation of the ALRT Offering, Allergan Ireland made a $6.0 million investment in Common Stock. As part of the ALRT Offering, all rights held by the Joint Venture were licensed to ALRT. The Company, Allergan and ALRT entered into certain agreements,

including a Technology License Agreement, a Research and Development Agreement, a Commercialization Agreement, a 1057 Purchase Option Agreement, an Asset Purchase Option Agreement and Services and Administrative Agreements in connection with the funding of ALRT and pursuant to which Ligand and Allergan perform development work on certain retinoid compounds. ALRT can terminate the Research and Development Agreement at any time after a breach by Ligand or Allergan, subject to the right of the nonbreaching party to assume the obligations of the breaching party within 20 days of receipt of notice of the breach. The ALRT1057 Option is exercisable at prices ranging from $21.4 million to $36.2 million (of which $18.7 million to $31.7 million is payable by Ligand) at any time beginning June 1997 and ending the earlier of 90 days after regulatory approval for the commercial sale of Panretin (ALRT1057) Oral or Panretin (ALRT1057) Topical and June 2000. The ALRT1057 Option must be exercised by both Ligand and Allergan. As a result, Ligand can exercise the ALRT1057 Option only if Ligand and Allergan each conclude that the exercise of the ALRT1057 Option is in both of their best interests. In addition, pursuant to the ALRT Stock Purchase Option Ligand is entitled to purchase all ALRT callable common stock at prices ranging from $71.4 million to $120.7 million at any time between June 1997 and June 2000. If Ligand exercises the ALRT Stock Purchase Option, Allergan has an option to purchase an undivided 50% interest in all of the assets of ALRT at prices ranging from $8.9 million to $15.0 million. Since 1992, Allergan Ireland, a wholly owned subsidiary of Allergan, has made $30.0 million in equity investments in Ligand. As of June 30, 1996, ALRT had provided approximately $19.3 million in research funding to Ligand under the Research and Development Agreement.

Pfizer Inc. In May 1991, Ligand entered into a five-year collaborative agreement with Pfizer to develop better alternative therapies for osteoporosis. Pfizer agreed to provide up to $3.0 million per year in research funding to Ligand in addition to committing significant internal resources. In November 1993, Ligand and Pfizer announced the successful completion of the research phase of their alliance with the identification of development candidates for the prevention and treatment of osteoporosis. In preclinical studies, the candidates from the program mimic the beneficial effects of estrogen on bone and have an impact on blood serum lipids often associated with cardiac benefits without increasing uterine or breast tissue proliferation. Under the terms of the collaboration, Pfizer has primary responsibility for pharmacology, medicinal chemistry to optimize the drug candidates, preclinical testing, and clinical trials of drug candidates for marketing approval by the FDA and certain other regulatory agencies. Ligand has granted Pfizer exclusive worldwide rights to manufacture and market any compounds jointly developed for osteoporosis. Ligand is to receive up to $7.5 million in milestone payments as development objectives are achieved, in addition to royalties on sales of successful drugs that emerge from the alliance. As of December 31, 1993, Pfizer had made a total of $7.5 million of equity investments in Ligand and had funded approximately $9.4 million in research funding.

In December 1994, Ligand filed suit against Pfizer in the Superior Court of California in San Diego County for breach of contract and for a declaration of future rights as they relate to droloxifene, a compound upon which Ligand performed work at Pfizer's request during the collaboration between Pfizer and Ligand to

develop drugs in the field of osteoporosis. Droloxifene is an estrogen antagonist/partial agonist with potential indications in the treatment of osteoporosis and breast cancer as well as other applications. Ligand and Pfizer entered into a settlement agreement with respect to the lawsuit in April 1996. Under the terms of the settlement agreement, Ligand is entitled to receive milestone payments if Pfizer continues development and royalties if Pfizer commercializes droloxifene. At the option of either party, milestone and royalty payments owed Ligand can be satisfied by Pfizer transferring to Ligand shares of Common Stock at an exchange ratio of $12.375 per share. To date, Ligand has received approximately $1.3 million in milestone payments from Pfizer as a result of the continued development of droloxifene. These milestones were paid in the form of an aggregate of 101,011 shares of Common Stock, which were subsequently retired from treasury stock in September 1996. According to recent announcements by Pfizer, droloxifene has entered Phase II clinical trials for osteoporosis and Phase III clinical trials for breast cancer.

The Salk Institute of Biological Studies. In October 1988, Ligand established an exclusive relationship with The Salk Institute which is one of

the leading research centers in the area of IR technology. Dr. Ronald Evans, who cloned and characterized the first IR in 1985 and who invented the co-transfection assay used by Ligand, is a professor in the Gene Expression Laboratory of The Salk Institute and an Investigator of the Howard Hughes Medical Institute. Under the agreement, Ligand has an exclusive, worldwide license to the intracellular receptor technology developed by Dr. Evans' laboratory at The Salk Institute. Subject to compliance with the terms of the agreement, the term of the license extends for the life of the patents covering such developments.

Under the agreement, Ligand made an initial payment to The Salk Institute and issued shares of Common Stock as partial consideration for the license. Ligand is also obligated to make certain royalty payments based on sales of certain products developed using the licensed technology, as well as certain minimum annual royalty payments.

Ligand also entered into exclusive consulting agreements with Dr. Evans that continue through July 1998. Under these agreements, Dr. Evans has purchased Common Stock and has been granted options to purchase Common Stock. As a consultant, Dr. Evans meets on a regular basis with Company personnel to review ongoing research and to assist Ligand in defining the technical objectives of future research. Dr. Evans is also involved in identifying new developments made in other leading academic laboratories which relate to Ligand's research interests. Dr. Evans serves as Chairman of Ligand's Scientific Advisory Board

Baylor College of Medicine. In January 1990, Ligand established an exclusive relationship with Baylor, which is a leading center of IR technology. Dr. Bert W. O'Malley is a professor and the Chairman of the Center for Reproductive Biology at Baylor and leads IR research at that institution. Important features of Ligand's co-transfection assay were developed in Dr. O'Malley's laboratory and are exclusively licensed by Ligand. Ligand has entered into a series of agreements with Baylor under which it has an exclusive, worldwide license to IR technology developed at Baylor and to future improvements made in Dr. O'Malley's laboratory through October 1996. Subject to compliance with the terms of the agreements, the term of the license may extend for the life of the patents covering such developments.

Ligand works closely with Dr. O'Malley and Baylor in scientific IR research, particularly in the area of sex steroids and orphan IRs. Under the agreement, Ligand is obligated to make payments to Baylor College of Medicine in support of research done in Dr. O'Malley's laboratory for the period from April 1992 through March 1997. Ligand is also obligated to make certain royalty payments based on the sales of products developed using the licensed technology. Ligand has also entered into an exclusive consulting agreement with Dr. O'Malley that continues through September 1996. Dr. O'Malley is a member of Ligand's Scientific Advisory Board. Dr. O'Malley has purchased Common Stock and has been granted options to purchase Common Stock.

Rockefeller University. In September 1992, Ligand entered into a worldwide, exclusive license agreement with Rockefeller University and exclusive consulting agreements with Dr. James Darnell of Rockefeller University and Dr. David Levy of NYU to develop and commercialize certain technology involving STATs to control gene expression. Dr. Darnell is one of the leading investigators of the control of gene expression by STATs. Rockefeller University will receive (i) payments upon the transfer of the technology to Ligand and

upon the first four anniversary dates of the agreement, (ii) a royalty on any commercialized products and (iii) subject to a vesting schedule, shares of Common Stock and warrants to purchase shares of Common Stock. In consideration of related technology assigned by NYU to Rockefeller University and covered by the license agreement with Ligand, NYU received, subject to a vesting schedule, shares of Common Stock and warrants to purchase shares of Common Stock. Subject to a vesting schedule tied to their consulting agreements, Dr. Darnell and Dr. Levy received shares of Common Stock. In addition, in October 1994 Ligand granted Dr. Darnell options to purchase shares of Common Stock.

In addition to the collaborations discussed above, the Company also has a number of other consulting, licensing, development and academic agreements by which it strives to advance its technology.

PATENTS AND PROPRIETARY RIGHTS

Ligand believes that patents and other proprietary rights are important to its business. Ligand's policy is to file patent applications to protect technology, inventions and improvements to its inventions that are considered important to the development of its business.

The patent positions of pharmaceutical and biopharmaceutical firms, including Ligand, are uncertain and involve complex legal and technical questions for which important legal principles are largely unresolved. In addition, the coverage sought in a patent application can be significantly reduced before or after a patent is issued. This uncertain situation is also affected by revisions to the United States patent law adopted in recent years to give effect to international accords to which the United States has become a party. The extent to which such changes in law will affect the operations of Ligand cannot be ascertained. In addition, there is currently pending before Congress legislation providing for other changes to the patent law which may adversely affect pharmaceutical and biopharmaceutical firms. If such pending legislation is adopted, the extent to which such changes would affect the operations of the Company cannot be ascertained.

Ligand's success will depend in part on its ability to obtain patent protection for its technology both in the United States and other countries. A number of pharmaceutical companies and research and academic institutions have developed technologies, filed patent applications or received patents on various technologies that may be related to Ligand's business. Some of these patent applications, patents or technologies may conflict with Ligand's technologies or patent applications. Any such conflict could limit the scope of the patents, if any, that Ligand may be able to obtain or result in the denial of Ligand's patent applications. In addition, if patents that cover Ligand's activities are issued to other companies, there can be no assurance that Ligand would be able to obtain licenses to such patents at a reasonable cost, if at all, or be able to develop or obtain alternative technology. The Company has from time to time had, continues to have and may have in the future, discussions with its current and potential collaborators regarding the scope and validity of the Company's patent and other proprietary rights to its technologies, including the Company's co-transfection assay. If a collaborator or other party were successful in having substantial patent rights of the Company determined to be invalid, it could adversely affect the ability of the Company to retain existing collaborations beyond their expiration or, where contractually permitted, encourage their termination. Such a determination could also adversely affect the Company's ability to enter into new collaborations. If any disputes should arise in the future with respect to the rights in any technology developed with a collaborator or with respect to other matters involving the collaboration, there could be delays in the achievement of milestones or receipt of milestone payments or research revenues, or interruptions or termination of collaborative research, development and commercialization of certain potential prodcuts, and litigation or arbitration could result. Any of the foregoing matters could be time consuming and expensive and could have a material adverse effect on the Company.

Ligand owns or has exclusively licensed over 215 currently pending patent applications in the United States relating to Ligand's technology, as well as foreign counterparts of certain of these applications in many countries. There can be no assurance that patents will issue from any of these applications or, if patents do issue, that claims allowed will be sufficient to protect Ligand's technology. In addition, Ligand is the owner or exclusive licensee of rights covered by approximately 80 United States patents issued or allowed to it or to The Salk Institute, Baylor and other licensors. Further, there can be no assurance that any patents issued to Ligand

or to licensors of Ligand's technology will not be challenged, invalidated, circumvented or rendered unenforceable based on, among other things, subsequently discovered prior art, lack of entitlement to the priority of an earlier, related application, or failure to comply with the written description, best mode, enablement or other applicable requirements, or that the rights granted under any such patents will provide significant proprietary protection or commercial advantage to Ligand. The invalidation, circumvention or unenforceability of any of Ligand's patent protection could have a material adverse effect on the Company.

The commercial success of Ligand will also depend in part on Ligand's not

infringing patents issued to competitors and not breaching technology licenses that cover technology used in Ligand's products. It is uncertain whether any third-party patents will require Ligand to develop alternative technology or to alter its products or processes, obtain licenses or cease certain activities. If any such licenses are required, there can be no assurance that Ligand will be able to obtain such licenses on commercially favorable terms, if at all. Failure by Ligand to obtain a license to any technology that it may require to commercialize its products could have a material adverse effect on Ligand. Litigation, which could result in substantial cost to Ligand, may also be necessary to enforce any patents issued or licensed to Ligand or to determine the scope and validity of third-party proprietary rights. There can be no assurance that Ligand's patents or those of its licensors, if issued, would be held valid by a court or that a competitor's technology or product would be found to infringe such patents. If any of its competitors have filed patent applications in the United States which claim technology also invented by Ligand, Ligand may be required to participate in interference proceedings declared by the PTO in order to determine priority of invention and, thus, the right to a patent for the technology, which could result in substantial cost to Ligand to determine its rights.

Ligand has learned that a United States patent has issued to, and foreign counterparts have been filed by, Roche that include claims to a formulation of 9-cis-Retinoic acid (Panretin (ALRT1057)) and use of that compound to treat epithelial cancers. Ligand had previously filed an application which has an earlier filing date than the Roche patent and which has claims that the Company believes are broader than but overlap in part with claims under the Roche patent. Ligand's rights under its patent application have been exclusively licensed to ALRT. Ligand and ALRT are currently investigating the scope and validity of this patent to determine its impact upon the Panretin (ALRT1057) Oral and Topical products. The PTO has informed Ligand that the overlapping claims are patentable to Ligand and stated its intention to initiate an interference proceeding to determine whether Ligand or Roche is entitled to a patent by having been first to invent the common subject matter. The Company cannot be assured of a favorable outcome in the interference proceeding because of factors not known at this time upon which the outcome may depend. In addition, the interference proceeding may delay the decision of the PTO regarding the Company's application for the Panretin (ALRT1057) Oral and Topical products. While the Company believes that the Roche patent does not cover the use of Panretin (ALRT1057) Oral and Topical to treat leukemias such as APL and sarcomas such as KS, or the treatment of skin diseases such as psoriasis, if the Company does not prevail in the interference proceeding, the Roche patent might block the Company's use of Panretin (ALRT1057) Oral and Topical in certain cancers, and the Company may not be able to obtain patent protection for the Panretin (ALRT1057) Oral and Topical products.

Ligand also relies upon trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain its competitive position. There can be no assurance that others will not independently develop substantially equivalent proprietary information or otherwise gain access to or disclose such information of Ligand. It is Ligand's policy to require its employees, certain contractors, consultants, members of its Scientific Advisory Board and parties to collaborative agreements to execute confidentiality agreements upon the commencement of employment or consulting relationships or a collaboration with Ligand. There can be no assurance that these agreements will not be breached, that they will provide meaningful protection of Ligand's trade secrets or adequate remedies in the event of unauthorized use or disclosure of such information or that Ligand's trade secrets will not otherwise become known or be independently discovered by its competitors.

SALES AND MARKETING

The creation of infrastructure to commercialize products is a difficult, expensive and time-consuming process. Ligand currently has no sales and only limited marketing capability outside Canada. To market any of its products directly, the Company will need to develop a marketing and sales force with technical expertise and distribution capability or contract with other pharmaceutical and/or health care companies with distributions systems and direct sales forces. There can be no assurance that the Company will be able to establish direct or indirect sales and distribution capabilities or be successful in gaining market acceptance for proprietary products or for other products. To the extent the Company enters into co-promotion or other licensing

arrangements, any revenues received by the Company will be dependent on the efforts of third parties, and there can be no assurance that any such efforts will be successful.

In September 1994, Ligand was appointed by Cetus Oncology as the sole distributor of Proleukin, an oncology product, within Canada for a five-year period beginning on the date of the first sale of Proleukin by Ligand in Canada. Ligand paid Cetus Oncology $250,000 upon execution of the agreement and made an additional milestone payment to Cetus Oncology upon the receipt of government approval for the sale of Proleukin in Canada. In accordance with the agreement, Ligand initially hired three sales representatives to market Proleukin in Canada.

In March 1995, Ligand was also appointed by QLT as the sole distributor within Canada of PHOTOFRIN, a product for the treatment of esophageal and superficial bladder cancer. The agreement covers an initial 10-year period beginning on the date of the first sale of PHOTOFRIN by Ligand in Canada. Ligand paid QLT $180,800 upon execution of the agreement with future payments based on sales volume.

MANUFACTURING

Ligand currently has no manufacturing facilities, and accordingly relies on third parties, including its collaborative partners, for clinical or commercial production of any compounds under consideration as products. Ligand is currently constructing and validating a cGMP pilot manufacturing capability in order to produce sufficient quantities of products for preclinical testing and initial clinical trials. If Ligand is unable to develop or contract on acceptable terms for manufacturing services, Ligand's ability to conduct preclinical testing and human clinical trials will be adversely affected, resulting in the delay of submission of products for regulatory approval and delay of initiation of new development programs, which in turn could materially impair Ligand's competitive position. Although drugs acting through IRs and STATs have been manufactured on a commercial scale by other companies, there can be no assurance that Ligand will be able to manufacture its products on a commercial scale or that such products can be manufactured by Ligand or any other party on behalf of Ligand at costs or in quantities to make commercially viable products.

GOVERNMENT REGULATION

The manufacturing and marketing of Ligand's products and its ongoing research and development activities are subject to regulation for safety and efficacy by numerous governmental authorities in the United States and other countries. In the United States, pharmaceuticals are subject to rigorous FDA regulation. The Federal Food, Drug and Cosmetic Act and the Public Health Service Act govern the testing, manufacture, safety, efficacy, labeling, storage, record keeping, approval, advertising and promotion of Ligand's products. Product development and approval within this regulatory framework takes a number of years and involves the expenditure of substantial resources.

The steps required before a pharmaceutical agent may be marketed in the United States include (i) preclinical laboratory and animal tests, (ii) the submission to the FDA of an IND, which must become effective before human clinical trials may commence, (iii) adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug, (iv) the submission of a NDA to the FDA and (v) the FDA approval of the NDA prior to any commercial sale or shipment of the drug. A company must pay a one-time user fee for NDA submissions, and annually pay user fees for each approved product and manufacturing establishment. In addition to obtaining FDA approval for each product, each domestic drug manufacturing establishment must be registered with the FDA. Domestic manufacturing establishments are subject to preapproved inspections by the FDA prior to marketing approval and then to biennial inspections and must

comply with cGMP. To supply products for use in the United States, foreign manufacturing establishments must comply with cGMP and are subject to periodic inspection by the FDA or by regulatory authorities in such countries under reciprocal agreements with the FDA.

Preclinical tests include laboratory evaluation of product chemistry and animal studies to assess the safety and efficacy of the product and its

formulation. The results of the preclinical tests are submitted to the FDA as part of an IND, and unless the FDA objects, the IND will become effective 30 days following its receipt by the FDA.

Clinical trials involve the administration of the pharmaceutical product to healthy volunteers or to patients identified as having the condition for which the pharmaceutical is being tested. The pharmaceutical is administered under the supervision of a qualified principal investigator. Clinical trials are conducted in accordance with protocols previously submitted to the FDA as part of the IND that detail the objectives of the study, the parameters used to monitor safety and the efficacy criteria that are being evaluated. Each clinical study is conducted under the auspices of an Institutional Review Board ("IRB") at the institution at which the study is conducted. The IRB considers, among other things, ethical factors, the safety of the human subjects and the possible liability risk for the institution.

Clinical trials are typically conducted in three sequential phases that may overlap. In Phase I, the initial introduction of the pharmaceutical into healthy human volunteers, the emphasis is on testing for safety (adverse effects), dosage tolerance, metabolism, distribution, excretion and clinical pharmacology. Phase II involves studies in a limited patient population to determine the efficacy of the pharmaceutical for specific targeted indications, to determine dosage tolerance and optimal dosage, and to identify possible adverse side effects and safety risks. Once a compound is found to be effective and to have an acceptable safety profile in Phase II evaluations, Phase III trials are undertaken to evaluate clinical efficacy further and to further test for safety within an expanded patient population at multiple clinical study sites. The FDA reviews both the clinical plans and the results of the trials and may discontinue the trials at any time if there are significant safety issues.

The results of the preclinical and clinical trials are submitted to the FDA in the form of an NDA for marketing approval. The testing and approval process is likely to require substantial time and effort and there can be no assurance that any approval will be granted on a timely basis, if at all. The approval process is affected by a number of factors, including the severity of the disease, the availability of alternative treatments and the risks and benefits demonstrated in clinical trials. Additional animal studies or clinical trials may be requested during the FDA review process and may delay marketing approval. After FDA approval for the initial indications, further clinical trials would be necessary to gain approval for the use of the product for any additional indications. The FDA may also require postmarketing testing to monitor for adverse effects, which can involve significant expense.

The results of preclinical studies and initial clinical trials are not necessarily predictive of results that will be obtained from large-scale clinical trials, and there can be no assurance that clinical trials of any product under development will demonstrate the safety and efficacy of such product or will result in a marketable product. The safety and efficacy of a therapeutic product under development by the Company must be supported by extensive data from clinical trials. A number of companies have suffered significant setbacks in advanced clinical trials, despite promising results in earlier trials. The failure to demonstrate adequately the safety and efficacy of a therapeutic drug under development would delay or prevent regulatory approval of the product and could have a material adverse effect on the Company. In addition, the FDA may require additional clinical trials, which could result in increased costs and significant development delays.

The rate of completion of clinical trials of the Company's products is dependent upon, among other factors, obtaining adequate clinical supplies and the rate of patient accrual. Patient accrual is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites and the eligibility criteria for the trial. Delays in planned patient enrollment in clinical trials may result in increased costs, program delays or both, which could have a material adverse effect on the Company. In addition, some

of the Company's current corporate partners have certain rights to control the planning and execution of product development and clinical programs, and there can be no assurance that such corporate partners' rights to control aspects of such programs will not impede the Company's ability to conduct such programs in accordance with the schedules and in the manner currently contemplated by the

Company for such programs. There can be no assurance that, if clinical trials are completed, the Company will submit a NDA with respect to any potential products or that any such application will be reviewed and approved by the FDA in a timely manner, if at all.

For both currently marketed and future products, failure to comply with applicable regulatory requirements after obtaining regulatory approval can, among other things, result in the suspension of regulatory approval, as well as possible civil and criminal sanctions. In addition, changes in regulations could have a material adverse effect on Ligand.

A drug that receives Orphan Drug designation by the FDA and is the first product to receive FDA marketing approval for its product claim is currently entitled to a seven-year exclusive marketing period in the United States for that product claim. A drug that is considered by the FDA to be different than a particular Orphan Drug, however, is not barred from sale in the United States during such seven-year exclusive marketing period. The FDA has approved an application by Ligand on behalf of ALRT to have ALRT1057 Oral designated an "Orphan Drug" for the treatment of APL. Ligand is preparing additional applications for Orphan Drug designations in other indications. Congress is currently considering significant changes to the Orphan Drug Act, including a reduction in the exclusive marketing period from seven years to four years, with the possibility of a three-year extension for certain drugs.

For marketing outside the United States before FDA approval to market, the Company must submit an export permit application to the FDA. The Company also will be subject to foreign regulatory requirements governing human clinical trials and marketing approval for drugs. The requirements relating to the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country and there can be no assurance that the Company or any of its partners will meet and sustain any such requirements.

COMPETITION

Some of the drugs which Ligand is developing will compete with existing therapies. In addition, a number of companies are pursuing the development of novel pharmaceuticals which target the same diseases that Ligand is targeting as well as IR-related, STAT-related and complex carbohydrate-related approaches to drug discovery and development. Many of Ligand's existing or potential competitors, particularly large pharmaceutical companies, have substantially greater financial, technical and human resources than Ligand and may be better equipped to develop, manufacture and market products. In addition, many of these companies have extensive experience in preclinical testing and human clinical trials, obtaining FDA and other regulatory approvals and manufacturing and marketing pharmaceutical products. Academic institutions, governmental agencies and other public and private research organizations are conducting research to develop technologies and products that may compete with those under development by the Company. These institutions are becoming increasingly aware of the commercial value of their findings and are becoming more active in seeking patent protection and licensing arrangements to collect royalties for the use of technology that they have developed. These institutions also may market competitive commercial products on their own or through joint ventures and will compete with the Company in recruiting highly qualified scientific personnel. Any of these companies, academic institutions, government agencies or research organizations may develop and introduce products and processes competitive with or superior to those of Ligand. The development by others of new treatment methods for those indications for which Ligand is developing products could render Ligand's products noncompetitive or obsolete.

Ligand's products under development target a broad range of markets. Ligand's competition will be determined in part by the potential indications for which Ligand's products are developed and ultimately approved by regulatory authorities. For certain of Ligand's potential products, an important factor in competition may be the timing of market introduction of Ligand's or competitors' products. Accordingly, the

relative speed at which Ligand or its existing or future corporate partners can develop products, complete the clinical trials and regulatory approval processes, and supply commercial quantities of the products to the market is expected to be an important competitive factor. Ligand expects that competition among products approved for sale will be based, among other things, on product

efficacy, safety, reliability, availability, price and patent position.

Ligand's competitive position also depends upon its ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary products or processes, and secure sufficient capital resources.

PRODUCT LIABILITY AND INSURANCE

Ligand's business exposes it to potential product liability risks which are inherent in the testing, manufacturing and marketing of human therapeutic products. Ligand currently has limited product liability insurance; however, there can be no assurance that Ligand will be able to maintain such insurance on acceptable terms or that such insurance will provide adequate coverage against potential liabilities. The Company expects to procure additional insurance when its products progress to a later stage of development and if any rights to later-stage products are in-licensed in the future. To the extent that product liability insurance, if available, does not cover potential claims, the Company will be required to self-insure the risks associated with such claims. A successful product liability claim or series of claims brought against the Company could have a material adverse effect on the Company.

HUMAN RESOURCES

As of August 31, 1996, Ligand had 323 full-time employees, of whom 246 were involved directly in scientific research and development activities. Of these employees, approximately 80 hold Ph.D. or M.D. degrees.

FACILITIES

Ligand currently leases and occupies five facilities: three in San Diego, California, and two in Alameda, California. In San Diego, the Company leases an approximately 42,000 square foot laboratory and administrative office space pursuant to a lease that continues through September 1997 and contains a renewal option of five years. In July 1994, the Company entered into a 20 year lease related to the construction of a new laboratory facility. This 52,800 square foot facility was completed and occupied in August 1995. The third facility in San Diego is for administrative office space pursuant to a sublease of approximately 7,400 square feet which was entered into in March 1995. In Alameda, Glycomed leases two buildings totalling approximately 56,000 square feet, for laboratory and administrative office usage. The leases expire in September 1997 and contain a renewal option of five years. As of May 1996, Glycomed had sublet approximately 12,750 square feet in one of these buildings. The Company believes these facilities will be adequate to meet the Company's near-term space requirements. The Company is currently undertaking to consolidate its San Diego facilities by means of a build-to-suit facility.

LITIGATION

In December 1994, Ligand filed suit against Pfizer in the Superior Court of California in San Diego County for breach of contract and for a declaration of future rights as they relate to droloxifene, a compound upon which Ligand performed work at Pfizer's request during a collaboration between Pfizer and Ligand to develop drugs in the field of osteoporosis. Droloxifene is an estrogen antagonist/partial agonist with potential indications in the treatment of osteoporosis and breast cancer as well as other applications. Ligand and Pfizer entered into a settlement agreement with respect to the lawsuit in April 1996. Under the terms of the settlement agreement, Ligand is entitled to receive milestone payments if Pfizer continues development and royalties if Pfizer commercializes droloxifene. At the option of either party, milestone and royalty payments owed Ligand can be satisfied by Pfizer transferring to Ligand shares of Common Stock at an exchange ratio of

$12.375 per share. To date, Ligand has received approximately $1.3 million in milestones payments from Pfizer as a result of the continued development of droloxifene. These milestones were paid in the form of an aggregate of 101,011 shares of Common Stock, which were subsequently retired from treasury stock in September 1996. According to recent announcements by Pfizer, droloxifene has entered Phase II clinical trials for osteoporosis and Phase III clinical trials for breast cancer.

From time to time, Ligand may be involved in litigation relating to claims

arising out of its operations in the normal course of business. As of the date of this Prospectus, the Company is not a party to any material legal proceedings.

MANAGEMENT

EXECUTIVE OFFICERS AND DIRECTORS

The executive officers and directors of Ligand as of September 20, 1996 are as follows:

NAME	AGE	POSITION
David E. Robinson	47	Chairman of the Board, President and Chief Executive Officer
Lloyd E. Flanders, Ph.D.	56	Senior Vice President, Pre-Clinical Development and R&D Administration
Andres Negro-Vilar, M.D., Ph.D.	56	Senior Vice President, Research, Chief Scientific Officer
Steven D. Reich, M.D.	51	Senior Vice President, Clinical Research
William L. Respess, J.D., Ph.D.	57	Senior Vice President, General Counsel, Government Affairs and Secretary
George M. Gill, M.D.	63	Vice President, Medical Affairs
Howard T. Holden, Ph.D.	51	Vice President, Regulatory Affairs and Compliance
Paul V. Maier	48	Vice President, Chief Financial Officer
Henry F. Blissenbach(1)	50	Director
Alexander D. Cross, Ph.D.(2)	63	Director
John Groom(1)(2)	58	Director
Irving S. Johnson, Ph.D.	71	Director
William C. Shepherd	58	Director

(1) Members of the Compensation Committee of the Board of Directors.
(2) Members of the Audit Committee of the Board of Directors.

DAVID E. ROBINSON has served as President and Chief Executive Officer and a Director of Ligand since 1991. Mr. Robinson was appointed Chairman of the Board in May 1996. Prior to joining Ligand, he was Chief Operating Officer at Erbamont, a pharmaceutical company. Prior to that, Mr. Robinson was President of Adria Laboratories, Erbamont's North American Subsidiary. He also was employed in various executive positions for more than 10 years by Abbott Laboratories, most recently as Regional Director of Abbott Europe. Mr. Robinson received his B.A. in political science and history from MacQuaire University and his M.B.A. from the University of South Wales, Australia. Mr. Robinson is a Director of the Cancer Center Foundation of the University of California at San Diego, the California Healthcare Institute (CHI), Neurocrine Biosciences Inc., a public biotechnology company, as well as several private health care companies.

LLOYD E. FLANDERS, PH.D. joined Ligand in September 1992 as Vice President, R&D Planning, Administration, Project Management, became Vice President, Pre-Clinical Development and R&D Administration in August 1993 and became Senior Vice President, Pre-Clinical Development and R&D Administration in March 1995. Prior to joining Ligand, Dr. Flanders was Vice President, New Product Development -- Cardiovascular Projects at Parke-Davis Research Division of the Warner-Lambert Company where he also previously served as Director, Research Planning and Administrative Services. From 1971 to 1985, he served in various positions with G.D. Searle and Company, including Director, Department of Project Management. Dr. Flanders received a Ph.D. in comparative biochemistry and biophysics from University of California, Davis, an M.B.A. from Lake Forest College and a B.S. in biology from DePauw University.

ANDRES NEGRO-VILAR, M.D., PH.D. joined Ligand in September 1996 as Senior Vice President, Research, and Chief Scientific Officer. Prior to joining Ligand, Dr. Negro-Vilar was Vice President of Research and Head of the Women's Health Research Institute for Wyeth-Ayerst Laboratories, a division of American Home Products, from 1993 to 1996. From 1983 to 1993, Dr. Negro-Vilar served at the

National Institute of Environmental Health Sciences of the National Institutes of Health as the Director of Clinical Programs and Chief of the Laboratory of Molecular and Integrative Neurosciences. Dr. Negro-Vilar received a Ph.D. in

physiology from University of Sao Paulo, Brazil, an M.D. from University of Buenos Aires, Argentina, and a B.S. in science from Belgrano College.

STEVEN D. REICH, M.D. joined Ligand in December 1995 as the Senior Vice President, Clinical Research. Prior to joining Ligand, Dr. Reich was at the clinical contract research organization PAREXEL International Corporation, from 1987 to 1995, where he served as Senior Vice President, Medical Affairs responsible for worldwide medical and clinical affairs services including clinical trials management, medical consulting and medical writing. From 1986 to 1987, Dr. Reich served as worldwide Medical Research Director of Biogen, Inc. ("Biogen"), and held various positions at Biogen from 1983 to 1986. Earlier in his career Dr. Reich served as Associate Director of Clinical Cancer Research for Bristol Laboratories from 1978 to 1979. He is a Board certified Medical Oncologist and has held academic positions as a clinical pharmacologist at Northwestern University, SUNY-Upstate Medical School, and University of Massachusetts Medical Center. Dr. Reich received an M.D. from the New Jersey College of Medicine and an A.B. from Princeton University.

WILLIAM L. RESPESS, J.D., PH.D. joined Ligand in December 1988 as Vice President and General Counsel, became Senior Vice President and General Counsel in August 1993 and assumed responsibility for Government Affairs in March 1995. Prior to joining Ligand, Dr. Respess was Vice President and General Counsel at Gen-Probe, Inc., a biotechnology company, from 1987 to 1988. From 1983 to 1986, he served as Vice President and General Counsel at Hybritech, Inc., a biotechnology company. From 1974 to 1983, he was an attorney with the patent law firm of Lyon & Lyon of Los Angeles, serving as Partner from 1980 to 1983. Dr. Respess received a J.D. from George Washington University, a Ph.D. in organic chemistry from the Massachusetts Institute of Technology and a B.S. in chemistry from the Virginia Military Institute.

GEORGE M. GILL, M.D. joined Ligand in September 1992 as Vice President, Clinical Research and became Vice President, Medical Affairs in January 1996. Prior to joining Ligand, Dr. Gill was Senior Director, Clinical Research at ICI Pharmaceutical Research and Development where he also served as Director of Clinical Research, Clinical and Medical Affairs from 1990 to 1992. From 1984 to 1990, Dr. Gill served in various positions at Bristol-Myers Company (now Bristol-Myers Squibb Company), including Vice President, Worldwide Regulatory Affairs. Dr. Gill received an M.D. from the University of Pennsylvania and a B.S. in chemistry from Dickinson College and is Board certified in pediatrics.

HOWARD T. HOLDEN, PH.D. joined Ligand in September 1992 as Vice President, Regulatory Affairs and Compliance. Prior to joining Ligand, Dr. Holden was Senior Director, Worldwide Regulatory Affairs at Parke-Davis Pharmaceutical Research Division of the Warner-Lambert Company. From 1986 to 1988, Dr. Holden served as Director, Regulatory Affairs and Compliance at Centocor Inc., a pharmaceutical company. Dr. Holden received a Ph.D. in microbiology from the University of Miami and a B.A. in zoology from Drew University.

PAUL V. MAIER joined Ligand in October 1992 as Vice President and Chief Financial Officer. Prior to joining Ligand, Mr. Maier served as Vice President, Finance at DFS West, a division of DFS Group, L.P., a private multinational retailer. From February 1990 to October 1990, Mr. Maier served as Vice President and Treasurer of ICN Pharmaceuticals, Inc. Mr. Maier held various positions in finance and administration at SPI Pharmaceuticals, Inc., a publicly held subsidiary of ICN Pharmaceuticals Group, from 1984 to 1988, including Vice President, Finance from February 1984 to February 1987. Mr. Maier received an M.B.A. from Harvard Graduate School of Business and a B.S. from Pennsylvania State University.

HENRY F. BLISSENBACH has served as a Director since May 1995 and currently serves as a member of Ligand's Compensation Committee. Mr. Blissenbach joined Diversified Pharmaceutical Services, a subsidiary company of SmithKline Beecham, in August 1986 and has served as President since March 1993. He earned his Doctor of Pharmacy (Pharm.D.) degree at the University of Minnesota, College of Pharmacy. He has held an academic appointment in the College of Pharmacy, University of Minnesota, since 1981. He has vast experience in managed health care, and has served in numerous advisory capacities with pharmaceutical

manufacturers and managed care entities for many years. Dr. Blissenbach currently serves on the Board of Directors for Chronimed, Inc.

ALEXANDER D. CROSS, PH.D. has served as a Director of Ligand since March 1991 and currently serves as a member of Ligand's Audit Committee. Dr. Cross has been an independent consultant in the fields of pharmaceuticals and biotechnology since January 1986. Dr. Cross was President and Chief Executive Officer of Zoecon Corporation, a biotechnology company, from April 1983 to December 1985, and Executive Vice President and Chief Operating Officer from 1979 to 1983. Dr. Cross currently serves as Chairman of the Board of Directors and Chief Executive Officer for Cytopharm, Inc. He is a member of the Boards of Directors of Failure Group, Inc. and Myelos Neurosciences Corp.

JOHN GROOM has served as a Director since May 1995 and currently serves as a member of Ligand's Audit and Compensation Committees. Mr. Groom has acted as President, Chief Executive Officer, and a director on the Board of Directors of Athena Neurosciences, Inc. ("Athena") since 1987. Following the merger of Athena with Elan Corporation, plc ("Elan"), Mr. Groom has additionally been appointed a Director and Chief Operating Officer of Elan. From 1960 until 1985, Mr. Groom was employed by Smith Kline & French Laboratories ("SK&F"), the pharmaceutical division of the then SmithKline Beecham Corporation. He held a number of positions at SK&F including President of SK&F International from 1980 to 1985. Mr. Groom also serves as a director on the Board of Directors of IDEC Pharmaceuticals Corporation, a biotechnology company, and the California Healthcare Institute and is a public trustee on the Board of Trustees of the American Academy of Neurology Education and Research Foundation. Mr. Groom is Fellow of the Association of Certified Accountants (UK).

IRVING S. JOHNSON, PH.D. has served as a Director of Ligand since March 1989. Dr. Johnson is currently an independent consultant in biomedical research. From 1953 until his retirement in November 1988, Dr. Johnson held various positions with Eli Lilly & Company, a pharmaceutical company, including Vice President of Research from 1973 until 1988. He has served on numerous advisory committees of the National Institute of Health including the Recombinant DNA Advisory Committee and was the recipient of the First Annual Congressional Award in Science and Technology. Dr. Johnson is a member of the Board of Directors of Agouron Pharmaceuticals, Inc. and Allelix Biopharmaceuticals, both biotechnology companies, and was a member of the Board of Directors of Glycomed from 1990 to 1994 prior to its merger with Ligand. He also serves on the Scientific Advisory Board of Ligand and other companies.

WILLIAM C. SHEPHERD has served as a Director of Ligand since July 1992. Mr. Shepherd has been President and Chief Executive of specialty health care company Allergan since January 1992, before assuming the additional title of Chairman in January 1996. He has held many other executive positions at Allergan during the past 30 years, including President of Allergan U.S., Senior Vice President, U.S. Operations, and Chief Operating Officer. Mr. Shepherd has been a Director of Allergan since 1984.

PRINCIPAL STOCKHOLDERS

The following table sets forth certain information regarding the ownership of the Common Stock as of August 31, 1996, and as adjusted to reflect the sale of the shares of the Common Stock offered hereby by the Company, by (i) all those known by the Company to be beneficial owners of more than five percent of its outstanding Common Stock, (ii) each director and the five most highly compensated executive officers of the Company and (iii) all executive officers and directors of the Company as a group. "Number of Shares Beneficially Owned" does not include warrants received in the ALRT Offering, which are not currently exercisable.

<TABLE>
<CAPTION>

		PERCENTAGE OF OUTSTANDING SHARES(2)	
BENEFICIAL OWNER	NUMBER OF SHARES BENEFICIALLY OWNED(1)	BEFORE OFFERING	AFTER OFFERING

<S>	<C>	<C>	<C>
Allergan Pharmaceuticals (Ireland) Ltd., Inc.(3).....	3,411,873	12.0%	10.9%
David E. Robinson(4).....	382,343	1.3	1.2
Henry F. Blissenbach(5).....	16,237	*	*
Alexander D. Cross(6).....	33,911	*	*
John Groom(7).....	16,237	*	*
Irving S. Johnson(7).....	39,137	*	*
William C. Shepherd(8).....	3,428,110	12.0	11.0
Robert B. Stein(9).....	198,042	*	*
William L. Respess(10).....	250,575	*	*
Paul V. Maier(11).....	115,057	*	*
Lloyd E. Flanders(12).....	146,770	*	*
All directors and executive officers as a group (14 persons)(13).....	4,885,078	16.6	15.2

</TABLE>

- ----------

* Less than 1%

(1) Except as indicated in the footnotes to this table, the persons named in the table have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them, subject to community property laws, where applicable. Share ownership in each case includes shares issuable upon exercise of certain outstanding options and warrants as described in the footnotes below.

(2) Percentage of ownership is based on 28,493,277 shares of Common Stock outstanding on August 31, 1996 and is calculated pursuant to Rule 13d-3(d)(1) under the Exchange Act.

(3) Allergan Ireland's address is Castlebar Road, Westport, County Mayo, Ireland.

(4) Includes 141,643 shares of Common Stock issuable upon the exercise of options that are exercisable within 60 days.

(5) Includes 16,237 shares of Common Stock issuable upon the exercise of options that are exercisable within 60 days.

(6) Includes 16,237 shares of Common Stock issuable upon the exercise of options and 149 shares of Common Stock issuable upon the exercise of warrants owned beneficially by Mr. Cross or his successor Trustee, U.A. dated July 8, 1992.

(7) Includes 16,237 shares of Common Stock issuable upon the exercise of options that are exercisable within 60 days.

(8) Includes 3,411,873 shares owned beneficially by Allergan Ireland. Mr. Shepherd is the Chairman, President and Chief Executive Officer of Allergan, the parent company of Allergan Ireland and 16,237 shares of Common Stock issuable upon the exercise of options that are exercisable within 60 days. Mr. Shepherd, a director of Ligand, may be deemed to be the beneficial owner of the shares owned beneficially by Allergan Ireland as that term is defined under the Exchange Act. Mr. Shepherd disclaims beneficial ownership of the shares owned beneficially by Allergan Ireland. Mr. Shepherd's address is 9393 Towne Centre Drive, San Diego, California 92121.

(9) Includes 89,214 shares of Common Stock issuable upon the exercise of options that are exercisable within 60 days. Dr. Stein served as Senior Vice President, Chief Scientific Officer until August 1996 and is no longer employed by the Company.

(10) Includes 129,249 shares of Common Stock issuable upon the exercise of options that are exercisable within 60 days.

(11) Includes 111,156 shares of Common Stock issuable upon the exercise of options that are exercisable within 60 days.

(12) Includes 146,770 shares of Common Stock issuable upon the exercise of options that are exercisable within 60 days.

(13) Includes 952,255 shares of Common Stock issuable upon the exercise of options and warrants held by certain officers and directors of Ligand that are exercisable within 60 days.

DESCRIPTION OF CAPITAL STOCK

The authorized capital stock of Ligand consists of 80,000,000 shares of Common Stock, $0.001 par value per share, and 5,000,000 shares of Preferred Stock, $0.001 par value per share ("Preferred Stock"). On November 24, 1994, each share of Ligand Class A Common Stock was automatically converted into 1.33

shares of Ligand Class B Common Stock, which was then designated Common Stock.

COMMON STOCK

The holders of Common Stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Subject to preferences that may be applicable to any outstanding Preferred Stock, holders of Common Stock are entitled to receive ratably such dividends as may be declared by the Board of Directors of Ligand out of funds legally available. See "Price Range of Common Stock" and "Dividend Policy." In the event of liquidation, dissolution or winding up of Ligand, holders of Common Stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preference of any outstanding Preferred Stock. Holders of Common Stock have no preemptive rights and no right to cumulate votes in the election of directors. There are no redemption or sinking fund provisions applicable to the Common Stock. All outstanding shares of Common Stock are fully paid and nonassessable.

At June 30, 1996, there were 28,110,700 shares of Common Stock outstanding and held of record by approximately 950 stockholders.

PREFERRED STOCK

The Board of Directors of Ligand has the authority to issue the Preferred Stock in one or more series and to fix the designation, powers, preferences, rights, qualifications, limitations and restrictions of the shares of each such series, including the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), liquidation preferences and the number of shares constituting any such series, without any further vote or action by the stockholders. The rights and preferences of Preferred Stock may in all respects be superior and prior to the rights of the Common Stock. The issuance of the Preferred Stock could decrease the amount of earnings and assets available for distribution to holders of Common Stock or adversely affect the rights and powers, including voting rights, of the holders of the Common Stock and could have the effect of delaying, deferring or preventing a change in control of Ligand.

In connection with the adoption of the Shareholder Rights Plan, the Company's Board of Directors designated 80,000 shares of Series A Participating Preferred Stock, none of which are outstanding as of the date of this Prospectus.

WARRANTS TO PURCHASE COMMON STOCK

At June 30, 1996, there were outstanding warrants to purchase 6,671,922 shares of Common Stock, at exercise prices ranging from $1.80 to $22.41 per share (subject to certain adjustments), of which warrants to purchase 6,500,000 shares of Common Stock were issued in connection with the ALRT Offering at an exercise price of $7.12 per share. Each warrant contains provisions for the adjustment of the exercise price and the aggregate number of shares issuable upon exercise of the warrant under certain circumstances, including stock dividends, stock splits, reorganizations, reclassifications or consolidations. Holders of certain of the warrants are entitled to certain registration rights with respect to the Common Stock issued or issuable upon exercise thereof. See "-- Registration Rights."

REGISTRATION RIGHTS

As of September 15, 1996, pursuant to the Amended Registration Rights Agreement, dated as of June 24, 1994, the First Addendum to Amended Registration Rights Agreement, dated as of July 6, 1994, the Second Addendum to Amended Registration Rights Agreement, dated as of September 2, 1994, the Third Addendum to Amended Registration Rights Agreement, dated as of February 3, 1995, the Fourth Addendum to Amended Registration Rights Agreement, dated as of May 18, 1995, the Fifth Addendum to Amended

Registration Rights Agreement, dated as of June 24, 1994 and effective as of September 11, 1995, the Sixth Addendum to Amended Registration Rights Agreement, dated as of June 24, 1994 and effective as of August 31, 1995, and the Seventh Addendum to Amended Registration Rights Agreement, dated as of November 10, 1995 (collectively, the "Registration Rights Agreement"), the holders of 6,440,344

shares of Common Stock, warrants to purchase 135,965 shares of Common Stock and 624,375 shares of Common Stock issuable upon conversion of $6,250,000 in principal amount of outstanding convertible promissory notes (collectively, the "Holders") are entitled to certain rights with respect to the registration of the outstanding shares of Common Stock and the shares of Common Stock issuable upon exercise of such warrants or conversion of such notes (the "Registrable Securities"). Under the Registration Rights Agreement, subject to certain exceptions, each Holder of Registrable Securities may cause Ligand to register such Holder's Registrable Securities on Form S-3 ("Form S-3 Registration") provided the Registrable Securities the Holder proposes to sell have an aggregate market value of at least $500,000. Ligand is not obligated to effect more than two Form S-3 Registrations within any 12-month period. In the case where a Form S-3 Registration is not available to Ligand, a Holder may cause Ligand, subject to certain exceptions, to use its best efforts to register the Holder's Registrable Securities for public resale ("Public Resale Registration"), subject to the underwriter's marketing limitation, if any; provided however, that the shares of Registrable Securities the Holder proposes to sell must have an anticipated aggregate offering price of more than $1,500,000 net of underwriting discounts and commissions. Ligand is not obligated to effect more than one Public Resale Registration within any six month period. In addition, whenever Ligand proposes to register any of its securities under the Securities Act (a "Company Registration"), or any Holder of Registrable Securities causes Ligand to register its shares, whether in a S-3 Registration or in a Public Resale Registration, all Holders of Registrable Securities are entitled to notice of such registration and to include their Registrable Securities in such registration, subject to certain restrictions, including any proposed underwriter's right to limit the number of shares included in such registration. Ligand is required to bear all registration expenses in connection with the first S-3 Registration and Public Resale Registration requested by a Holder and all Company Registrations. All selling expenses related to securities registered by the Holders are required to be paid by the Holders on a pro rata basis. Ligand is required to indemnify certain of the Holders of such Registrable Securities and the underwriters for such Holders, if any, under certain circumstances.

Under certain conditions, registration rights may be transferred to a transferee of Registrable Securities who, after such transfer, holds at least 50,000 shares of the Registrable Securities. Registration rights granted under the Registration Rights Agreement may be amended or waived (either generally or in a particular instance and either retroactively or prospectively) only with the written consent of Ligand and the Holders of a majority of the Registrable Securities then outstanding.

Registration rights granted to each Holder under the Registration Rights Agreement, subject to certain exceptions, terminate on the earlier of December 31, 1999 or the date after which all shares of Registrable Securities held by such Holder may be immediately sold under Rule 144(k) promulgated pursuant to the Securities Act.

DELAWARE LAW, THE SHAREHOLDER RIGHTS PLAN AND CERTAIN CHARTER PROVISIONS

Ligand is subject to the provisions of Section 203 of the Delaware General Corporate Law, an anti-takeover law. In general, the statute prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. For purposes of Section 203, a "business combination" includes a merger, asset sale, or other transaction resulting in a financial benefit to the interested stockholder, and an "interested stockholder" is a person who, together with affiliates and associates, owns (or within three years prior, did own) 15% or more of the corporation's voting stock.

The holders of Common Stock are currently entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders other than the election of directors and are not entitled to demand cumulative voting. The absence of cumulative voting may have the effect of limiting the ability of

minority stockholders to effect changes in the Board of Directors and, as a result, may have the effect of deterring hostile takeovers or delaying or

preventing changes in control or management of Ligand.

In September 1996, the Company's Board of Directors adopted the Shareholder Rights Plan which provides for a dividend distribution of one Right on each outstanding share of the Common Stock. Each Right entitles stockholders to buy 1/1000th of a share of Ligand Series A Participating Preferred Stock at an exercise price of $100, subject to adjustment. The Rights will become exercisable following the tenth day after a person or group announces acquisition of 20% or more of the Common Stock, or announces commencement of a tender offer, the consummation of which would result in ownership by the person or group of 20% or more of the Common Stock. The Company will be entitled to redeem the Rights at $0.01 per Right at any time on or before the earlier of the tenth day following acquisition by a person or group of 20% or more of the Common Stock and September 13, 2006.

Ligand's Certificate of Incorporation contains the Fair Price Provision that requires the approval of the holders of 66 2/3% of Ligand's voting stock as a condition to a merger or certain other business transactions with, or proposed by, a holder of 15% or more of Ligand's voting stock (an "Interested Stockholder"), except in cases where a majority of the Continuing Directors (as defined below) approve the transaction or certain minimum price criteria and other procedural requirements are met. A "Continuing Director" is a director originally elected upon incorporation of Ligand or a director who is not an Interested Stockholder or affiliated with an Interested Stockholder or whose nomination or election to the Board of Directors of Ligand is recommended or approved by a majority of the Continuing Directors. The minimum price criteria are recommended or approved by a majority of the Continuing Directors. The minimum price criteria generally require that, in a transaction in which stockholders are to receive payments, holders of Common Stock must receive a value equal to the highest price paid by the Interested Stockholder for Common Stock during the prior two years, and that such payment be made in cash or in the type of consideration paid by the Interested Stockholder for the greatest portion of its shares. Ligand's Board of Directors believes that the Fair Price Provision helps assure that all of Ligand's stockholders will be treated similarly if certain kinds of business combinations are effected. However, the Fair Price Provision may make it more difficult to accomplish certain transactions that are opposed by the incumbent Board of Directors and that could be beneficial to stockholders.

The Certificate of Incorporation also requires that any action required or permitted to be taken by stockholders of Ligand must be effected at a duly called annual or special meeting of stockholders and may not be effected by a consent in writing. In addition, Ligand's Bylaws provide that special meetings of the stockholders may be called by the president and shall be called by the president or secretary at the written request of a majority of the Board of Directors, or at the written request of stockholders owning at least 10% of Ligand's capital stock. The Bylaws also provide that the authorized number of directors may be changed by resolution of the Board of Directors or by the stockholders at the annual meeting of the stockholders. These provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of Ligand.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Common Stock is Wells Fargo & Co.

UNDERWRITING

Subject to the terms and conditions of the Underwriting Agreement between the Company and Bear, Stearns & Co. Inc., Robertson, Stephens & Company LLC and Hambrecht & Quist LLC, as Representatives of the Underwriters, each of the Underwriters named below has severally agreed to purchase from the Company, and the Company has agreed to sell to each Underwriter, the respective number of shares of Common Stock set forth opposite its name below:

<TABLE>
<CAPTION>

UNDERWRITER	NUMBER OF SHARES
<S>	<C>
Bear, Stearns & Co. Inc.....	

Robertson, Stephens & Company LLC.....	
Hambrecht & Quist LLC.....	
Total.....	2,750,000

</TABLE>

The Underwriting Agreement provides that the obligations of the several Underwriters to purchase shares of Common Stock are subject to approval of certain legal matters by counsel and to certain other conditions precedent. If any of the shares of Common Stock are purchased by the Underwriters pursuant to the Underwriting Agreement, all such shares of Common Stock (other than shares of Common Stock covered by the over-allotment option described below) must be so purchased.

The Underwriters propose to offer the shares of Common Stock directly to the public at the public offering price set forth on the cover page of this Prospectus, and at such price less a concession not in excess of $ per share of Common Stock to certain other dealers who are members of the National Association of Securities Dealers, Inc. The Underwriters may allow, and such dealers may reallow, concessions not in excess of $ per share to certain other dealers. After the public offering, the offering price and other selling terms may be changed by the Underwriters. The Common Stock is quoted on the Nasdaq National Market.

The Underwriters have been granted a 30-day over-allotment option by the Company to purchase up to 412,500 additional shares of Common Stock, exercisable at the public offering price less the underwriting discount. If the Underwriters exercise such over-allotment option, then each of the Underwriters will have a firm commitment, subject to certain conditions, to purchase from the Company approximately the same percentage thereof as the number of shares of Common Stock to be purchased by it as shown in the above table bears to the 2,750,000 shares of Common Stock offered hereby. The Underwriters may exercise such option only to cover over-allotments made in connection with the sale of the shares of Common Stock offered hereby.

The officers and directors of the Company and certain holders of the Common Stock have agreed not to offer for sale, sell, distribute, contract to sell, pledge, grant any option for the sale of or otherwise dispose of or transfer any of the Common Stock owned by them prior to the expiration of 90 days from the date of this Prospectus without the prior written consent of Bear, Stearns & Co. Inc., acting alone, or the Representatives, acting jointly. After such 90-day period, such persons will be entitled to sell, distribute or otherwise dispose of the Common Stock that they hold subject to the provisions of applicable securities laws.

The Company has agreed that it will not issue, sell or grant options to purchase or otherwise dispose of any shares of its Common Stock or securities convertible into or exchangeable for its Common Stock, except with respect to options or other rights outstanding on the date of this Prospectus or pursuant to the Company's stock plans or in connection with transactions involving the Company and other entities or individuals such as joint ventures, acquisitions, mergers or similar transactions, for a period of 90 days after the date of this Prospectus without the prior written consent of Bear, Stearns & Co. Inc.

The Underwriting Agreement provides that the Company will indemnify the Underwriters and controlling persons, if any, against certain liabilities, including liabilities under the Securities Act, or will contribute to payments which the Underwriters or any such controlling persons may be required to make in respect thereof.

In connection with the Offering, certain Underwriters and selling group members, if any, who are qualifying registered market makers on the Nasdaq National Market may engage in passive market making transactions in the Common Stock on the Nasdaq National Market in accordance with Rule 10b-6A under the Exchange Act, during the two business day period before commencement of sales in the Offering. The passive market making transactions must comply with applicable price and volume limits and be identified as such. In general, a passive market maker may display its bid at a price not in excess of the highest independent bid for the security. If all independent bids are lowered below the passive market maker's bid, however, such bid must then be lowered when certain purchase

limits are exceeded. Net purchases by a passive market maker on each day are generally limited to a specified percentage of the passive market maker's average daily trading volume in the Common Stock during a prior period and must be discontinued when such limit is reached. Passive market making may stabilize the market price of the Common Stock at a level above that which might otherwise prevail and, if commenced, may be discontinued at any time.

LEGAL MATTERS

The validity of the Common Stock offered hereby will be passed upon for the Company by Brobeck, Phleger & Harrison LLP, San Diego, California. Certain legal matters relating to the Offering will be passed upon for the Underwriters by Skadden, Arps, Slate, Meagher & Flom, Los Angeles, California.

EXPERTS

The consolidated financial statements of Ligand Pharmaceuticals Incorporated at December 31, 1994 and 1995, and for each of the three years in the period ended December 31, 1995, appearing in this Prospectus and Registration Statement, have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon, appearing elsewhere herein, and are included in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

ADDITIONAL INFORMATION

The Company has filed with the Commission a Registration Statement on Form S-3 (the "Registration Statement") under the Securities Act of 1933, as amended, with respect to the Common Stock offered hereby. This Prospectus does not contain all of the information set forth in the Registration Statement and the exhibits and schedules thereto. For further information with respect to the Company and the Common Stock offered hereby, reference is made to the Registration Statement and to the exhibits and schedules thereto. Statements contained in this Prospectus regarding the contents of any contract or other document are not necessarily complete, and in each instance reference is made to the copy of such contract or document filed as an exhibit to the Registration Statement or the documents incorporated into the Prospectus by reference, each such statement being qualified in all respects by such reference. The Registration Statement, including the exhibits and schedules thereto, may be inspected without charge at the principal office of the Commission, 450 Fifth Street, N.W., Washington, D.C. 20549, and copies of all or any part thereof may be obtained from such office upon payment of the prescribed fees. In addition, the Commission maintains a World Wide Web site on the Internet at http://www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. The Common Stock is traded on the Nasdaq National Market, and copies of such materials can also be inspected at the offices of the National Association of Securities Dealers, Inc., 1735 K Street, N.W., Washington, D.C. 20006.

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<CAPTION>

</TABLE>

REPORT OF INDEPENDENT AUDITORS

The Board of Directors and Stockholders
Ligand Pharmaceuticals Incorporated

We have audited the accompanying consolidated balance sheets of Ligand Pharmaceuticals Incorporated as of December 31, 1994 and 1995, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 1995. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Ligand Pharmaceuticals Incorporated at December 31, 1994 and 1995, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 1995, in conformity with generally accepted accounting principles.

ERNST & YOUNG LLP

San Diego, California
January 19, 1996

LIGAND PHARMACEUTICALS INCORPORATED

CONSOLIDATED BALANCE SHEETS

<TABLE>
<CAPTION>

	DECEMBER 31,		JUNE 30,
	1994	1995	1996
			(UNAUDITED)
<S>	<C>	<C>	<C>
ASSETS			
Current assets:			
Cash and cash equivalents	$ 7,627,894	$ 15,962,477	$ 11,227,388
Short-term investments	30,775,300	54,181,893	45,473,363
Receivable from a related party	1,158,401	2,286,117	1,978,571
Other current assets	2,081,307	577,098	783,528
Total current assets	41,642,902	73,007,585	59,462,850
Restricted short-term investments	--	6,758,586	3,746,326
Property and equipment, net	3,863,413	12,272,010	11,921,743
Notes receivable from officers and employees	623,659	485,355	535,868
Other assets	565,888	1,070,079	1,006,554
	$ 46,695,862	$ 93,593,615	$ 76,673,341
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	$ 2,258,337	$ 3,939,896	$ 2,425,201
Accrued liabilities	2,494,493	6,705,495	5,636,054
Deferred revenue	1,165,620	2,607,573	2,013,925
Current portion of obligations under capital			

leases	1,335,192	2,405,686	2,550,509
Deficit in joint venture	822,256	--	--
Total current liabilities	8,075,898	15,658,650	12,625,689
Long-term obligations under capital leases	2,284,861	8,585,485	8,713,804
Convertible subordinated debentures	--	31,278,752	32,615,984
Convertible note	10,000,000	10,000,000	10,000,000
Commitments			
Stockholders' equity :			
Convertible preferred stock, $0.001 par value, 5,000,000 shares authorized; none issued	--	--	--
Common stock, $0.001 par value; 80,000,000 shares authorized, 17,954,064 shares, 27,800,597 shares and 28,146,386 shares issued at December 31, 1994 and 1995 and June 30, 1996, respectively	17,954	27,800	28,147
Paid-in capital	104,683,368	173,450,517	175,101,850
Warrant subscription receivable	--	(4,524,387)	(3,717,514)
Adjustment for unrealized gains (losses) on available-for-sale securities	(726,820)	217,469	(265,553)
Accumulated deficit	(76,108,281)	(140,280,514)	(157,400,801)
Deferred compensation and consulting fees	(1,529,538)	(818,568)	(564,895)
	26,336,683	28,072,317	13,181,234
Less treasury stock, at cost	(1,580)	(1,589)	(463,370)
Total stockholders' equity	26,335,103	28,070,728	12,717,864
	$ 46,695,862	$ 93,593,615	$ 76,673,341

</TABLE>

See accompanying notes.

LIGAND PHARMACEUTICALS INCORPORATED

CONSOLIDATED STATEMENTS OF OPERATIONS

<TABLE>
<CAPTION>

	YEARS ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30,	
	1993	1994	1995	1995	1996
				(UNAUDITED)	
<S>	<C>	<C>	<C>	<C>	<C>
Revenues:					
Collaborative research and development:					
Related parties	$ 9,974,361	$ 8,341,829	$ 11,972,253	$ 4,454,908	$ 7,261,849
Unrelated parties	6,137,982	4,893,257	12,423,677	5,476,188	9,878,893
Other	150,044	73,597	120,103	36,300	117,601
	16,262,387	13,308,683	24,516,033	9,967,396	17,258,343
Costs and expenses:					
Research and development	24,301,128	27,205,309	41,635,765	16,025,726	27,081,848
Selling, general and administrative	6,192,175	6,956,465	8,181,367	3,768,664	5,171,751
Write-off of acquired in-process technology	--	--	19,564,494	19,869,396	--
ALRT contribution	--	--	17,500,000	17,500,000	--
Total operating expenses	30,493,303	34,161,774	86,881,626	57,163,786	32,253,599
Loss from operations	(14,230,916)	(20,853,091)	(62,365,593)	(47,196,390)	(14,995,256)
Interest income	2,005,074	1,297,882	3,603,378	1,192,195	1,998,794
Interest expense	(353,820)	(679,282)	(5,410,018)	(1,292,802)	(4,123,825)

Equity in operations of joint venture.....	(6,878,779)	(6,844,740)	--	--	--
Net loss.....	$(19,458,441)	$(27,079,231)	$(64,172,233)	$(47,296,997)	$(17,120,287)
Net loss per share.....	$ (1.19)	$ (1.57)	$ (2.70)	$ (2.33)	$ (.61)
Shares used in computing loss per share.....	16,356,656	17,240,535	23,791,542	20,271,040	27,990,368

</TABLE>

See accompanying notes.

LIGAND PHARMACEUTICALS INCORPORATED

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

<TABLE>
<CAPTION>

	CLASS A COMMON STOCK		CLASS B COMMON STOCK		PAID-IN
	SHARES	AMOUNT	SHARES	AMOUNT	CAPITAL
<S>	<C>	<C>	<C>	<C>	<C>
Balance at December 31, 1992.....	6,780,683	$ 6,781	7,404,546	$7,405	$ 89,525,727
Issuance of Common Stock.....	119,212	119	300,946	301	4,195,505
Amortization of deferred compensation and consulting fees.....	--	--	--	--	--
Issuance of Common Stock for services rendered.....	5,000	5	15,000	15	431,710
Purchases of treasury stock.....	--	--	--	--	--
Retirement of treasury stock.....	(32,739)	(33)	(98,217)	(99)	(4,629)
Net loss.....	--	--	--	--	--
Balance at December 31, 1993.....	6,872,156	6,872	7,622,275	7,622	94,148,313
Issuance of Common Stock.....	885,463	885	14,156	14	10,537,616
Amortization of deferred compensation and consulting fees.....	--	--	--	--	--
Cumulative effect of adjustment for unrealized losses on available-for-sale securities.....	--	--	--	--	--
Adjustment for unrealized losses on available-for-sale securities.....	--	--	--	--	--
Purchase of treasury stock.....	--	--	--	--	--
Conversion of Class A Common Stock to Class B Common Stock.....	(7,757,619)	(7,757)	10,317,633	10,318	(2,561)
Net loss.....	--	--	--	--	--
Balance at December 31, 1994.....	--	--	17,954,064	17,954	104,683,368
Issuance of Common Stock.....	--	--	2,903,622	2,903	20,965,584
Issuance of Common Stock for merger net of transaction costs of $1,235,000.....	--	--	6,942,911	6,943	41,951,565
Amortization of deferred compensation and consulting fees.....	--	--	--	--	--
Adjustment to unrealized gain (losses) on available for sale securities.....	--	--	--	--	--
Purchase of treasury stock.....	--	--	--	--	--
Warrant subscription receivable.....	--	--	--	--	5,850,000
Cash received from ALRT and applied to warrant subscription receivable.....	--	--	--	--	--
Net loss.....	--	--	--	--	--
Balance at December 31, 1995.....	--	--	27,800,597	27,800	173,450,517
Issuance of Common Stock (unaudited).....	--	--	345,789	347	1,651,333
Amortization of deferred compensation and consulting fees (unaudited).....	--	--	--	--	--
Adjustment for unrealized gain (losses) on					

available-for-sale securities (unaudited).....	--	--	--	--	--	
Purchase of treasury stock (unaudited).....	--	--	--	--	--	
Receipt of Common Stock for milestone revenues (unaudited).....	--	--	--	--	--	
Cash received from ALRT and applied to subscription receivable (unaudited).....	--	--	--	--	--	
Net loss (unaudited).....	--	--	--	--	--	
Balance at June 30, 1996 (unaudited).....	--	$ --	28,146,386	$28,147	$175,101,850	

</TABLE>

LIGAND PHARMACEUTICALS INCORPORATED

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

<TABLE>
<CAPTION>

ADJUSTMENTS FOR UNREALIZED GAINS (LOSSES) ON AVAILABLE-FOR-SALE SECURITIES	ACCUMULATED DEFICIT	DEFERRED COMPENSATION AND CONSULTING FEES	WARRANT SUBSCRIPTION RECEIVABLE	TREASURY STOCK SHARES	TREASURY STOCK AMOUNT	TOTAL STOCKHOLDERS' EQUITY
<S> <C>	<C>	<C>	<C>	<C>	<C>	
$ --	$ (29,570,609)	$ (2,715,298)	$ --	(126,826)	$(4,474)	$57,249,532
--	--	--	--	--	--	4,195,925
--	--	692,459	--	--	--	692,459
--	--	(175,480)	--	--	--	256,250
--	--	--	--	(7,914)	(1,620)	(1,620)
--	--	--	--	130,956	4,761	--
--	(19,458,441)	--	--	--	--	(19,458,441)
--	(49,029,050)	(2,198,319)	--	(3,784)	(1,333)	42,934,105
--	--	--	--	--	--	10,538,515
--	--	668,781	--	--	--	668,781
(111,921)	--	--	--	--	--	(111,921)
(614,899)	--	--	--	--	--	(614,899)
--	--	--	--	(1,168)	(247)	(247)
--	--	--	--	--	--	--
--	(27,079,231)	--	--	--	--	(27,079,231)
(726,820)	(76,108,281)	(1,529,538)	--	(4,952)	(1,580)	26,335,103
--	--	--	--	--	--	20,968,487
--	--	--	--	--	--	41,958,508
--	--	710,970	--	--	--	710,970
944,289	--	--	--	--	--	944,289
--	--	--	--	(34)	(9)	(9)
--	--	--	(5,850,000)	--	--	--
--	--	--	1,325,613	--	--	1,325,613
--	(64,172,233)	--	--	--	--	(64,172,233)
217,469	(140,280,514)	(818,568)	(4,524,387)	(4,986)	(1,589)	28,070,728
--	--	--	--	--	--	1,651,680
--	--	253,673	--	--	--	253,673
(483,022)	--	--	--	--	--	(483,022)
--	--	--	--	(2,417)	(23,565)	(23,565)
--	--	--	--	(28,283)	(438,216)	(438,216)
--	--	--	806,873	--	--	806,873
--	(17,120,287)	--	--	--	--	(17,120,287)
$ (265,553)	$(157,400,801)	$ (564,895)	$(3,717,514)	(35,686)	$(463,370)	$12,717,864

</TABLE>

LIGAND PHARMACEUTICALS INCORPORATED

CONSOLIDATED STATEMENTS OF CASH FLOWS

<TABLE>
<CAPTION>

	YEARS ENDED DECEMBER 31,			SIX MONTHS ENDED JUNE 30,	
	1993	1994	1995	1995	1996
				(UNAUDITED)	
<S>	<C>	<C>	<C>	<C>	<C>
OPERATING ACTIVITIES:					
Net loss	$(19,458,441)	$(27,079,231)	$(64,172,233)	$(47,296,997)	$(17,120,287)
Adjustments to reconcile net loss to net cash used by operating activities:					
Depreciation and amortization	1,269,324	1,536,415	2,687,394	945,235	1,915,622
Equity in operations of joint venture	6,878,779	6,844,740	--	--	--
Amortization of notes receivable from officers and employees	199,578	264,716	338,819	131,157	129,487
Write-off of in process technology	--	--	19,564,494	19,869,396	--
Research and development and consulting fees paid through issuance of stock	256,250	242,475	--	--	--
Amortization of deferred compensation and consulting fees	692,459	668,781	710,970	364,740	253,673
Accretion of debt discount	--	--	1,653,752	316,520	1,337,232
Receipt of Company stock received for milestone revenue	--	--	--	--	(438,216)
Change in operating assets and liabilities, net of Glycomed merger:					
Other current assets	(530,032)	(905,886)	1,626,334	801,496	(206,430)
Receivable from a related party	(462,631)	1,432,327	(1,127,716)	(363,174)	307,546
Accounts payable and accrued liabilities	695,937	2,019,796	379,336	19,714	(2,584,136)
Deferred revenue	49,245	666,375	465,063	(311,022)	(593,648)
Net cash used in operating activities	(10,409,532)	(14,309,492)	(37,873,787)	(25,522,935)	(16,999,157)
INVESTING ACTIVITIES:					
Purchases of short-term investments	(68,684,596)	(18,336,286)	(17,684,078)	(1,342,019)	(35,127,390)
Proceeds from short-term investments	30,922,979	27,546,175	37,204,888	16,560,562	43,352,898
Purchase of property and equipment	(465,036)	(587,331)	(174,693)	(272,300)	(252,404)
Net increase in note receivable from officers and employees	(552,000)	(20,000)	(135,000)	(110,000)	(180,000)
Increases in deposits and other assets	(27,410)	(540,047)	(32,897)	(210,577)	--
Decreases in deposits and other assets	58,807	125,615	59,549	31,520	63,525
Investment in joint venture	(5,000,000)	(7,125,000)	(822,256)	(814,968)	--
Net cash acquired in Glycomed acquisition	--	--	10,225,109	10,225,109	--
Net cash (used in) provided by investing activities	(43,747,256)	1,063,126	28,640,622	24,067,327	7,856,629
FINANCING ACTIVITIES:					
Principal payments on obligations under capital leases	(1,049,878)	(1,063,618)	(1,448,176)	(688,820)	(1,039,808)
Net change in restricted short-term investment	--	--	(2,043,241)	(1,795,261)	3,012,260
Net proceeds from the issuance of convertible note	--	10,000,000	--	--	--
Net proceeds from sale of Common Stock and warrant receivable	4,194,305	10,295,793	21,059,165	10,211,859	2,434,987
Net cash provided by financing activities	3,144,427	19,232,175	17,567,748	7,727,778	4,407,439
Net (decrease) increase in cash and cash equivalents	(51,012,361)	5,985,809	8,334,583	6,272,170	(4,735,089)
Cash and cash equivalents at beginning of period	52,654,446	1,642,085	7,627,894	7,627,894	15,962,477
Cash and cash equivalents at end of period	$ 1,642,085	$ 7,627,894	$ 15,962,477	$ 13,900,064	$ 11,227,388
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:					
Interest paid	$ 353,820	$ 420,948	$ 3,178,041	$ 503,713	$ 2,742,456
SUPPLEMENTAL SCHEDULE OF NONCASH INVESTING AND FINANCING ACTIVITIES:					
Additions to obligations under capital leases	$ 2,047,084	$ 1,162,111	$ 8,414,973	$ 2,780,940	$ 1,312,951
Warrant subscription receivable issued with ALRT offering	$ --	$ --	$ 5,850,000	$ 5,850,000	--

</TABLE>

See accompanying notes.

LIGAND PHARMACEUTICALS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(INFORMATION AS OF JUNE 30, 1996 AND FOR THE SIX MONTHS ENDED JUNE 30, 1995 AND 1996 IS UNAUDITED)

1. ORGANIZATION

Ligand Pharmaceuticals Incorporated, a Delaware corporation (the "Company"), is a biopharmaceutical company primarily committed to the discovery and development of new drugs that regulate hormone activated intracellular receptors and Signal Transducers and Activators of Transcription.

The Company's potential products are in various stages of development. Substantially all of the Company's revenues to date have been derived from its research and development agreements with major pharmaceutical collaborators. Prior to generating product revenues, the Company must complete the development of its products, including several years of human clinical testing, and receive regulatory approvals prior to selling these products in the human health care market. No assurance can be given that the Company's products will be successfully developed, regulatory approvals will be granted, or patient and physician acceptance of these products will be achieved. There can be no assurance that Ligand will successfully commercialize, manufacture or market its products or ever achieve or sustain product revenues or profitability.

The Company faces those risks associated with companies whose products are in various stages of development. These risks include, among others, the Company's need for additional financing to complete its research and development programs and commercialize its technologies. The Company expects to incur substantial additional research and development expenses, including continued increases in personnel and costs related to preclinical testing, clinical trials and sales and marketing expenses related to the product sales in Ligand Pharmaceuticals (Canada) Incorporated. The Company intends to seek additional funding sources of capital and liquidity through collaborative arrangements, collaborative research or through public or private financing. No assurance can be given that such financing will be available to the Company when required or under favorable terms.

The Company believes that patents and other proprietary rights are important to its business. The Company's policy is to file patent applications to protect technology, inventions and improvements to its inventions that are considered important to the development of its business. The patent positions of pharmaceutical and biotechnology firms, including the Company, are uncertain and involve complex legal and factual questions for which important legal principles are largely unresolved.

2. SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and disclosures made in the accompanying notes to the consolidated financial statements. Actual results could differ from those estimates.

Interim Financial Information

The financial statements at June 30, 1996 and the six months ended June 30, 1995 and 1996 are unaudited. These financial statements reflect all adjustments, consisting only of normal recurring adjustments

which, in the opinion of management, are necessary to fairly present the financial position as of June 30, 1996, and the results of operations for the six months ended June 30, 1995 and 1996. The results of operations for the six months ended June 30, 1996 are not necessarily indicative of the results to be expected for the year ending December 31, 1996.

Cash, Cash Equivalents and Short-term Investments

Cash and cash equivalents consist primarily of cash, certificates of deposits, treasury securities and repurchase agreements with original maturities at the date of acquisition of less than three months.

The Company invests its excess cash principally in United States government debt securities, investment-grade corporate debt securities and certificates of deposit. The Company has established guidelines relative to diversification and maturities that maintain safety and liquidity. These guidelines are periodically reviewed and modified to take advantage of trends in yields and interest rates.

Common Stock and Net Loss Per Share

On November 24, 1994, each share of the Company's Class A Common Stock automatically converted into 1.33 shares of Class B Common Stock (which was thereafter designated "Common Stock"). All references in the accompanying notes and consolidated financial statements referring to the number of shares and per share amounts have been retroactively restated to reflect the conversion of the Company's Class A Common Stock into Common Stock. Net loss per share is computed using the weighted average number of shares of Common Stock outstanding.

Research and Development Revenues and Expenses

Collaborative research and development revenues are recorded as earned based on the performance criteria of each contract. Payments received which have not met the appropriate criteria are recorded as deferred revenue. Research and development costs are expensed as incurred.

For the years ended December 31, 1993, 1994 and 1995, and for the six months ended June 30, 1995 and 1996, costs and expenses related to collaborative research and development agreements were $16.1 million, $13.2 million, $24.4 million, $9.9 million and $17.1 million, respectively.

Property and Equipment

Property and equipment is stated at cost and consists of the following:

<TABLE>
<CAPTION>

	DECEMBER 31,	
	1994	1995
<S>	<C>	<C>
Equipment and leasehold improvements	$ 8,290,929	$19,386,920
Less accumulated depreciation and amortization	(4,427,516)	(7,114,910)
Net property and equipment	$ 3,863,413	$12,272,010

</TABLE>

Depreciation of property and equipment is computed using the straight-line method over the estimated useful lives of the assets which range from five to fifteen years. Assets acquired pursuant to capital lease arrangements and leasehold improvements are amortized over the estimated useful lives or the related lease term, whichever is shorter.

New Accounting Standards

In October 1995, the Financial Accounting Standards Board issued SFAS 123, "Accounting for Stock-Based Compensation", effective for fiscal years beginning after December 15, 1995. SFAS 123 establishes and encourages the use of the fair value based method of accounting for stock-based compensation arrangements, under which compensation cost is determined using the fair value of stock-based compensation determined as of the grant date, and is recognized over the periods in which the related services are rendered. The statement also permits companies to elect to continue using the current implicit value accounting method specified in Accounting Principles Board (APB) Opinion No. 25 to account for stock-based compensation. The Company has decided to retain its current implicit value based method, and will be required to disclose the pro forma effect of using the fair value based method to account for its stock based compensation. Pro forma disclosures reflecting the effects of the fair value based method of accounting are not required for interim reporting purposes.

3. INVESTMENTS

Investments are recorded at estimated fair market value at December 31, 1995 and 1994, and consist principally of United States government debt securities, investment-grade corporate debt securities and certificates of deposit with maturities at the date of acquisition of three months or longer. The Company has classified all of its investments as available-for-sale securities. The following table summarizes the various investment categories at:

<TABLE>
<CAPTION>

	DECEMBER 31, 1994		
	COST	GROSS UNREALIZED GAINS (LOSSES)	ESTIMATED FAIR VALUE
<S>	<C>	<C>	<C>
Available-for-Sale:			
U.S. Government Securities	$21,323,125	$ (415,442)	$20,907,683
Corporate Obligations	8,700,433	(273,853)	8,426,580
Certificates of Deposit	1,478,562	(37,525)	1,441,037
	$31,502,120	$ (726,820)	$30,775,300

</TABLE>

<TABLE>
<CAPTION>

	DECEMBER 31, 1995		
	COST	GROSS UNREALIZED GAINS (LOSSES)	ESTIMATED FAIR VALUE
<S>	<C>	<C>	<C>
Available-for-Sale:			
U.S. Government Securities	$37,073,232	$ 208,798	$37,282,030
Corporate Obligations	14,054,668	13,580	14,068,248
Certificates of Deposit	2,836,524	(4,909)	2,831,615
	53,964,424	217,469	54,181,893
Certificates of Deposit-restricted	4,057,586	--	4,057,586
U.S. Government Securities-restricted	2,701,000	--	2,701,000
Equity securities	440,000	--	440,000

	$61,163,010	$ 217,469	$61,380,479

</TABLE>

The realized gains (losses) on sales of available-for-sale securities for the years ended December 31, 1994 and 1995 have not been material.

The amortized cost and estimated fair value of debt and marketable securities at December 31, 1994 and 1995, by contractual maturity, are shown below. Expected maturities will differ from contractual maturities because the issuers of the securities may have the right to prepay obligations without prepayment penalties.

<TABLE>
<CAPTION>

	DECEMBER 31, 1994		DECEMBER 31, 1995	
	COST	ESTIMATED FAIR VALUE	COST	ESTIMATED FAIR VALUE
<S>	<C>	<C>	<C>	<C>
Due in one year or less	$13,724,390	$13,450,132	$57,509,400	$57,692,058
Due after one year through three years	17,686,262	17,236,044	3,117,610	3,155,364
Due after three years	91,468	89,124	96,000	93,057
	31,502,120	30,775,300	60,723,010	60,940,479
Equity securities	--	--	440,000	440,000
	$31,502,120	$30,775,300	$61,163,010	$61,380,479

</TABLE>

4. MERGER WITH GLYCOMED

In May 1995, Glycomed Incorporated ("Glycomed") was merged into a wholly-owned subsidiary of the Company ("the Merger"). Glycomed is a biopharmaceutical company conducting research and development of pharmaceuticals based on biological activities of complex carbohydrates. The results of operations of Glycomed are included in the Company's consolidated results of operations with effect from the date of the Merger. Each outstanding share of Glycomed Common Stock was converted into 0.5301 shares of the Common Stock, resulting in the issuance of 6,942,911 shares of the Common Stock to Glycomed shareholders. The Merger was accounted for using the purchase method of accounting. The excess of the purchase price over the fair value of the net assets acquired was allocated to in-process technology and was written off, resulting in a one time non-cash charge to results of operations of $19.6 million.

Details of the merger are as follows:

<TABLE>

<S>	<C>
Total consideration:	
Common Stock	$43,193,560
Convertible debentures assumed	29,625,000
Other liabilities assumed	6,896,576
	79,715,136
Less:	
Fair value of assets acquired, including cash, restricted cash and short term investments of $46,698,462	49,925,533
Write off of in-process technology	19,564,494

Net cash acquired	$10,225,109

</TABLE>

The following unaudited pro forma data reflects the Company's results of operations as if the Glycomed acquisition occurred on January 1, 1994.

<TABLE>
<CAPTION>

	YEARS ENDED DECEMBER 31,	
	1994	1995
<S>	<C>	<C>
Revenues	$ 19,918,683	$ 25,711,477
Net loss	(68,569,065)	(51,689,676)
Loss per share	$ (2.84)	$ (1.96)

</TABLE>

5. ACCRUED LIABILITIES

Accrued liabilities at December 31, 1994 and 1995 comprised the following:

<TABLE>
<CAPTION>

	1994	1995
<S>	<C>	<C>
Accrued legal	$ 574,571	$1,463,599
Accrued interest	258,333	2,291,820
Accrued compensation	725,608	1,099,615
Other	935,981	1,850,461
	$2,494,493	$6,705,495

</TABLE>

6. CONVERTIBLE SUBORDINATED DEBENTURES

In conjunction with the Glycomed acquisition, the Company adjusted the carrying value of the Glycomed 7 1/2% Convertible Subordinated Debentures Due 2003 (the "Debentures") issued by Glycomed in 1992 in the original principal amount of $50.0 million to $29.6 million, which was their fair market value at the date of the Merger. The Company has entered into a supplemental indenture which provides for conversion of the Debentures into the Common Stock at $26.52 per share. The Debentures pay interest semi-annually at 7.5% per annum and are due in 2003. The difference between the face value and the fair market value at the acquisition date will be accreted up to the face value over the remaining term of the Debentures and will be charged to interest expense. In accordance with terms of the indenture, a trustee held U.S. Government Securities of approximately $2.7 million in escrow until January 1, 1996 for future interest payments. This amount is included in restricted short-term investments at December 31, 1995.

7. COMMITMENTS

Leases and Equipment Notes Payable

The Company has entered into capital lease and equipment note payable agreements which require monthly payments through January 2003. Equipment under these agreements at December 31, 1994 and 1995 and June 30, 1996 was $7.7 million, $16.1 million and $17.4 million, respectively. At December 31, 1994 and 1995 and June 30, 1996 accumulated amortization was $4.2 million, $6.9 million

and $8.7 million, respectively.

The Company has also entered into operating lease agreements for office and research facilities with varying terms through August 2015. The agreements also provide for increases in annual rentals based on changes in the Consumer Price Index or fixed percentage increases varying from three to six percent. One of these leases requires an irrevocable standby letter of credit of $1.3 million to secure the performance of the Company's lease obligations.

Rent expense for the years ended December 31, 1993, 1994 and 1995 and for the six months ended June 30, 1995 and 1996 was $1.3 million, $1.7 million, $2.5 million, $1.0 million and $1.5 million, respectively.

At December 31, 1995, annual minimum rental payments due under the Company's leases and equipment notes payable are as follows:

<TABLE>
<CAPTION>

	OBLIGATIONS UNDER CAPITAL LEASES AND EQUIPMENT NOTES PAYABLE	OPERATING LEASES
<S>	<C>	<C>
1996	$ 3,200,623	$ 3,084,924
1997	2,790,533	2,510,310
1998	2,198,540	1,351,027
1999	1,871,363	1,391,558
2000	1,871,363	1,433,305
Thereafter	1,683,583	24,691,225
Total minimum lease payments	13,616,005	$34,462,349
Less amounts representing interest	2,624,834	
Present value of minimum lease payments	10,991,171	
Less current portion	2,405,686	
	$ 8,585,485	

</TABLE>

Royalty Agreements

The Company has entered into royalty agreements requiring payments by the Company ranging from 8% to 12% of net sales and 10% to 20% of license and other income for certain products developed by the Company. Currently, the Company is making minimum royalty payments under two agreements. These payments increase annually to a maximum of $200,000 per year and aggregate $1.5 million through 2001. Royalty expense under the agreements for the years ended December 31, 1993, 1994 and 1995 and for the six months ended June 30, 1995 and 1996 were $150,000, $160,000, $195,000, $95,000 and $90,000, respectively.

No royalty payments have been received by the Company.

8. STOCKHOLDERS' EQUITY

Warrants

At December 31, 1995 and June 30, 1996, the Company had outstanding warrants to purchase 6,696,646 shares and 6,671,922 shares, respectively, of

Common Stock, of which 6,500,000 warrants issued in the ALRT offering (see Note 9). The warrants have exercise prices ranging from $1.80 to $22.41 per share and expire at various dates through June 3, 2000.

Stock Plans

The Company's 1992 stock option/issuance plan incorporates all outstanding stock options and unvested share issuances under a prior plan along with amendments in May 1993, 1994, 1995 and 1996 to increase the aggregate shares available for grant or issuance to 6,428,457 shares of Common Stock. The employee stock purchase plan provides for the sale of 166,500 shares of Common Stock. In addition to these plans, on the date of the Merger, all outstanding in-the-money stock options from Glycomed's stock option plan were converted

into options to purchase 470,008 shares of Common Stock. Following is a summary of the activity for the Company's stock option plans:

<TABLE>
<CAPTION>

	SHARES	PRICE RANGE
<S>	<C>	<C>
Balance at December 31, 1992	888,717	$ 0.22 - $ 9.60
Granted	546,851	7.30 - 8.64
Exercised	(1,465)	6.00 - 9.60
Cancelled	(24,126)	6.00 - 9.60
Balance at December 31, 1993	1,409,977	0.22 - 9.50
Granted	1,046,217	8.62 - 11.59
Exercised	(1,782)	7.70 - 7.90
Cancelled	(35,508)	0.22 - 10.55
Balance at December 31, 1994	2,418,904	0.22 - 11.59
Merger options granted	470,008	0.68 - 6.37
Granted	1,077,540	4.68 - 10.00
Exercised	(215,530)	0.29 - 7.97
Cancelled	(146,816)	3.89 - 11.59
Balance at December 31, 1995	3,604,106	0.22 - 11.59
Granted	357,518	12.75 - 16.38
Exercised	(305,688)	0.22 - 11.59
Cancelled	(58,070)	3.77 - 12.75
Balance at June 30, 1996	3,597,866	$ 0.22 - $16.38
Options exercisable at December 31, 1995	1,697,031	$ 0.22 - $11.59
Options exercisable at June 30, 1996	1,726,251	$ 0.22 - $11.59

</TABLE>

At December 31, 1995 and June 30, 1996, 381,631 and 874,074 shares, respectively, were available under the plans for future grants of stock options or sale of stock.

For certain shares issued under these plans and certain other issuances of stock, the Company has recognized as compensation and consulting fees expense the excess of the deemed value for accounting purposes over the aggregate issue price for such shares. The compensation expense is amortized ratably over the vesting period of each share. Amortization of deferred compensation and consulting fees for the years ended December 31, 1993, 1994 and 1995 and for the six months ended June 30, 1995 and 1996 was $692,000, $669,000, $711,000, $365,000 and $254,000, respectively.

9. COLLABORATIVE RESEARCH AGREEMENTS

SmithKline Beecham Corporation

In February 1995 the Company entered into a research collaboration with SmithKline Beecham Corporation ("SB") to discover and characterize small molecule drugs to control hematopoiesis. Revenues under the agreement are recognized ratably over the term of the agreement. The revenue recognized under the agreement for the year ended December 31, 1995 and for the six months ended June 30, 1995 and 1996 was $2.1 million, $910,000 and $1.2 million, respectively. SB has agreed to provide the Company up to $21.5 million in research funding and equity investments. SB made an investment of $5.0 million in the Company's Common Stock at the inception of the agreement. In November 1995, a second equity investment

of $2.5 million in the Company's Common Stock was provided to the Company upon the achievement of certain milestones. A third installment of equity investment of $2.5 million will be provided to the Company upon SB's election to expand the scope of research as defined. The final installment of $2.5 million will be provided at SB's option as a convertible note or an equity investment if SB elects to further expand the scope of research as defined.

American Home Products Corporation

In September 1994 the Company entered into a collaborative research agreement with the Wyeth-Ayerst division of American Home Products ("AHP"), to discover and develop drugs which interact with the estrogen or progesterone receptors. AHP agreed to support up to $19.0 million of the Company's research activities, to purchase $5.0 million of the Company's Common Stock, and to provide, in three installments, up to $20.0 million in convertible notes over the life of the agreement. Revenues under the agreement are recognized ratably over the term of the agreement.

Revenue recognized under the agreement for the years ended December 31, 1994 and 1995 and for the six months ended June 30, 1995 and 1996 was $1.7 million, $4.0 million, $2.0 million and $4.4 million, respectively. The $5.0 million equity investment plus the initial $10.0 million convertible note was provided to the Company upon inception of the agreement. The second convertible note installment of $5.0 million will be provided upon the achievement of certain milestones. In the second quarter of 1995, the Company achieved the milestone, which allowed the Company to qualify for an additional $5.0 million convertible note. The Company decided that it will not draw down the note at this time and the parties have agreed to extend the period for Ligand to draw down the note up to the 27th month of the agreement. The final convertible note installment of $5.0 million will be provided if the collaboration agreement is extended from three to five years. The first two notes are convertible into Common Stock at $10.01 per share and the final note is convertible at $10.88 per share. The conversion prices are subject to adjustment if certain dilutive events occur to outstanding Common Stock. In August 1996 Ligand elected to convert an aggregate of $3.8 million of the $10.0 million convertible note into 374,626 shares of Common Stock at the $10.01 conversion price. The notes bear interest at 7.75% payable semi-annually and are due September 1999 unless converted into the Company's Common Stock. If conversion has not occurred by September 1999 the Company may extend the due date of the notes to September 2001.

In January 1996 the Company and AHP expanded and amended the research and development collaboration. The Company received $1.5 million in additional research revenue from AHP, AHP expanded the research funding by $1.0 million in years two and three of the agreement, the contract-specified milestone payments increased, AHP granted rights to the Company to cause the conversion of the convertible note into Ligand Common Stock, and the parties agreed to extend the period for Ligand to draw down the loan until December 1996.

Abbott Laboratories

In July 1994 the Company entered into a long-term collaborative research agreement with Abbott Laboratories ("Abbott") to discover and develop drugs for the prevention or treatment of inflammatory diseases. Abbott agreed to support up to $16.0 million of the Company's research activities over a five-year period in connection with the agreement.

Revenues under the agreement are recognized ratably over the term of the agreement and for the years ended December 31, 1994 and 1995 and for the six months ended June 30, 1995 and 1996 revenues were $1.2 million, $2.6 million, $1.2 million and $1.4 million, respectively. Abbott made an equity investment of

$5.0 million by purchasing shares of the Company's Common Stock at the inception of the agreement and in August 1995, Abbott made another equity investment of $5.0 million in the Company's Common Stock, which was stipulated in the July 1994 agreement.

Sankyo Company Limited

As part of the Glycomed acquisition, the Company acquired a collaborative research agreement with Sankyo Company Limited ("Sankyo") which Glycomed had entered into in June 1994. Under the agreement, Sankyo reimburses a portion of the Company's research expenses related to the collaboration up to an aggregate of $8.0 million. Revenues under the agreement are recognized ratably over the term of the agreement. The revenue recognized under the agreement since the date of Merger through December 31, 1995 and for the six months ended June 30, 1995 and 1996 was $1.7 million, $311,000 and $1.4 million, respectively. The agreement also provides that upon being presented with a target compound arising from the research collaboration by the Company, Sankyo shall notify the Company whether it wishes to pursue development of the compound. If Sankyo exercises its option to develop the compound, the Company and Sankyo shall negotiate in good faith the terms and conditions for an option and license agreement within 180 days of Sankyo's exercise. Sankyo shall pay the Company an initial payment of $1.0 million within 30 days after execution of each option and license agreement as a license fee. Sankyo shall make additional payments of license fees as follows: $1.0 million within 30 days after Sankyo decides to initiate Phase II clinical trials of the approved compound in Japan; $1.0 million within 30 days after the filing of an NDA for the approved compound in Japan; and $2.0 million within 30 days after the date of approval of an NDA for the approved compound in Japan.

In connection with the collaborative research agreement, in September 1995, Sankyo purchased $1.5 million of the Company's Common Stock.

Glaxo-Wellcome plc

In September 1992 the Company entered into a five-year collaborative research agreement with Glaxo-Wellcome plc ("Glaxo") to develop drugs for the treatment of cardiovascular disease. Under the agreement, Glaxo reimburses a portion of the Company's research expenses related to the collaboration to a maximum of approximately $2.0 million annually. Revenues under the agreement are recognized ratably over the term of the agreement. The revenue recognized under the agreement for the years ended December 31, 1993, 1994 and 1995 and for the six months ended June 30, 1995 and 1996 was $1.2 million, $2.0 million, $2.1 million, $1.1 million and $1.1 million, respectively. In connection with the agreement, Glaxo purchased $7.5 million of the Company's Common Stock. Glaxo also purchased $2.5 million of the Company's Common Stock as part of the Company's initial public offering.

Allergan Retinoid Therapeutics, Inc.

On June 30, 1992 the Company entered into agreements with Allergan, Inc. ("Allergan") whereby Allergan-Ligand Joint Venture ("the Joint Venture") was

established to research, develop, license and commercialize products related to the use of intercellular receptors in the treatment of certain diseases and disorders.

From inception through December 31, 1994, the Company and Allergan invested $14.6 million each to provide funding for the Joint Venture's operations. Following is the summarized balance sheet of the Joint

Venture as of December 31, 1994 and the summarized statements of operations for the years ended December 31, 1993 and 1994, and for the period from July 1, 1992 (inception) through December 31, 1994:

ALLERGAN LIGAND JOINT VENTURE

BALANCE SHEET

<TABLE>
<CAPTION>

	DECEMBER 31, 1994
<S>	<C>
ASSETS	
Cash and cash equivalents	$ 70,356
Interest receivable and other current assets	--
Property and equipment, net	2,284
	$ 72,640
LIABILITIES AND PARTNERS' DEFICIT	
Accounts payable to Ligand	$1,158,400
Accounts payable to Allergan	522,362
Other accounts payable and accrued expenses	36,388
Partners' deficit:	
The Company	(822,255)
Allergan	(822,255)
	$ 72,640

</TABLE>

ALLERGAN LIGAND JOINT VENTURE

STATEMENTS OF OPERATIONS

<TABLE>
<CAPTION>

	YEARS ENDED DECEMBER 31,		JULY 1, 1992 (INCEPTION) THROUGH DECEMBER 31,
	1993	1994	1994
<S>	<C>	<C>	<C>
Interest income	$ 129,933	$ 4,552	$ 174,867
Contract research expense	13,887,491	13,694,032	31,069,375
Net loss	$(13,757,558)	$(13,689,480)	$(30,894,508)

</TABLE>

In December 1994, the Company and Allergan formed Allergan Ligand Retinoid Therapeutics, Inc. ("ALRT") to continue the research and development activities previously conducted by the Joint Venture. In June 1995, the Company and ALRT

completed a public offering of 3,250,000 Units with aggregate proceeds of $32.5 million (the "ALRT Offering") and cash contributions by Allergan and Ligand of $50.0 million and $17.5 million respectively, providing for net proceeds of $94.3 million for retinoid product research and development. Each Unit consisted of one share of ALRT's callable common stock and two warrants, each warrant entitling the holder to purchase one share of the Common Stock of the Company. Immediately prior to the consummation of the ALRT Offering, Allergan Pharmaceuticals (Ireland) Ltd., Inc. made a $6.0 million investment in the Company's Common Stock. The Company's $17.5 million cash contribution resulted in a one-time charge to operations. The Company also recorded a warrant subscription receivable and corresponding increase in paid-in capital of $5.9 million (6,500,000 warrants valued at $0.90 per warrant) pursuant to the ALRT Offering. In 1995 and for the first six months of 1996, $1.3 million and $806,000, respectively, of the proceeds received from ALRT were applied to the warrant subscription receivable. In conjunction with the consummation of the ALRT Offering, all rights held by the Joint Venture were licensed to ALRT. The Company, Allergan and ALRT entered into certain agreements including a Technology License Agreement, a Research and Development Agreement, a Commercialization Agreement, a 1057

Purchase Option Agreement, an Asset Purchase Option Agreement and Services and Administrative Agreements in connection with the funding of ALRT. The Company has an option to purchase all ALRT callable common stock. If Ligand exercises the option, Allergan has an option to purchase an undivided 50% interest in all of the assets of ALRT. After June 3, 1995, cash received from ALRT pursuant to the agreements was prorated between contract revenue and the warrant subscription receivable based on their respective values.

Contributions made by the Company to the Joint Venture related to the period from January 1, 1995, through June 30, 1995 were retroactively reimbursed by ALRT and previous equity losses recognized for the six month period from the Joint Venture operations were reversed.

Pfizer Inc

In 1991 the Company entered into a collaborative research and development and license agreement with Pfizer Inc ("Pfizer") to perform services related to the joint development of pharmaceuticals for the treatment of osteoporosis. Due to the early success in meeting research-stage objectives for drug candidates, the two companies phased out the ongoing research collaboration by July 1, 1994. The Company received and recorded $4.9 million of revenue for the year ended December 31, 1993. In connection with the collaborative research agreement, Pfizer purchased $7.5 million of Common Stock.

In December 1994, Ligand filed suit against Pfizer in the Superior Court of California in San Diego County for breach of contract and for a declaration of future rights as they relate to droloxifene, a compound upon which Ligand performed work at Pfizer's request during a collaboration between Pfizer and Ligand to develop drugs in the field of osteoporosis. Droloxifene is an estrogen antagonist/partial agonist with potential indications in the treatment of osteoporosis and breast cancer as well as other applications. Ligand and Pfizer entered into a settlement agreement with respect to the lawsuit in April 1996. Under the terms of the settlement agreement, Ligand is entitled to receive milestone payments if Pfizer continues development and royalties if Pfizer commercializes droloxifene. At the option of either party, milestone and royalty payments owed Ligand can be satisfied by Pfizer transferring to Ligand shares of Common Stock at an exchange ratio of $12.375 per share. To date, Ligand has received approximately $1.3 million in milestone payments from Pfizer as a result of the continued development of droloxifene. These milestones were paid in the form of an aggregate of 101,011 shares of Common Stock, which were subsequently retired from treasury stock in September 1996. According to recent announcements by Pfizer, droloxifene has entered Phase II clinical trials for osteoporosis and Phase III clinical trials for breast cancer.

10. LICENSE AGREEMENT

In September 1992, the Company acquired certain licenses and technology rights from Rockefeller University and New York University in exchange for an initial cash payment, shares of Common Stock and warrants to purchase Common Stock of the Company. Under the terms of the agreements the Company acquired worldwide licensing rights to certain transcription technology developed by Rockefeller University. The agreements also provide for certain additional payments if certain milestones are achieved. In connection with these agreements the Company entered into consulting agreements whereby two scientists received shares of Common Stock from the Company's restricted stock plan. These shares were issued at par value and resulted in deferred consulting fees of $2.2 million which are being recognized over the five-year vesting period.

11. NOTES RECEIVABLE FROM OFFICERS AND EMPLOYEES

The Company has advanced funds to certain officers and employees in connection with various employment agreements. The agreements provide for forgiveness of the advances over four and five-year periods. If an individual terminates the relationship with the Company, the unforgiven portion of the advances and any accrued interest are due and payable upon termination. The notes are secured by shares of the Company's Common Stock owned by the individual or second trust deeds on the personal residences of the respective employees.

12. INCOME TAXES

The Company adopted Statement of Financial Accounting Standards ("SFAS") No. 109, "Accounting for Income Taxes," in January 1993. SFAS 109 is an asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's financial statements or tax returns. The adoption of SFAS 109 had no impact on 1993 or prior results.

At December 31, 1995, the Company had consolidated federal and combined California income tax net operating loss carryforwards of approximately $148 million and $16 million, respectively. The difference between the federal and California tax loss carryforwards is primarily attributable to the capitalization of research and development expenses for California income tax purposes and the fifty percent limitation on California loss carryforwards.

The federal and California tax loss carryforwards will begin to expire in 2002 and 1996, respectively, unless previously utilized. The Company also had consolidated federal and combined California research tax credit carryforwards of approximately $3.8 million and $2.3 million respectively, which will begin to expire in 2002 unless previously utilized.

Pursuant to Internal Revenue Code Sections 382 and 383, use of a portion of net operating loss and credit carryforwards will be limited because of cumulative changes in ownership of more than 50% which the Company believes will occur as a result of the sale of Common Stock contemplated by this offering and which previously occurred within three year periods during 1989 and 1992. However, the Company does not believe the limitations will have a material impact upon its ability to utilize these carryforwards. Future sales of Common Stock may, depending on the timing of such sales, further restrict the utilization of the carryforward. In addition, use of Glycomed's preacquisition tax net operating and credit carryforwards will also be limited because the acquisition by the Company represents a change in ownership of more than 50%. Such tax net operating losses and credit carryforwards of Glycomed have been reduced, including the related deferred tax assets.

Significant components of the Company's deferred tax assets as of December 31, 1994 and 1995 are shown below. A valuation allowance has been recognized to fully offset the deferred tax assets as of December 31, 1994 and 1995 as realization of such assets is uncertain.

<TABLE>
<CAPTION>

	1994	1995
<S>	<C>	<C>
Deferred tax liability:		
Acquired subordinated debt	$ --	$ 7,676,000
Deferred tax assets:		
Net operating loss carryforwards	23,913,000	53,191,000
Research and development credits	4,088,000	5,284,000
Capitalized research and development	3,841,000	7,556,000
Other -- net	2,214,000	3,651,000
Total deferred tax assets	34,056,000	69,682,000
Valuation allowance for deferred tax assets	(34,056,000)	(62,006,000)
Net deferred tax assets	--	7,676,000
Net deferred taxes	$ --	$ --

</TABLE>

13. SUBSEQUENT EVENT

In September 1996, the Company's Board of Directors adopted a preferred shares rights plan (the "Shareholder Rights Plan") which provides for a dividend distribution of one preferred share purchase right (a "Right") on each outstanding share of the Common Stock. Each Right entitles stockholders to buy 1/1000th of a share of Ligand Series A Participating Preferred Stock at an exercise price of $100, subject to adjustment. The Rights will become exercisable following the tenth day after a person or group announces acquisition of 20% or more of the Common Stock, or announces commencement of a tender offer, the consummation of which would result in ownership by the person or group of 20% or more of the Common Stock. The Company will be entitled to redeem the Rights at $0.01 per Right at any time on or before the earlier of the tenth day following acquisition by a person or group of 20% or more of the Common Stock and September 13, 2006.

- ----------
- ----------

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<TABLE>

<CAPTION>

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- ---
- ---

2,750,000 SHARES

LOGO

COMMON STOCK

PROSPECTUS

BEAR, STEARNS & CO. INC.

ROBERTSON, STEPHENS & COMPANY

HAMBRECHT & QUIST

, 1996

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth all expenses, other than underwriting discounts and commissions, payable by the Registrant in connection with the sale of the Common Stock being registered. All the amounts shown are estimates, except for the registration fee and the NASD filing fee.

<TABLE>

<S>	<C>
Registration fee	$ 15,747
Listing fee	17,500
NASD fee	5,164
Blue Sky fees and expenses	15,000
Printing and engraving expenses	90,000
Legal fees and expenses	150,000
Accounting fees and expenses	50,000
Transfer Agent and Registrar fees	15,000
</TABLE>

Miscellaneous expenses	16,589
Total	$375,000

</TABLE>

ITEM 15. INDEMNIFICATION OF OFFICERS AND DIRECTORS.

(a) Section 145 of the Delaware General Corporation Law permits indemnification of officers and directors of Ligand under certain conditions and subject to certain limitations. Section 145 of the Delaware General Corporation Law also provides that a corporation has the power to purchase and maintain insurance on behalf of its officers and directors against any liability asserted against such person and incurred by him or her in such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of Section 145 of the Delaware General Corporation Law.

(b) Article VII, Section 1 of the Bylaws of Ligand provides that Ligand shall indemnify its officers, directors, employees and agents to the full extent permitted by the General Corporation Law of Delaware. The rights to indemnity thereunder continue as to a person who has ceased to be a director, officer, employee or agent and inure to the benefit of the heirs, executors and administrators of the person. In addition, expenses incurred by a director or officer in defending any civil, criminal, administrative or investigative action, suit or proceeding by reason of the fact that he or she is or was a director or officer of Ligand (or was serving at Ligand's request as a director or officer of another corporation) shall be paid by Ligand in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by Ligand as authorized by the relevant section of the Delaware General Corporation Law.

(c) As permitted by Section 102(b)(7) of the Delaware General Corporation Law, Article V, Section (A)2 of Ligand's Certificate of Incorporation provides that a director of Ligand shall not be personally liable for monetary damages or breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to Ligand or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which the director derived any improper personal benefit.

(d) Article V, Section (A)1 of Ligand's Certificate of Incorporation provides that the liability of the directors of Ligand for monetary damages shall be eliminated to the fullest extent permissible under California law. Accordingly, to the extent California law applies, a director will not be liable for monetary damages for breach of duty to Ligand or its stockholders in any action brought by or in the right of Ligand. However, a director remains liable to the extent required by law (i) for acts or omissions that involve intentional misconduct or a knowing and culpable violation of law, (ii) for acts or omissions that a director believes to be

contrary to the best interests of Ligand or its stockholders or that involve the absence of good faith on the part of the director, (iii) for any transaction from which a director derived an improper personal benefit, (iv) for acts or omissions that show a reckless disregard for the director's duty to Ligand or its stockholders in circumstances in which the director was aware, or should have been aware, in the ordinary course of performing a director's duties, of a risk of serious injury to Ligand or its stockholders, (v) for acts or omissions that constitute an unexcused pattern of inattention that amounts to an abdication of the director's duty to Ligand or its stockholders, (vi) for any act or omission occurring prior to the date when the exculpation provision became effective and (vii) for any act or omission as an officer, notwithstanding that the officer is also a director or that his or her actions, if negligent or improper, have been ratified by the directors. The effect of the provisions in the Certificate of Incorporation is to eliminate the rights of Ligand and its stockholders (through stockholders' derivative suits on behalf of Ligand) to recover monetary damages against a director for breach of duty as a director, including breaches resulting from negligent behavior in the context of

transactions involving a change of control of Ligand or otherwise, except in the situations described in clauses (i) through (vii) above. These provisions will not alter the liability of directors under federal securities laws.

(e) Pursuant to authorization provided under the Certificate of Incorporation, Ligand has entered into indemnification agreements with each of its present and certain of its former directors. Ligand has also entered into similar agreements with certain of Ligand's executive officers who are not directors. Generally, the indemnification agreements attempt to provide the maximum protection permitted by Delaware and California law as it may be amended from time to time. Moreover, the indemnification agreements provide for certain additional indemnification. Under such additional indemnification provisions, however, an individual will not receive indemnification for judgments, settlements or expenses if he or she is found liable to Ligand (except to the extent the court determines he or she is fairly and reasonably entitled to indemnity for expenses), for settlements not approved by Ligand or for settlements and expenses if the settlement is not approved by the court. The indemnification agreements provide for Ligand to advance to the individual any and all reasonable expenses (including legal fees and expenses) incurred in investigating or defending any such action, suit or proceeding. In order to receive an advance of expenses, the individual must submit to Ligand copies of invoices presented to him or her for such expenses. Also, the individual must repay such advances upon a final judicial decision that he or she is not entitled to indemnification. Ligand's Bylaws contain a provision of similar effect relating to advancement of expenses to a director or officer, subject to an undertaking to repay if it is ultimately determined that indemnification is unavailable.

(f) There is directors and officers liability insurance now in effect which insures directors and officers of the Company.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(A) EXHIBITS.

<TABLE>
<CAPTION>
EXHIBIT
NO. DESCRIPTION
- ------- ----------
<C> <S>
+1.1 Underwriting Agreement.
5.1 Opinion of Brobeck, Phleger & Harrison LLP with respect to the securities being registered.
23.1 Consent of Ernst & Young LLP, Independent Auditors.
23.2 Consent of Brobeck, Phleger & Harrison LLP (contained in their opinion filed as Exhibit 5.1).
</TABLE>

- ----------
+ To be filed by amendment.

(B) FINANCIAL STATEMENT SCHEDULES INCLUDED SEPARATELY IN THE REGISTRATION STATEMENT.

None

All other schedules are omitted because they are not required, are not applicable or the information is included in the Consolidated Financial Statements or notes thereto.

ITEM 17. UNDERTAKINGS.

The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities

at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Company pursuant to the provisions described in Item 15, or otherwise, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective; and

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on the 25th day of September 1996.

LIGAND PHARMACEUTICALS INCORPORATED

By: /s/ DAVID E. ROBINSON

David E. Robinson
Chairman, President and Chief Executive Officer

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints David E. Robinson and Paul V. Maier, or either of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and any registration statement related to this Registration Statement and filed pursuant to Rule 462 under the Securities Act of 1933, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

<TABLE>
<CAPTION>

SIGNATURE	TITLE	DATE
<S>	<C>	<C>
/s/ David E. Robinson	Chairman, President, and Chief Executive Officer (Principal Executive Officer)	September 25, 1996
(David E. Robinson)		
/s/ Paul V. Maier	Vice President, Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	September 25, 1996
(Paul V. Maier)		
/s/ Henry F. Blissenbach	Director	September 25, 1996
(Henry F. Blissenbach)		
/s/ Alexander D. Cross	Director	September 25, 1996
(Alexander D. Cross)		
/s/ John Groom	Director	September 25, 1996
(John Groom)		
/s/ Irving S. Johnson	Director	September 25, 1996
(Irving S. Johnson)		
/s/ William C. Shepherd	Director	September 25, 1996
(William C. Shepherd)		

</TABLE>

EXHIBIT INDEX

<TABLE>
<CAPTION>

EXHIBIT NO.	DESCRIPTION
<C>	<S>
+1.1	Underwriting Agreement.
5.1	Opinion of Brobeck, Phleger & Harrison LLP with respect to the securities being registered.
23.1	Consent of Ernst & Young LLP, Independent Auditors.
23.2	Consent of Brobeck, Phleger & Harrison LLP (contained in their opinion filed as Exhibit 5.1).

</TABLE>

+ To be filed by amendment.

EXHIBIT 5.1

September 25, 1996

Ligand Pharmaceuticals Incorporated
9393 Towne Centre Drive
Suite 100
San Diego, CA 92121

Re: 3,162,500 Shares of Common Stock of Ligand Pharmaceuticals Incorporated

Ladies and Gentlemen:

We have acted as counsel to Ligand Pharmaceuticals Incorporated, a Delaware corporation (the "Company"), in connection with the proposed issuance and sale by the Company of up to 3,162,500 shares of the Company's Common Stock (the "Shares"), pursuant to the Company's Registration Statement on Form S-3 (the "Registration Statement").

In connection with this opinion, we have examined the Registration Statement and related Prospectus, the Company's Restated Certificate of Incorporation, as amended through the date hereof, the Company's bylaws, as amended through the date hereof, and the originals, or copies certified to our satisfaction, of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below (the "Documents"). We are relying (without any independent investigation thereof) upon the truth and accuracy of the statements, covenants, representations and warranties set forth in such Documents.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares have been duly authorized, and if, as and when issued in accordance with the Registration Statement and Prospectus (as amended and supplemented through the date of issuance) will be validly issued, fully paid and nonassessable.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to all references to us in the Registration Statement, the Prospectus and any further amendments thereto. Subject to the foregoing sentence, this opinion is given as of the date hereof solely for your benefit and may not be relied upon, circulated, quoted or otherwise referred to for any purpose without our prior written consent.

Very truly yours,

BROBECK, PHLEGER & HARRISON LLP

EXHIBIT 23.1

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the reference to our firm under the caption "Experts" and "Selected Financial Data" in the Registration Statement (Form S-3) and the related Prospectus of Ligand Pharmaceuticals Incorporated and to the use of our report dated January 19, 1996, with respect to the consolidated financial statements of Ligand Pharmaceuticals Incorporated included elsewhere therein.

/s/ Ernst & Young LLP

ERNST & YOUNG LLP

San Diego, California
September 24, 1996