SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

Mark One

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 2003
OR
[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____.

Commission File No. 0-20720

LIGAND PHARMACEUTICALS INCORPORATED
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiciton of incorporation or organization)

77-0160744
(I. R. S. Employer Identification No.)

10275 Science Center Drive San Diego, CA
(Address of Principal Executive Offices)

92121-1117
(Zip Code)

Registrant's telephone number, including area code: (858) 550-7500

Securities registered pursuant to Section 12(b) of the Act:
None

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, $.001 par value

Preferred Share Purchase Rights
(Title of Class)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes [X] No [ ]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes [X] No [ ]

The aggregate market value of the Registrant's voting stock held by non-affiliates as of June 30, 2003, computed by reference to the closing price as quoted by the NASDAQ National Stock Market as of that date, was approximately $727,330,712. For purposes of this calculation, shares of Common Stock held by directors, officers and 5% stockholders known to the Registrant have been deemed to be owned by affiliates which should not be construed to indicate that any such person possesses the power, direct or indirect, to direct or cause the direction of the management or policies of the Registrant or that such person is controlled by or under common control with the Registrant.

As of February 27, 2004, the Registrant had 73,358,539 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement to be filed not later than 120 days after December 31, 2003, in connection with the Registrant's 2004 Annual Meeting of Stockholders, referred to herein as the "Proxy Statement," are incorporated by reference into Part III of this Form 10-K. Certain exhibits filed with the Registrant's prior registration statements and period reports under the Securities Exchange Act of 1934 are incorporated herein by reference into Part IV of this Report.

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GLOSSARY

PRODUCTS AND INDICATIONS

ONTAK®(denileukin diftitox)	Approved in February 1999 for sale in the U.S. for the treatment of patients with persistent or recurrent cutaneous T-cell lymphoma whose malignant cells express the CD25 component of the Interleukin-2 receptor.
Targretin®(bexarotene) capsules	Approved in December 1999 for sale in the U.S. and in March 2001 for sale in Europe for the treatment of cutaneous manifestations of cutaneous T-cell lymphoma in patients who are refractory to at least one prior systemic therapy.
Targretin®(bexarotene) gel 1%	Approved in June 2000 for sale in the U.S. for the topical treatment of cutaneous lesions in patients with cutaneous T-cell lymphoma (Stage 1A and 1B) who have refractory or persistent disease after other therapies or who have not tolerated other therapies.
Panretin®gel (alitretinoin) 0.1%	Approved in February 1999 for sale in the U.S. and in October 2000 for sale in Europe for the topical treatment of cutaneous lesions of patients with AIDS-related Kaposi's sarcoma.
AVINZA®	Approved in March 2002 for sale in the U.S. for the once-daily treatment of moderate-to-severe pain in patients who require continuous, around-the-clock opioid therapy for an extended period of time.

CTCL	Cutaneous T-cell lymphoma
HIV	Human immunodeficiency virus
HRT	Hormone replacement therapy
KS	Kaposi's sarcoma
NHL	Non-Hodgkin's lymphoma
NSCLC	Non-small cell lung cancer
CLL	Chronic lymphocytic leukemia
GVHD	Graft-versus-host disease

SCIENTIFIC TERMS

AR	Androgen Receptor
ER	Estrogen Receptor
GR	Glucocorticoid Receptor
IR	Intracellular Receptor
JAK	Janus Kinase family of tyrosine protein kinases
MR	Mineralocorticoid Receptor
PPAR	Peroxisome Proliferation Activated Receptor
PR	Progesterone Receptor
RAR	Retinoic Acid Receptor
RR	Retinoid Responsive Intracellular Receptor
RXR	Retinoid X Receptor
SARM	Selective Androgen Receptor Modulator
SERM	Selective Estrogen Receptor Modulator
SGRM	Selective Glucocorticoid Receptor Modulator
STAT	Signal Transducer and Activator of Transcription

REGULATORY TERMS

CPMP	Committee for Proprietary Medicinal Products (Europe)
EC	European Commission
EMEA	European Agency for the Evaluation of Medicinal Products
FDA	United States Food and Drug Administration
IND	Investigational New Drug Application (United States)
MA	Marketing Authorization (Europe)
MAA	Marketing Authorization Application (Europe)
NDA	New Drug Application (United States)

PART I

Item 1. Business

Caution: The discussion and analysis of our business contained in this annual report on Form 10-K may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed at "Risks and Uncertainties" in "Item 1 - Business". This outlook represents our current judgment on the future direction of our business. Such risks and uncertainties could cause actual results to differ materially from any future performance suggested. We undertake no obligation to release publicly the results of any revisions to these forward-looking statements to reflect events or circumstances arising after the date of this annual report. This caution is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

Our trademarks, trade names and service marks referenced in this annual report include Ligand®, ONTAK®, Panretin®, Targretin®, and AVINZA®. Each other trademark, trade name or service mark appearing in this annual report belongs to its owner.

References to Ligand Pharmaceuticals Incorporated ("Ligand", the "Company", "we" or "our") include our wholly owned subsidiaries - Glycomed Incorporated; Ligand Pharmaceuticals (Canada) Incorporated; Ligand Pharmaceuticals International, Inc.; and Seragen, Inc. ("Seragen").

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

Overview

Our goal is to build a profitable pharmaceutical company that discovers, develops and markets new drugs that address critical unmet medical needs in the areas of cancer, men's and women's health, skin diseases, osteoporosis, and metabolic, cardiovascular and inflammatory diseases. We strive to develop drugs that are more effective and/or safer than existing therapies, that are more convenient (taken orally or topically administered) and that are cost effective. We plan to build a profitable pharmaceutical company by generating income from the specialty pharmaceutical products we develop and market, and from research, milestone and royalty revenues resulting from our collaborations with large pharmaceutical partners, which develop and market products in large markets that are beyond our strategic focus or resources.

We currently market four oncology products in the United States: Panretin® gel, ONTAK® and Targretin® capsules, each of which was approved by the FDA in 1999; and Targretin® gel, which was approved by the FDA in 2000. Our fifth and newest product, AVINZA®, is a treatment for chronic, moderate-to-severe pain that was approved by the FDA in March 2002. In Europe, the European Community ("EC") granted a Marketing Authorization (MA) for Panretin® gel in October 2000 and an MA for Targretin® capsules in March 2001. We also continue efforts to acquire or in-license products, such as ONTAK® and AVINZA ®, which have near-term prospects of FDA approval and which can be marketed by our specialty sales forces. We are developing additional products through our internal development programs and currently have various products in clinical development, including marketed products that we are testing for larger market indications such as non-small cell lung cancer (NSCLC), chronic lymphocytic leukemia (CLL) and hand dermatitis.

We have formed research and development collaborations with numerous global pharmaceutical companies, including Abbott Laboratories, Allergan, Inc., Bristol-Myers Squibb, Eli Lilly & Company, GlaxoSmithKline, Organon (Akzo Nobel), Pfizer Inc., TAP Pharmaceutical Products, Inc. (TAP), and Wyeth. At the end of 2003, our corporate partners had 11 Ligand products in human development, and numerous compounds on an IND track, or in preclinical and research stages. These corporate partner products are being studied for the treatment of large market indications such as osteoporosis, diabetes, contraception and cardiovascular disease. Three of these partner products are in pivotal Phase III clinical trials: lasofoxifene, which is being developed by Pfizer for osteoporosis and other indications; and bazedoxifene, which is being developed by Wyeth as monotherapy for osteoporosis and in combination with Wyeth's PREMARIN® as hormone replacement therapy (HRT). A fourth partner product, LY519818, is being developed by Eli Lilly & Company for the treatment of type 2 diabetes which has announced its advancement into Phase III registration studies after appropriate consultation with the FDA.

Internal and collaborative research and development programs are built around our proprietary science technology, which is based on our leadership position in gene transcription technology. Our proprietary technologies involve two natural mechanisms that regulate gene activity: non-peptide hormone-activated IRs, and cytokine and growth factor activated STATs. Panretin® gel, Targretin® capsules, Targretin® gel and most of our corporate partner products currently on human development track are IR modulators, discovered using our IR technology. SB-497115, which Glaxo moved into clinical studies for thrombocytopenia in 2002, was discovered using our STATs expertise.

In late 1998, we assembled a specialty oncology and HIV-center sales and marketing team to market in the U.S. products developed, acquired or licensed by us. In late 1999, we expanded our U.S. sales force from approximately 20 to approximately 40 sales representatives to support the launch of Targretin® capsules and Targretin® gel and increase market penetration of ONTAK® and Panretin® gel. In 2001, we expanded our sales force to approximately 50 sales representatives, including approximately 20 full-time contract sales representatives who focus on the dermatology market. In 2002, to support the launch of AVINZA ®, we redirected these contract sales representatives to call on high-prescribing pain specialists. Also in 2002, we hired approximately another 30 representatives to call on pain specialists, bringing the total number of representatives selling only AVINZA ® to approximately 50. In 2003, we expanded our specialty pain sales force to approximately 70 representatives. In addition, more than 700 Organon sales representatives promote AVINZA ® as a result of the co-promotion agreement we established in early 2003 (see "AVINZA ® Co-Promotion Agreement with Organon"). At the end of 2003, we had approximately 25 sales representatives promoting our in-line oncology products. Internationally, through marketing and distribution agreements with Elan, Ferrer International and Alfa Wassermann, we have established marketing and distribution capabilities in Europe, as well as Central and South America. In February 2004, Elan and Medeus Pharma Limited ("Medeus") announced that Medeus had acquired Elan's European sales and marketing business, and that the acquisition included the marketing and distribution rights to certain Ligand products in Europe.

Business Strategy

Our goal is to become a profitable pharmaceutical research, development and marketing company that generates significant cash flow. Building primarily on our proprietary IR and STAT technologies, our strategy is to generate cash flow primarily from the sale in the U.S., Europe and Latin America of specialty pharmaceutical products we develop, acquire or in-license, and from research, milestone and royalty revenues from the development and sale of products our collaborative partners develop and market.

Building a Specialty Pharmaceutical Franchise in the U.S., Europe and Latin America.

Our strategy with respect to specialty pharmaceutical products is to develop a product pipeline based on our IR and STAT technologies and acquired and in-licensed products, and to market these products initially with a specialized sales force in the U.S. and through marketing partners in selected international markets. Ligand's international partners are Elan (principally in Western and Eastern Europe), Ferrer (in Spain, Portugal, Greece, Central and South America) and Alfa Wassermann (in Italy). See "Overview" discussion above regarding Elan's announcement to sell their European sales and marketing business to Medeus.

Focusing initially on niche pharmaceutical and dermatology indications with the possibility of expedited regulatory approval has allowed us to bring products to market quickly. This strategy also has allowed us to spread the cost of our sales and marketing infrastructure across multiple products. Our goal is to expand the markets for our products through approvals in additional indications and in international markets. To further leverage our sales forces, we intend to acquire selectively or license-in complementary technology and/or products currently being marketed or in advanced stages of development.

Building a Collaborative-Based Business in Large Product Markets.

Our strategy in our collaborative research and development business is to share the risks and benefits of discovering and developing drugs to treat diseases that are beyond our strategic focus or resources. These diseases typically affect large populations often treated by primary care physicians. Drugs to treat these diseases may be more costly to develop and/or market effectively with a small specialty sales force. On the other hand, drugs approved for these indications may have large market potential – often in excess of $1 billion annually in global sales.

We have nine collaborative arrangements with global pharmaceutical companies focusing on a broad range of disease targets.

Corporate Collaborator	Initiation of Collaboration	Focus
Pfizer Inc.	May 1991	Osteoporosis, breast cancer prevention
Allergan, Inc.	June 1992	Skin disorders
GlaxoSmithKline (Glaxo Wellcome plc)	September 1992	Cardiovascular diseases
Abbott Laboratories	July 1994	Inflammatory diseases
Wyeth	September 1994	Women's and men's health, oncology
GlaxoSmithKline (SmithKline Beecham)	February 1995	Blood disorders
Eli Lilly & Company	November 1997	Type II diabetes, metabolic and cardiovascular diseases
Organon	February 2000	Women's health
TAP Pharmaceutical Products, Inc.	June 2001	Men's and women's health

Our collaborative programs focus on discovering drugs for cardiovascular, inflammatory, metabolic and other diseases, as well as broad applications for women's and men's health. We believe that our collaborators have the resources, including clinical and regulatory experience, manufacturing capabilities and marketing infrastructure, needed to develop and commercialize drugs for these large markets. The arrangements generally provide for collaborative discovery programs funded largely by the corporate partners aimed at discovering new therapies for diseases treated by primary care physicians. In general, drugs resulting from these collaborations will be developed, manufactured and marketed by the corporate partners. Our collaborative agreements provide for us to receive: research revenue during the drug discovery stage; milestone revenue for compounds successfully moving through clinical development and regulatory submission and approval; and royalty revenue from the sale of approved drugs developed through collaborative efforts.

Ligand Marketed Products

U.S. Specialty Pharmaceutical Franchise. We currently market five pharmaceutical products in the U.S.

Marketed Product	Approved Indication	European Status	Additional Indications in Development
AVINZA®	Chronic, moderate-to-severe pain	N/A	None
ONTAK®	CTCL	MAA withdrawn	CLL, B-cell NHL, other T-cell lymphomas, psoriasis, NSCLC
Targretin®capsules	CTCL	MA issued	NSCLC, psoriasis, renal cell cancer, prostate/colon cancer
Targretin®gel	CTCL	MAA withdrawn	Hand dermatitis, psoriasis
Panretin®gel	KS	MA issued	None

CTCL Market. CTCL is a type of NHL that appears initially in the skin, but over time may involve other organs. CTCL is a cancer of T-lymphocytes, white blood cells that play a central role in the body's immune system. The disease can be extremely disfiguring and debilitating. Median survival for late-stage patients is less than three years. The prognosis for CTCL is based in part on the stage of the disease when diagnosed. CTCL is most commonly a slowly progressing cancer, and many patients live with the complications of CTCL for 10 or more years after diagnosis. However, some patients have a much more aggressive form of this disease. CTCL affects an estimated 16,000 people in the U.S. and 12,000 to 14,000 in Europe. With ONTAK®, Targretin® capsules, and Targretin® gel currently approved in the U.S. for the treatment of CTCL, our strategy is to have multiple products available for treating this disease.

ONTAK®. ONTAK® was approved by the FDA and launched in the U.S. in February 1999 as our first product for the treatment of patients with CTCL. ONTAK® was the first treatment to be approved for CTCL in nearly 10 years. ONTAK® is currently in Phase II clinical trials for the treatment of patients with CLL, B-cell NHL, other T-cell lymphomas, NSCLC, and GVHD. Results from several of these studies were reported in 2002 and 2003. Ligand's top priority for additional ONTAK® development is CLL, and we began a large-scale Phase II study in 2003. Clinical trials using ONTAK® for the treatment of patients with psoriasis and rheumatoid arthritis also have been conducted, and further trials are being considered. These indications provide significantly larger market opportunities than CTCL. A European MAA for CTCL was filed in December 2001, which we withdrew in April 2003. It was our assessment that the cost of the additional clinical and technical information requested by the European Agency for the Evaluation of Medicinal Products (EMEA) would be better spent on the acceleration of the second generation ONTAK® development. We expect to resubmit the ONZAR™ application with the second generation product in 2005.

Targretin® capsules. We launched U.S. sales and marketing of Targretin® capsules in January 2000 following receipt of FDA approval in December 1999. Targretin® capsules offer the convenience of a daily oral dose administered by the patient at home. We are developing Targretin® capsules in a variety of larger market opportunities, including NSCLC, moderate to severe plaque psoriasis and renal cell cancer. NSCLC is Ligand's largest and most important development program. In March 2001, the European Commission granted marketing authorization for Targretin® capsules in Europe for the treatment of patients with CTCL, and our network of distributors began marketing the drug in the fourth quarter of 2001 in Europe.

Targretin® gel. We launched U.S. sales and marketing of Targretin® gel in September 2000 following receipt of FDA approval in June 2000. Targretin® gel offers patients with refractory, early stage CTCL a novel, non-invasive, self-administered treatment topically applied only to the affected areas of the skin. Targretin® gel is currently in clinical development for hand dermatitis. In 2002 and early 2003, we reported exciting Phase I/II data that showed nearly 40% of patients with chronic, severe hand dermatitis improved by 90% or more after being treated with Targretin® gel monotherapy and nearly 80% responded with greater than 50% improvement. Based on these promising results, we intend to design and implement Phase II/III registration trials in hand dermatitis. We filed an MAA in Europe for CTCL in March of 2001, but withdrew it in 2002. Due to the small size of the European early stage CTCL market and the limited revenue potential of Targretin® gel, we believed that the additional comparative clinical studies requested by the EMEA were not economically justified.

Panretin® gel. Panretin® gel was approved by the FDA and launched in February 1999 as the first FDA-approved patient-applied topical treatment for AIDS-related KS. Panretin® gel represents a non-invasive option to the traditional management of this disease. Most approved therapies require the time and expense of periodic visits to a healthcare facility, where treatment is administered by a doctor or nurse. AIDS-related KS adversely affects the quality of life of thousands of people in the U.S. and Europe. Panretin® gel was approved in Europe for the treatment of patients with KS in October 2000, and was launched through our distributor network in the fourth quarter of 2001 in Europe.

AVINZA ®. AVINZA ® was approved by the FDA in March 2002 for the once-daily treatment of moderate-to-severe pain in patients who require continuous, around-the-clock opioid therapy for an extended period of time. We launched the product in the second quarter of 2002. AVINZA ® consists of two components: an immediate-release component that rapidly achieves plateau morphine concentrations in plasma, and an extended-release component that maintains plasma concentrations throughout a 24-hour dosing interval. This unique drug delivery technology makes AVINZA ® the only true once-daily sustained release opioid. AVINZA ® was developed by Elan, which

licensed the U.S. and Canadian rights to us in 1998. The U.S. sustained-release opioid market grew to approximately $3.5 billion in 2003, the largest initial market we have entered. Because tens of thousands of U.S. physicians prescribe sustained-release opioids, our goal has long been to co-promote the product with another company to maximize its potential. Early in 2003, we finalized a co-promotion agreement with Organon. Together, we achieved the No. 2 share of voice in the sustained-release opioid marketplace with initially more than 800 combined sales representatives.

AVINZA® Co-Promotion Agreement with Organon

In February 2003, Organon, a business unit of Akzo Nobel, and Ligand announced that the companies would co-promote AVINZA® with initially more than 800 sales representatives in the United States.

Organon brings strong relationships in primary care, anesthesiology, hospitals and managed care to support AVINZA®. Through the agreement with Organon, Ligand gains strong partner resource commitments in primary care, hospitals and managed care to maximize AVINZA®'s potential as our largest near-term commercial opportunity. In addition, the agreement includes a risk/return-balanced set of economics that incentivizes Organon to achieve much greater success than Ligand could alone, that provides a positive operational EPS driver to Ligand, and that enables an attractive return on our cumulative investments in AVINZA®. Finally, the agreement strengthens our capabilities in retail and wholesale distribution, medical marketing and managed care to support AVINZA®. Joint co-promotion efforts began in March of 2003.

AVINZA® achieved the No. 2 share of voice in the sustained-release opioid marketplace with a combined sales force of more than 800 representatives, and appropriately scaled investments in other medical marketing. Ligand promotes AVINZA® with its specialty pain sales force of nearly 70 representatives. Organon promotes the product with more than 700 representatives in three sales forces: primary care, hospital (anesthesiology) and specialty (pain centers). In addition, Organon brings critical capabilities with key accounts, managed care and long-term care to accelerate AVINZA®'s growth.

Under the companies' agreement, Ligand records all sales of AVINZA®. Ligand will pay Organon a percentage of AVINZA®'s net sales based on the following schedule:

Annual Net Sales of AVINZA®	% of Incremental Net Sales Paid to Organon by Ligand
$0-35 million (2003 only)	0% (2003 only)
$0-150 million	30%
$150-300 million	40%
$300-425 million	50%
>$425 million	45%

Organon and Ligand share equally all costs for advertising and promotion, medical affairs and clinical trials. Each company is responsible for its own sales force costs and other expenses. Both companies have made significant commitments to conduct a minimum number of sales calls, with AVINZA® in primary or secondary position, over the term of the agreement.

The initial term of the co-promotion agreement, which applies only to the U.S. market, is 10 years. Any time prior to the end of year five, Organon has an option to extend the agreement to 2017, the end of the term of a key AVINZA® patent, by making a $75 million payment to Ligand.

To provide overall governance of the partnership, Organon and Ligand established a steering committee with three senior executives from each company. The chair of the steering committee will alternate between Organon and Ligand on an annual basis. Organon and Ligand also formed a commercial committee to design and coordinate all sales, marketing and distribution activities for AVINZA®. The commercial committee is co-chaired by one Organon and one Ligand employee. The commercial committee established a clinical/regulatory subcommittee to design and coordinate all medical, clinical and regulatory activities for AVINZA®.

Product Development Process

There are three phases in product development — the research phase, the preclinical phase and the clinical trials phase. See "Government Regulation" for a more complete description of the regulatory process involved in developing drugs. At Ligand, activities during the research phase include research related to specific IR and STAT targets and the identification of lead compounds. Lead compounds are chemicals that have been identified to meet pre-selected criteria in cell culture models for activity and potency against IR or STAT targets. More extensive evaluation is then undertaken to determine if the compound should enter preclinical development. Once a lead compound is selected, chemical modification of the compound is undertaken to create an optimal drug candidate.

The preclinical phase includes pharmacology and toxicology testing in preclinical models (*in vitro* and *in vivo*), formulation work and manufacturing scale-up to gather necessary data to comply with applicable regulations prior to commencing human clinical trials. Development candidates are lead compounds that have successfully undergone *in vitro* and *in vivo* evaluation to demonstrate that they have an acceptable profile that justifies taking them through preclinical development with the intention of filing an IND and initiating human clinical testing.

Clinical trials are typically conducted in three sequential phases that may overlap. In Phase I, the initial introduction of the pharmaceutical into humans, the emphasis is on testing for adverse effects, dosage tolerance, absorption, metabolism, distribution, excretion and clinical pharmacology. Phase II involves studies in a representative patient population to determine the efficacy of the pharmaceutical for specific targeted indications, to determine dosage tolerance and optimal dosage, and to identify related adverse side effects and safety risks. Once a compound is found to be effective and to have an acceptable safety profile in Phase II studies, Phase III trials are undertaken to evaluate clinical efficacy further and to test further for safety. Sometimes Phase I and II trials or Phase II and III trials are combined. In the U.S., the FDA reviews both clinical plans and results of trials, and may discontinue trials at any time if there are significant safety issues.

Ligand Product Development Programs

We are developing several proprietary products for which we have worldwide rights for a variety of cancers and skin diseases, as summarized in the table below. This table is not intended to be a comprehensive list of our internal research and development programs. Many of the indications being pursued may present larger market opportunities for our currently marketed products. Our clinical development programs are primarily based on products discovered through our IR technology, with the exception of ONTAK®, which was developed using Seragen's fusion protein technology, and AVINZA® , which was developed by Elan. Five of the products in our proprietary product development programs are retinoids, discovered and developed using our proprietary IR technology. Our research is based on both our IR and STAT technologies. See "Technology" for a discussion of our IR and STAT technologies and retinoids.

Program	Disease/Indication	Development Phase
AVINZA®	Chronic, moderate-to-severe pain	Marketed in U.S. Phase IIIB/IV
ONTAK®	CTCL	Marketed in U.S.
	CLL	Phase II
	Peripheral T-cell lymphoma	Phase II
	B-cell NHL	Phase II
	Psoriasis (severe)	Phase II
	NSCLC third line	Phase II
Targretin® capsules	CTCL	Marketed in U.S.
	NSCLC first-line	Phase III
	NSCLC monotherapy	Planned Phase II/III
	NSCLC second/third line	Phase II
	Advanced breast cancer	Phase II
	Psoriasis (moderate to severe)	Phase II
	Renal cell cancer	Phase II

Program	Disease/Indication	Development Phase
Targretin® gel	CTCL Hand dermatitis (eczema) Psoriasis	Marketed in U.S. Phase II Phase II
Panretin® gel	KS	Marketed in U.S.
Panretin®capsules (1)	KS Bronchial metaplasia	Phase II Phase II
LGD1550 (RAR agonist)	Advanced cancers Acne Psoriasis	Phase II Pre-clinical Pre-clinical
LGD1331 (Androgen antagonist)	Prostate cancer, hirsutism, acne, androgenetic alopecia	Pre-clinical
LGD5552 (Glucocorticoid agonists)	Inflammation, cancer	Pre-clinical
Mineralocorticoid receptor modulators	Congestive heart failure, hypertension	Research

(1) See detailed discussion of Panretin® capsules below.

ONTAK® Development Programs

ONTAK® is a fusion protein that represents the first of a new class of targeted cytotoxic biologic agents. Rights to ONTAK® were acquired from Eli Lilly in 1997 and in the acquisition of Seragen in 1998. ONTAK® is marketed in the U.S. for patients with CTCL, which affects approximately 16,000 people in the U.S. In addition to ongoing CTCL trials, we are, or may be, conducting clinical trials with ONTAK® in patients with CLL, peripheral T-cell lymphoma, B-cell NHL, psoriasis, NSCLC, and GVHD, indications that represent significantly larger market opportunities than CTCL.

In early 1999, ONTAK® entered Phase II trials for the treatment of patients with NHL. One study is assessing ONTAK® in patients with certain types of low-grade B-cell NHL who have previously been treated with at least one systemic anti-cancer treatment. A second multi-center trial for ONTAK® is being conducted in patients with low-grade B-cell NHL who have been previously treated with at least one chemotherapy regimen and at least one monoclonal antibody therapy. A third trial allows certain patients to enter with low to intermediate grade B-cell NHL.

Separately, a study of ONTAK® in patients with relapsed or refractory B-and T-cell NHL conducted by researchers from the M.D. Anderson Cancer Center and published at the 2003 annual meeting of the American Society of Hematology showed that among 39 patients who could be evaluated for a response, four had a complete response, seven had partial responses, and ten had stable disease, indicating that more than half of patients with relapsed or refractory NHL benefited from treatment. NHL affects approximately 300,000 people in the U.S. and Ligand estimates that more than 50,000 of these patients would be candidates for ONTAK® therapy.

ONTAK® is also being evaluated to treat chronic lymphocytic leukemia (CLL), which affects more than 60,000 people in the U.S. At the American Society of Hematology annual meeting in 2002, researchers from Wake Forest University reported results from a preliminary Phase II study that showed ONTAK reduced CLL in blood cells, lymph nodes and bone marrow. In the study, nine of 10 patients with fludarabine-refractory, CD25-positive, B-cell CLL who received at least three courses of ONTAK® experienced reductions in peripheral CLL cells, with three of these patients showing reductions of at least 99%. In addition, six of 10 patients showed reductions in the diameter of their cancerous lymph nodes, with one patient showing an 80% reduction. One of 12 patients showed a partial remission, with 80% node shrinkage and 100% clearance of CLL cells from bone marrow. Based on these encouraging results, Ligand began a large-scale Phase II study in 2003.

Clinical trials with ONTAK® have demonstrated benefits in patients with long-standing, previously treated severe psoriasis, and in patients with steroid-resistant acute GVHD. For example, according to results of a Phase I/II study presented by independent researchers in early 2003, ONTAK® generated complete remission of acute GVHD in five of 11 steroid-resistant patients after allogeneic stem cell transplants, and partial remission in two more patients.

Targretin® Capsules Development Programs

Targretin® capsules are marketed in the U.S. for patients with refractory CTCL. Ligand also is investigating the use of Targretin® capsules in several cancer and skin disease markets that represent significantly larger market opportunities than CTCL.

In August 2000, we reported that Phase I/II clinical results demonstrated that Targretin® capsules, in conjunction with chemotherapy, may be an effective treatment for patients with NSCLC and renal cell cancer. These results were published in the May 2001 issue of the Journal of Clinical Oncology. These results add to a growing body of evidence that suggests Targretin® therapy may delay disease progression and extend survival of patients with some forms of solid tumors. This body of evidence led us to begin two large-scale Phase III clinical studies in 2001 to demonstrate conclusively Targretin® capsules' benefit in the treatment of patients with NSCLC. One of these multi-center studies is evaluating Targretin® in combination with the chemotherapy drugs cisplatin and vinorelbine, and is being conducted primarily in Europe. The other multi-center study is examining Targretin® in combination with carboplatin and paclitaxel, and is being conducted mainly in the U.S. Both studies are randomized with approximately 600 patients each, and have survival as the primary endpoint. By third quarter 2003, we had enrolled 100% of the required patients. We expect to announce survival data in late 2004. The studies are designed to support a supplemental indication for Targretin® capsules for first-line treatment of patients with advanced NSCLC. In 2003 we also began a Phase II study of Targretin® as monotherapy for late-stage lung cancer patients who have failed treatment with chemotherapy or cannot tolerate it. The American Cancer Society estimates that approximately 170,000 Americans are diagnosed with lung cancer each year; of those approximately 80% were diagnosed with NSCLC.

Our primary focus for Targretin® capsules during 2004 will be NSCLC. We will, however, continue to explore in Phase II trials the potential of Targretin® capsules in combination regimens for the treatment of patients in solid tumor indications as well as psoriasis.

Targretin® Gel Development Program

Targretin® gel is marketed in the U.S. for patients with refractory CTCL. In 2002 and early 2003, we reported exciting Phase I/II data that showed 39% of patients with chronic, severe hand dermatitis improved by 90% or more after being treated with Targretin® gel monotherapy. In addition, 79% of patients improved by at least 50%. Fifty-five patients with a history of chronic severe hand dermatitis for at least six months were enrolled in the 22-week, randomized, open-label study, which was designed to evaluate safety, tolerability and activity. Patients were treated with Targretin® alone, Targretin® in combination with a medium potency topical steroid, and Targretin® in combination with a low potency topical steroid. Based on these promising results, we intend to design and implement Phase II/III registration trials in hand dermatitis in 2004. There are many subtypes of hand dermatitis, and many causes. Most hand dermatitis is caused by contact with irritating environmental substances, such as chemicals, soaps and cleaning fluids, and some cases are caused by allergic reactions to a wide variety of environmental substances. Ligand estimates that more than 4 million people in the United States have hand dermatitis and seek treatment.

We filed an MAA for Targretin® gel in Europe for CTCL in March of 2001, but withdrew it in 2002. Due to the small size of the European early stage CTCL market and the limited revenue potential of Targretin® gel, we believed that the additional comparative clinical studies requested by the EMEA were not economically justified.

Panretin ®Capsules Development Programs

Panretin® capsules have demonstrated clinical promise for the systemic treatment of cutaneous AIDS-related KS, other cancers and skin disorders. We have reported favorable results in two Phase II trials with Panretin® capsules in patients with KS. Encouraging results from a Phase II trial with Panretin® capsules in bronchial metaplasia were published in 2002. The study showed that treatment with Panretin® capsules reversed biomarkers of pre-lung cancer among former smokers. Ligand believes the promising results seen with Panretin® capsules further support the potential benefits of using retinoids to treat lung cancer. Toward that end, Ligand's top development priority is to move ahead with Phase III studies of Targretin® capsules, which bind selectively to retinoid X receptors, in combination with chemotherapy to treat NSCLC. Further development activities for Panretin® capsules will require additional research and development funding not currently allocated to the product.

LGD1550 Capsules Development Programs

LGD1550 is a potent RAR agonist that strongly inhibits growth *in vitro* of several human cancer cell lines. In Phase I/II clinical trials in advanced cancer, LGD1550 capsules were well tolerated. Investigators observed dose-limiting skin toxicities, diarrhea and abdominal cramps. Other potentially dose-limiting toxicities, such as headache and lipid abnormalities, frequently observed with other retinoids, have not been observed with LGD1550. Unlike all-trans retinoic acid, a retinoid approved for the treatment of acute promyelocytic leukemia, LGD1550 does not appear to induce its own metabolism over the dose range tested since blood levels are maintained with continued therapy. Phase I/II studies with LGD1550 for the treatment of patients with acne and psoriasis are being considered.

Selective Glucocorticoid Receptor Modulators Research and Development Program

As part of the research and development collaboration we entered into with Abbott in 1994, Ligand received exclusive worldwide rights for all anti-cancer products discovered in the collaboration. When the research phase of the collaboration ended in July 1999, Abbott retained rights to certain selective glucocorticoid receptor modulators, or SGRMs. Ligand retained rights to all other compounds discovered through the collaboration, as well as recapturing technology rights. Ligand then initiated an internal effort to develop SGRMs for inflammation, oncology and other therapeutic applications. As a result of that effort, in 2001, we moved several SGRMs into late preclinical development. During 2003, LGD5552 was designated a clinical candidate and is currently on IND track. These non-steroidal SGRM molecules have anti-inflammatory activity that may be useful against diseases such as asthma and rheumatoid arthritis, as well as anti-proliferative effects that could be beneficial in treating certain leukemias and myelomas. Our goal is to develop novel products that maintain the efficacy of corticosteroids but lack the side effects of current therapies, which can include osteoporosis, hyperglycemia and hypertension.

SARM Programs

We are pioneering the development of tissue selective SARMs, a novel class of non-steroidal, orally active molecules that selectively modulate the activity of the AR in different tissues, providing a wide range of opportunities for the treatment of many diseases and disorders in both men and women. Tissue-selective AR agonists or antagonists may provide utility in male HRT and the treatment of patients with hypogonadism, osteoporosis, male and female sexual dysfunction, frailty, prostate cancer, benign prostatic hyperplasia, skin disorders and other diseases. The use of androgen antagonists has shown efficacy in the treatment of prostate cancer, with three androgen antagonists currently approved by the FDA for use in the treatment of the disease. However, we believe that there is a substantial medical need for improved androgen modulators for use in the treatment of prostate cancer due to the significant side effects seen with currently available drugs.

SARM programs have been one of our largest programs over the past several years. We have assembled an extensive SARM compound library and one of the largest and most experienced AR drug discovery teams in the pharmaceutical industry. We intend to pursue the specialty applications emerging from SARMs internally, but may seek collaborations with major pharmaceutical companies to exploit broader clinical applications.

Consistent with this strategy, we formed in June 2001 a joint research and development alliance with TAP Pharmaceutical Products to focus on the discovery and development of SARMs. In December 2003, we announced the extension of this collaboration for an additional year. Please see the "Collaborative Research and Development Programs/Sex Hormone Modulators Collaborative Programs/TAP Collaboration" section below for more details on this alliance.

Apart from the TAP alliance, Ligand has conducted preclinical development for LGD1331, an androgen antagonist for acne, prostate cancer, hirsutism and androgenetic alopecia. Preclinical studies of LGD1331 indicate that it may have utility for treating acne and hirsutism disorders that affect a significant number of women. *In vivo* studies of LGD1331 have revealed favorable characteristics, including indirect evidence of diminished effects on the central nervous system, compared with currently marketed drugs of this type for the treatment of these conditions.

STAT Research Programs

In contrast to our IR programs, our STAT programs focus on cytokines and growth factors whose receptors are found on the surface of the cell. STATs play a modulating role in the biology of cytokines and growth factors. Many diseases, such as inflammatory conditions, may result from excessive cytokine activity, and others may result from insufficient cytokine activity. See "Technology/Signal Transducers and Activators of Transcription Technology" for a more complete discussion of our STATs expertise. In our STAT programs, we seek to develop drug candidates that mimic the activity of thrombopoietin (TPO) for use in a variety of conditions including cancer and disorders of blood cell formation. In 2002, our partner GlaxoSmithKline moved into clinical studies the first product discovered from our STAT expertise, SB-497115, an oral TPO agonist for the treatment of thrombocytopenia.

Collaborative Research and Development Programs

We are pursuing several major collaborative drug discovery programs to further develop the research and development of compounds based on our IR technologies. These collaborations focus on several large market indications as estimated in the table below.

Indication	U.S. Prevalence
Menopausal symptoms	48 million
Osteoporosis (men and women)	44 million
Dyslipidemas	106 million
Contraception	38 million
Type II diabetes	20 million
Breast cancer	2 million

At the end of 2003, 11 of our collaborative product candidates were in human development - lasofoxifene, bazedoxifene, bazedoxifene+PREMARIN®, pipendoxifene, NSP989, NSP989 combo, GW516, LY818, LY929, LY674 and SB497115. Please see note 13 of notes to consolidated financial statements for a description of the financial terms of our key ongoing collaboration agreements. The table below summarizes our collaborative research and development programs, but is not intended to be a comprehensive summary of these programs.

Program	Disease/Indication	Development Phase	Marketing Rights
SEX HORMONE MODULATORS			
SERMs			
• Lasofoxifene	Osteoporosis, breast cancer prevention	Phase III	Pfizer
• Bazedoxifene	Osteoporosis	Phase III	Wyeth
• Bazedoxifene+PREMARIN®	Osteoporosis prevention Vasometer symptoms	Phase III	Wyeth
• Pipendoxifene (formerly ERA-923)	Breast cancer	Phase II	Wyeth

Program	Disease/Indication	Development Phase	Marketing Rights
PR modulators			
• NSP-989 (PR agonist)	Contraception	Phase II	Wyeth
• NSP-989 combo (PR agonist)	Contraception	Phase I	Wyeth
• WAY-075 (PR antagonist)	Contraception, reproductive disorders	IND track	Wyeth
• ORG-841 (PR agonist)	HRT, contraception, reproductive disorders	IND track	Organon
SARMs			
• LGD2226 / 2941 (androgen agonist)	Male hypogonadism, HRT, female sexual dysfunction, osteoporosis	IND track	TAP
METABOLIC/CARDIOVASCULAR DISEASES			
PPAR modulators			
• GW516	Cardiovascular disease, dyslipidemia	Phase II	GlaxoSmithKline
• LY818	Type II diabetes	Phase II (1)	Lilly
• LY929	Type II diabetes, metabolic diseases, dyslipidemia	Phase I	Lilly
• LY674	Atherosclerosis/dyslipidemia	Phase I	Lilly
• LYWWW (2)	Dyslipidemia	IND track	Lilly
• LYYYY (2)	Type II diabetes, metabolic diseases, dyslipidemia	IND track	Lilly
• PPAR modulators	Type II diabetes, metabolic diseases, dyslipidemia	Pre-clinical	Lilly
HNF-4 modulators	Type II diabetes, metabolic diseases	Research	Lilly
INFLAMMATORY DISEASES, ONCOLOGY, ANEMIA			
SB-497115 (TPO agonist)	Thrombocytopenia	Phase I	GlaxoSmithKline

(1) Lilly decision to advance to Phase III announced March 2004

(2) Compound number not disclosed.

Sex Hormone Modulators Collaborative Programs

The primary objective of our sex hormone modulators collaborative programs is to develop drugs for hormonally responsive cancers of men and women, hormone replacement therapies, the treatment and prevention of diseases affecting women's health, and hormonal disorders prevalent in men. Our programs, both collaborative and internal, target development of tissue-selective modulators of the PR, the ER and the AR. Through our collaborations with Pfizer and Wyeth, three SERM compounds are in development for osteoporosis, breast cancer and HRT. In addition, we entered into a joint research and development program in 2001 with TAP Pharmaceutical Products to focus on the discovery and development of SARMs.

Pfizer Collaboration. In May 1991, we entered into a research and development collaboration with Pfizer to develop better therapies for osteoporosis. In November 1993, we jointly announced the successful completion of the research phase of our 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 and have an impact on blood serum lipids often associated with cardiac benefits without increasing uterine or breast tissue proliferation.

We have milestone and royalty rights to lasofoxifene, which is being developed by Pfizer for osteoporosis prevention and other diseases. Lasofoxifene is a second-generation estrogen partial agonist discovered through our collaboration with Pfizer. Pfizer has retained marketing rights to the drug. Lasofoxifene has been shown in Phase II clinical studies to reduce bone loss and decrease low-density lipoprotein ("LDL" or "bad" cholesterol) levels. In September 2000, Pfizer announced that it initiated Phase III studies of lasofoxifene for the treatment and prevention of osteoporosis in post-menopausal women. In December 2001, Pfizer announced that two Phase III studies were fully enrolled with more than 1,800 patients, and that an additional Phase III risk reduction trial was underway to evaluate lasofoxifene's effects on bone mineral density, lipid-lowering and breast cancer prevention. In January of 2003, Pfizer disclosed that this large, 7,500-patient risk-reduction study was fully enrolled.

Wyeth Collaboration. In September 1994, we entered into a research and development collaboration with Wyeth-Ayerst Laboratories, the pharmaceutical division of American Home Products (AHP), to discover and develop drugs that interact with ERs or PRs for use in HRT, anti-cancer therapy, gynecological diseases, and central nervous system disorders associated with menopause and fertility control. AHP has since changed its name to Wyeth. We granted Wyeth exclusive worldwide rights to all products discovered in the collaboration that are agonists or antagonists to the PR and ER for application in the fields of women's health and cancer therapy.

As part of this collaboration, we tested Wyeth's extensive chemical library for activity against a selected set of targets. In 1996, Wyeth exercised its option to include compounds we discovered that modulate PRs, and to expand the collaboration to encompass the treatment or prevention of osteoporosis through the ER. Wyeth also added four advanced chemical compound series from its internal ER-osteoporosis program to the collaboration. The research phase of the collaboration ended in August 1998.

Wyeth has ongoing clinical studies with two SERMs from the collaboration. Wyeth is developing bazedoxifene (TSE-424) and bazedoxifene+PREMARIN® for the treatment of post-menopausal osteoporosis. Phase III trials were initiated in June 2001. In late 2002, Wyeth disclosed that it had completed enrollment in a Phase III osteoporosis prevention trial, and that it expected enrollment in a bazedoxifene fracture prevention trial to finish in 2003, and that bazedoxifene is on track for regulatory submission in 2005. In addition, Wyeth reiterated its commitment to developing bazedoxifene+PREMARIN® as a progesterone-free treatment for menopausal symptoms in the wake of the well-publicized Women's Health Initiative (WHI) study of hormone replacement therapies. Ligand believes it is important to recognize that bazedoxifene is a synthetic drug that was specifically designed to increase bone density and reduce cholesterol levels while at the same time protecting breast and uterine tissue. In other words, bazedoxifene may represent a potential solution to some of the side effects associated with progestin in the WHI study.

Wyeth also has conducted Phase II studies of pipendoxifene (formerly ERA 923) for the treatment of breast cancer. In 2003, Wyeth began Phase II studies of NSP-989, a progesterone agonist that may be useful in contraception and HRT. Wyeth also continues to do preclinical work in the area of PR antagonists.

Organon Collaboration. In February 2000, we entered into a research and development collaboration with Organon to focus on small molecule compounds with potential effects for the treatment and prevention of gynecological diseases mediated through the PR. The objective of the collaboration is the discovery of new non-steroidal compounds that are tissue-selective in nature and that may have fewer side effects. Such compounds may provide utility in hormone replacement therapy, oral contraception, reproductive diseases, and other hormone-related disorders. The initial research phase concluded in February 2002, and preclinical candidates have been selected.

Bristol-Myers Squibb Collaboration. In May 2000, we entered into a research and development collaboration with Bristol-Myers Squibb Company to focus on the discovery, design and development of orally active compounds that selectively modulate the MR. This receptor plays a critical role in many illnesses, particularly cardiovascular diseases such as congestive heart failure and hypertension. Bristol-Myers Squibb terminated this collaboration in June 2001.

TAP Collaboration. In June 2001, we entered into a joint research and development alliance with TAP Pharmaceutical Products to focus on the discovery and development of SARMs. SARMs may contribute to the prevention and treatment of diseases including hypogonadism (low testosterone), male and female sexual dysfunction, male and female osteoporosis, frailty, and male HRT. The three-year collaboration carries an option to extend by up to two additional one-year terms. In December 2003, we announced the extension of this collaboration for an additional year.

Under the terms of the agreement, TAP received exclusive worldwide rights to manufacture and sell any products resulting from the collaboration in its field, which would include treatment and prevention of hypogonadism, male sexual dysfunction, female osteoporosis, male HRT and other indications not retained by Ligand. Ligand retains certain rights in the androgen receptor field, including the prevention or treatment of prostate cancer, benign prostatic hyperplasia, acne and hirsutism. In addition, Ligand has an option at the expiration of the original three-year term to develop one compound not being developed by TAP in its field, with TAP retaining an option to negotiate to co-develop and co-promote such compounds with Ligand.

Metabolic and Cardiovascular Disease Collaborative Programs

We are exploring the role of certain IRs, including the PPARs, in cardiovascular and metabolic diseases. PPARs, a subfamily of orphan IRs, have been implicated in processes that regulate plasma levels of very low density lipoproteins and triglycerides. See "Technology/Intracellular Receptor Technology" for a discussion of PPARs and orphan IRs. Data implicate PPARs in the mechanism of action of lipid-lowering drugs such as Lopid®. There are three subtypes of the PPAR subfamily with defined novel aspects of their action — alpha, beta and gamma. The subtype PPAR alpha appears to regulate the metabolism of certain lipids and is useful in treating hyperlipidemia. PPAR gamma plays a role in fat cell differentiation and cellular responses to insulin. Modulators of PPAR gamma activity (e.g., the glitazone class of insulin sensitizers) have utility in managing type II diabetes. PPARs are believed to function in cells in partnership with RXRs. In addition to compounds that act directly on PPARs and that may have utility in various cardiovascular and metabolic diseases, certain retinoids (e.g., Targretin® capsules) are able to activate this RXR:PPAR complex and may also have utility in these disorders. We have two collaborative partners, GlaxoSmithKline and Lilly, in the areas of cardiovascular and metabolic diseases, with four compounds in clinical development.

GlaxoSmithKline Collaboration. In September 1992, we entered into a research and development collaboration with Glaxo Wellcome plc (now GlaxoSmithKline) to discover and develop drugs for the prevention or treatment of atherosclerosis and other disorders affecting the cardiovascular system. The collaboration focuses on discovering drugs that produce beneficial alterations in lipid and lipoprotein metabolism in three project areas: (1) regulation of cholesterol biosynthesis and expression of a receptor that removes cholesterol from the blood stream, (2) the IRs influencing circulating HDL levels, and (3) PPARs, the subfamily of IRs activated by lipid lowering drugs such as Lopid® and Atromid-S. The research phase was successfully completed in 1997 with the identification of a novel lead structure that activates selected PPAR subfamily members and the identification of a different lead compound that shows activity in preclinical models for lowering LDL cholesterol by up-regulating LDL receptor gene expression in liver cells. We retain the right to develop and commercialize products arising from the collaboration in markets not exploited by GlaxoSmithKline, or where GlaxoSmithKline is not developing a product for the same indication.

In 1999, two compounds were advanced to exploratory development: (1) GW544, a PPAR agonist for cardiovascular disease and dyslipidemia; and (2) GW516, a second candidate that is in clinical development for cardiovascular disease and dyslipidemia. GW516 remains in Phase II studies. The American Heart Association estimates that 62 million Americans have some form of cardiovascular disease, and that cardiovascular disease accounts for more than 40% of deaths in the U.S. annually.

Eli Lilly Collaboration. In November 1997, we entered into a research and development collaboration with Eli Lilly & Co. (Lilly) for the discovery and development of products based upon our IR technology with broad applications in the fields of metabolic diseases, including diabetes, obesity, dyslipidemia, insulin resistance and cardiovascular diseases associated with insulin resistance and obesity. Under the collaboration, Lilly received: (1) worldwide, exclusive rights to our compounds and technology associated with the RXR receptor in the field; (2) rights to use our technology to develop an RXR compound in combination with a SERM in cancer; (3) worldwide, exclusive rights in certain areas to our PPAR technology, along with rights to use PPAR research technology with

the RXR technology; and (4) exclusive rights to our HNF-4 receptor and obesity gene promoter technology. Lilly has the right to terminate the development of compounds under the agreements. We would receive rights to certain of such compounds in return for a royalty to Lilly, the rate of which is dependent on the stage at which the development is terminated. In April 2002, Lilly and Ligand announced the companies would extend the collaboration until November of 2003. In May 2003, the companies announced the second extension of the collaboration through November 2004.

Under the Lilly collaboration, we retained or received: (1) exclusive rights to independently research, develop and commercialize Targretin® and other RXR compounds in the fields of cancer and dermatology; (2) an option to obtain selected rights to one of Lilly's specialty pharmaceutical products; and (3) rights to receive milestones, royalties and options to obtain certain co-development and co-promotion rights for the Lilly-selected RXR compound in combination with a SERM.

Our rights under the initial agreements have changed. In connection with the acquisition of Seragen in 1998, we obtained from Lilly its rights to ONTAK® in satisfaction of our option to obtain selected rights to one of Lilly's specialty pharmaceutical products. In 1999, we agreed to focus our collaborative efforts on the RXR modulator second-generation program, which has compounds with improved therapeutic indices relative to the three first-generation compounds, and on co-agonists of the PPAR receptor program. In early 1999, Lilly opted not to proceed with the development of certain first-generation compounds, including Targretin®, in the RXR program for diabetes. As a result of this decision, all rights to the oral form of Targretin® reverted to us, and LGD1268 and LGD1324 returned to the pool of eligible RXR modulators for possible use in oncology in combination with a SERM under the collaboration agreement between Ligand and Lilly.

In September 2001, we announced that we had earned an undisclosed milestone from Lilly as a result of Lilly's filing with the FDA an IND for LY818, a PPAR modulator for type II diabetes and metabolic diseases. LY818 entered Phase II studies early in 2003, resulting in a $1.5 million milestone payment. In March 2004, Lilly announced their decision to move LY818 into Phase III registration studies. In June 2002, we announced that we had earned a $1.1 million milestone payment as a result of Lilly's filing with the FDA an IND for LY929, a PPAR modulator for the treatment of Type II diabetes, metabolic diseases and dyslipidemias. In November 2002, we announced that we had earned a $2.1 million milestone payment as a result of Lilly's filing with the FDA an IND for LY674, a PPAR modulator for the treatment of dyslipidemias. We will receive additional milestones if these products continue through the development process, and royalties on product sales if the products receive marketing approval. During 2002, Lilly also moved to IND track two other PPAR products, the compound numbers for which have not been disclosed. Lilly and Ligand also have an active preclinical development program.

Inflammatory Disease Collaborative Program

Abbott Collaboration. In July 1994, we entered into a research and development collaboration with Abbott Laboratories ("Abbott") to discover and develop small molecule compounds for the prevention or treatment of inflammatory diseases. The collaborative program includes several molecular approaches to discovering modulators of glucocorticoid receptor activity that have significantly improved therapeutic profiles relative to currently known anti-inflammatory steroids such as prednisone and dexamethasone. The collaboration is focused on the development of novel non-steroidal glucocorticoids that maintain the efficacy of corticosteroids, but lack some or all of corticosteroids' dose-limiting side effects. The research phase concluded in July 1999. Certain compounds discovered during the collaboration have progressed to advanced preclinical testing in an effort to select a clinical candidate.

When the research phase of the collaboration ended in July 1999, Abbott retained rights to certain selective glucorcorticoid receptor modulators, or SGRMs, whose development has now been slowed or halted. Ligand retained rights to all other compounds discovered through the collaboration, as well as recaptured technology rights. Abbott will make milestone and royalty payments on products targeted at inflammation resulting from the collaboration. Each party will be responsible for the development, registration, and commercialization of the products in its respective field.

STATs/Blood Disorders Collaborative Program

Our proprietary STAT technology is distinct from our IR technology platform. STATs are activated through a receptor located on the surface of the cell, rather than a receptor located within the cell. STAT technology provides us with a second broadly enabling drug discovery platform that has potential applications in cancer, inflammation, asthma, allergy, infectious disease, anemia, obesity, diabetes, and growth disorders. See "Technology/Signal Transducers and Activators of Transcription Technology" for a more complete discussion of our STAT technology. We are pursuing product development opportunities based on our STAT expertise through a collaboration with GlaxoSmithKline.

GlaxoSmithKline Collaboration. In February 1995, we entered into a research and development collaboration with SmithKline Beecham (now GlaxoSmithKline) to use our proprietary STAT technology to discover and characterize small molecule, orally bioavailable drugs to control hematopoiesis (the formation and development of blood cells) for the treatment of a variety of blood cell deficiencies. In 1998, we announced the discovery of the first non-peptide small molecule that mimics in mice the activity of Granulocyte-Colony Stimulating Factor ("G-CSF"), a natural protein that stimulates production of infection-fighting neutrophils (a type of white blood cell). While this lead compound has only been shown to be active in mice, its discovery is a major scientific milestone and suggests that orally active, small-molecule mimics can be developed not only for G-CSF, but for other cytokines as well.

A number of lead molecules have been found that mimic the activity of natural growth factors for white cells and platelets. In the fourth quarter of 2002, we earned a $2.0 million milestone payment from GlaxoSmithKline, which has begun human trials of SB-497115, an oral, small molecule drug that mimics the activity of thrombopoietin (TPO), a protein factor that promotes growth and production of blood platelets. There are no approved TPO agents for the treatment or prevention of thrombocytopenias (decreased platelet count). Investigational use of injectable forms of recombinant human TPO has been effective in raising platelet levels in cancer patients undergoing chemotherapy, and has led to accelerated hematopoietic recovery when given to stem cell donors. Some of these investigational treatments have not moved forward to registration due to the development of neutralizing antibodies. Thus, a small molecule TPO mimic with no apparent immunogenic potential and oral activity that may facilitate dosing may provide an attractive therapeutic profile for a major unmet medical need.

The research phase of the collaboration concluded in February 2001. Under the collaboration, we have 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 GlaxoSmithKline. GlaxoSmithKline has the option to co-promote these products with us in North America and to develop and market them outside North America.

Dermatology Program

Allergan. In September 1997, in conjunction with the buyback of Allergan Ligand Retinoid Therapeutics, Inc. (ALRT), we agreed with Allergan to restructure the terms and conditions relating to research, development, and commercialization and sublicense rights for the ALRT compounds. Under the restructured arrangement, we received exclusive, worldwide development, commercialization, and sublicense rights to Panretin® capsules and Panretin® gel, LGD1550, LGD1268 and LGD1324. Allergan received exclusive, worldwide development, commercialization and sublicense rights to LGD4310, an RAR antagonist. Allergan also received LGD4326 and LGD4204, two advanced preclinical RXR selective compounds. In addition, we participated in a lottery with Allergan for each of the approximately 2,000 retinoid compounds existing in the ALRT compound library as of the closing date, with each party acquiring exclusive, worldwide development, commercialization, and sublicense rights to the compounds that they selected. We and Allergan will each pay the other a royalty based on net sales of products developed from the compounds selected by each in the lottery and the other ALRT compounds to which each acquires exclusive rights. We will also pay to Allergan royalties based on our net sales of Targretin® for uses other than oncology and dermatology indications. In the event that we license commercialization rights to Targretin® to a third party, we will pay to Allergan a percentage of royalties payable to us with respect to sales of Targretin® other than in oncology and dermatology indications. During 2001, Allergan elected not to proceed with development of AGN4310 for mucocutaneous toxicity.

Royalty Pharma Agreement

In March 2002, we announced an agreement with Royalty Pharma AG, which purchased rights to a share of future payments from our collaborative partners' sales of three SERMs in Phase III development. The SERM products included in the transaction are lasofoxifene, which is in Phase III studies for osteoporosis and other indications at Pfizer, bazedoxifene and bazedoxifene/PREMARIN® , which are in Phase III trials at Wyeth for osteoporosis and as HRT.

Royalty Pharma paid us $6.0 million in March 2002 in exchange for a right to receive 0.250% of net sales of the three SERMs for a period of 10 years. In the second quarter of 2002, Royalty Pharma exercised its first option to purchase for $3.0 million an additional 0.125% of the SERMs' potential future sales. In the third quarter of 2002, Royalty Pharma exercised another option to purchase for $3.5 million an additional 0.125% of the SERMs' potential future sales. In the fourth quarter of 2002, we and Royalty Pharma expanded our SERM royalty agreement and formed a new royalty-sharing partnership around our approved cancer drug Targretin® capsules. Under the revised agreement, Royalty Pharma exercised an expanded option in December 2002 and agreed to pay us $6.775 million for 0.1875% of the SERMs' potential future sales and for 1% of worldwide sales of Targretin® capsules from January 2003 through 2016. The agreement does not apply to sales of Targretin® capsules outside the United States for CTCL until the product is approved for an indication other than CTCL.

In October 2003, we and Royalty Pharma amended our existing royalty agreement, and Royalty Pharma exercised an option for $12.5 million in exchange for 0.7% of potential future sales of three selective estrogen receptor modulator (SERM) products for 10 years. Under the revised agreement, Royalty Pharma has three additional options to purchase up to 1.3% of such product net sales for $39.0 million. Additionally, Royalty Pharma agreed to pay cumulative milestones of up to $2.5 million upon the launches of the SERM products (provided they are approved by September 30, 2005). The revised agreement specifies that the options expire in the fourth quarter of 2003 and as NDA acceptance and approval milestones or specified dates are achieved in 2004 and 2005. Royalty Pharma did not exercise its second option for $12.5 million in the fourth quarter of 2003. For the options that are currently structured to expire in 2004 and 2005, the royalty rates owed to Royalty Pharma will be reduced if certain events occur, and if sales of SERM products exceed certain thresholds. In addition, if Phase III data for at least one of the SERM products have not been published by March 31, 2004, these options will have no fixed expiration date. Instead, they must be exercised within 30 days of the applicable development milestone. Overall, through December 2003, Royalty Pharma purchased for $31.8 million the right to receive 1.3875% of the SERMs' potential future sales, plus 1% of Targretin® capsules sales. Royalty Pharma has remaining options, exercisable at its discretion, to purchase at escalating prices rights to receive up to another 0.8% of the SERMs' potential future sales for up to $26.5 million in two installments in 2004 and 2005.

Under the terms of the agreement, unexercised options expire on their due date and cannot be deferred or accelerated. All payments are non-refundable, regardless of whether the products are ever successfully registered or marketed. Milestone payments owed by our partners as the products complete development and registration are not included in the Royalty Pharma agreement and will be paid to us as earned.

Technology

In our successful efforts to discover new and important medicines, we and our academic collaborators and consultants have concentrated on two areas of research: advancing the understanding of the activities of hormones and hormone-related drugs, and making scientific discoveries related to IR and STAT technologies. We believe that our expertise in these technologies will enable us to develop novel, small-molecule drugs acting through IRs or STATs with more target-specific properties than currently available drugs. Our efforts may result either in improved therapeutic and side effect profiles and new indications for IRs, or in novel mechanisms of action and oral activity for STATs. Both IRs and STATs are families of transcription factors that change cell function by selectively turning on or off particular genes in response to circulating signals that impinge on cells. In addition to our proprietary IR and STAT technologies, we have acquired fusion protein technology, which was used by Seragen in the development of ONTAK® .

Intracellular Receptor Technology

Hormones occur naturally within the body and control processes such as reproduction, cell growth and differentiation. Hormones generally fall into two classes, non-peptide hormones and peptide hormones. Non-peptide hormones include retinoids, sex steroids (estrogens, progestins and androgens), adrenal steroids (glucocorticoids and mineralocorticoids), vitamin D and thyroid hormone. These non-peptide 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 that mimic or block hormone action may be useful in the treatment of these diseases. Furthermore, hormone mimics (agonists) or blockers (antagonists) can be used to treat diseases in which the underlying cause is not hormonal imbalance. The effectiveness of IRs as drug targets is clearly demonstrated by currently available drugs acting through IRs for several 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), natural and synthetic 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 Dovonex® (used to treat psoriasis).

We have built a strong proprietary position and accumulated substantial expertise in IRs applicable to drug discovery and development. Building on our scientific findings about the molecular basis of hormone action, we have created proprietary new tools to explore and manipulate non-peptide hormone action for potential therapeutic benefit. We employ a proprietary cell-culture based assay system for small molecules that can modulate IRs, referred to as the co-transfection assay. The co-transfection assay system simulates the actual cellular processes controlled by IRs and is able to detect whether a compound interacts with a particular human IR and whether this interaction mimics or blocks the effects of the natural regulatory molecules on target gene expression.

The understanding of non-peptide hormones and their actions has increased substantially in the last 15 years. Driving this rapid expansion of knowledge has been the discovery of the family of IRs through which all known small-molecule, non-peptide hormones act. We and our academic collaborators and consultants have made major discoveries pertaining to IRs and to small molecule hormones and compounds that interact with these IRs. These discoveries include: (1) the identification of the IR superfamily, (2) the recognition of IR subtypes, (3) the heterodimer biology of RXR-selective compounds and (4) the discovery of orphan IRs. We believe that each of these broad areas of knowledge provides important opportunities for drug discovery.

IR Superfamily. The receptors for all non-peptide hormones are closely related members of a superfamily of proteins known as IRs. Human IRs for all the known non-peptide hormones now have been cloned, in many cases by our scientists or our collaborators. The structure and underlying mechanism of action of IRs have many common features, such that drug discovery insights about one IR often can be directly applied to other members of the IR superfamily, bringing synergy to our IR-focused drug discovery efforts. First-generation drugs were developed and commercialized for their therapeutic benefits prior to the discovery of IRs. As a result, they often cross-react with the IRs for hormones other than the intended target, which can result in significant side effects. The understanding that IRs are structurally similar has enabled us 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, two subtypes of the IRs for thyroid hormone, two subtypes for the ER, and three subtypes for the PPARs. Patent applications covering many of these IR subtypes have been exclusively licensed by us. We believe that drugs capable of selective modulation of IR subtypes will allow more specific pharmacological intervention that is better matched to therapeutic need. Targretin®, an RXR-selective molecule, was discovered as a result of our understanding of retinoid receptor subtypes.

Retinoid Responsive IRs. Retinoic acid, a derivative of Vitamin A, is one of the body's natural regulatory hormones that has a broad range of biological actions, influencing cell growth, differentiation, programmed cell death and embryonic development. Many chemical analogues of retinoic acid, 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 has been approved by the FDA to treat acute promyelocytic leukemia. Retinoids also have shown an ability to reverse precancerous (premalignant) changes in tissues, reducing the risk of development of cancer, and may have potential as preventive agents for a variety of epithelial malignancies, including skin, head and neck, bladder and prostate cancer. Currently marketed retinoids, which were developed and commercialized prior to the discovery of retinoid-responsive IRs, cause significant side effects. These include severe birth defects if fetal exposure occurs, severe irritation of the skin and mucosal surfaces, elevation of plasma lipids, headache and skeletal abnormalities.

The six RRs that have been identified to date can be grouped in two subfamilies -- RARs and RXRs. Patent applications covering members of both families of RRs have been licensed exclusively to us primarily from The Salk Institute. The RR subtypes appear to have different functions, based on their distribution in various tissues within the body and data arising from *in vitro* and *in vivo* studies, including 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. We are developing chemically synthesized retinoids that, by selectively activating RR subtypes, may preserve desired therapeutic effects while reducing side effects.

We have three retinoid products approved by the FDA (Panretin® gel, Targretin® capsules and Targretin® gel) and four retinoid products in clinical trials (Panretin® capsules, Targretin® capsules, Targretin® gel and LGD1550 capsules). Panretin® gel and Panretin® capsules incorporate 9-*cis* retinoic acid, a retinoid isolated and characterized by us in 1991 in collaboration with scientists at The Salk Institute and Baylor. 9-*cis* retinoic acid is the first non-peptide hormone discovered in more than 25 years and appears to be a natural ligand for the RAR and RXR subfamilies of retinoid receptors. Bexarotene, the active substance in Targretin®, is a synthetic retinoid developed by us that shows selective retinoid receptor subtype activity that is different from that of *9-cis* retinoic acid, the active substance in Panretin®. Targretin® selectively activates a subclass of retinoid receptors called RXRs. RXRs play an important role in the control of a variety of cellular functions. LGD1550 is a potent RAR agonist that strongly inhibits growth of several human cancer cell lines.

RXRs. RXRs can form a dimer with numerous IRs, such as the PPAR, LXR, RAR, thyroid hormone and vitamin D receptors. While RXRs are widely expressed, their IR partners are more selectively expressed in different tissues, such as liver, fat or muscle. As a result, compounds that bind RXRs offer the unique potential to treat a variety of diseases, including cancer and metabolic diseases. In preclinical models of type II diabetes, RXR agonists appear to stimulate the physiological pathways responsive to RXR-PPAR receptor partners expressed in key target tissues that are involved in glucose metabolism. As a result, a discrete set of genes is activated in these tissues, resulting in a decrease in serum glucose levels and insulin.

Orphan Receptors. More than 50 additional members of the IR superfamily that do not interact with the known non-peptide hormones have been discovered. These members of the IR superfamily have been designated orphan receptors. We believe that among the orphan IRs there may be receptors for uncharacterized small molecule hormones, and that the physiological roles of the various orphan IRs are likely to be diverse. We have devised strategies to isolate small molecules that interact with orphan IRs. In 1999, we invested in and exclusively licensed specified orphan IR technology to a new private corporation, X-Ceptor Therapeutics, Inc. ("X-Ceptor"), which is conducting research to identify therapeutic products from orphan nuclear receptors. We also retained the right to acquire all the remaining shares of X-Ceptor, which expired in 2003 without our exercising it. Please see note 14 of notes to consolidated financial statements for further details regarding our investment in X-Ceptor.

Signal Transducers and Activators of Transcription Technology

STATs are a family of proteins that are a key part of the signal transduction pathway for a variety of biologically important polypeptide hormones (e.g., interferons, interleukins, leptin and hematopoietic growth factors). STATs play a role in the biology of cytokines and growth factors functionally analogous to that played by IRs in the biology of the non-peptide hormones. When various cytokines or growth factors bind to their receptors on the cell surface, this triggers the activation of specific members of the 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 alter their expression, thereby modulating physiologic or pathophysiologic processes.

The discovery of STATs, the elucidation of their roles in interferon signal transduction, and the first cloning of genes encoding STATs were pioneered by our exclusive collaborator, Dr. James Darnell, and were described initially in 1992. A total of seven members of the STAT family have been identified and a large number of peptide hormones have been shown to utilize STAT signaling pathways. These peptide hormones include the interferons (alpha, beta and gamma), the hematopoietic colony stimulating factors (interleukin-3, EPO, G-CSF, GM-CSF and thrombopoietin), growth hormone, prolactin, leptin and many of the interleukins.

In certain 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. Other cytokines are useful as injected protein medicines, including interferons (Intron-A®, Roferon®, Betaseron®) and interleukins (Proleukin®) and G-CSF (Neupogen®). Each of these and many other cytokines appear to exert their actions through JAK/STAT signal transduction pathways.

We have established a collaboration with GlaxoSmithKline to discover and characterize small molecule drugs to modulate specific JAK/STAT pathways to control the formation of red, white and platelet blood cells for treating patients with cancer, anemia, or platelet deficiency disorders. Proof of principle for this approach was achieved with GlaxoSmithKline in the area of G-CSF and thrombopoietin mimics. In 2002, GlaxoSmithKline moved into clinical studies the first product discovered from our STAT technology, SB-497115, an oral TPO agonist for the treatment of thrombocytopenia.

Fusion Protein Technology

Our fusion protein technology was developed by Seragen, which we acquired in 1998. Seragen's fusion proteins consist of a fragment of diphtheria toxin genetically fused to a ligand that binds to specific receptors on the surface of target cells. Once bound to the cell, the fusion proteins are designed to enter the cell and destroy the ability of the cell to manufacture proteins, resulting in cell death. Using this platform, Seragen genetically engineered six fusion proteins, each of which consists of a fragment of diphtheria toxin fused to a different targeting ligand, such as a polypeptide hormone or growth factor. ONTAK®, which is approved in the U.S. for the treatment of patients with persistent or recurrent CTCL, is a fusion protein consisting of a fragment of diphtheria toxin genetically fused to a part of interleukin-2. In addition to treatment of CTCL, fusion proteins may have utility in oncology, dermatology, infectious diseases, and autoimmune diseases. Seragen has entered into exclusive license agreements with Harvard University and other parties for patents related to fusion protein technology and has been issued six U.S. patents for improvements in the technology licensed from Harvard University.

Academic Collaborations

To date, we have licensed technology from The Salk Institute, Baylor College of Medicine, and Rockefeller University and developed relationships with key scientists to further the development of our core IR and STAT technologies.

The Salk Institute of Biological Studies. In 1988, we established an exclusive relationship with The Salk Institute, which is one of the research centers in the area of IR technology. We amended and restated this agreement in April 2002. Under our agreement, we have an exclusive, worldwide license to certain IR technology developed in the laboratory of Dr. Ronald Evans, a Salk professor and Howard Hughes Medical Institute Investigator. Dr. Evans cloned and characterized the first IR in 1985 and is an inventor of the co-transfection assay used by us to screen for IR modulators. Under the agreement, we are 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 and a percentage of milestones and other payments received. The agreement also provides that we have the option of buying out future royalty payments as well as milestone and other payment-sharing obligations on a product-by-product basis by paying the Salk a lump sum calculated using a formula in the agreement. In March 2004, we paid the Salk $1.12 million to exercise this buyout option with respect to lasofoxifene, a product under development by Pfizer. See the discussion above regarding "Collaborative Research and Development Programs."

We have also entered into a consulting agreement with Dr. Evans that continues through February 2004. Dr. Evans serves as Chairman of Ligand's Scientific Advisory Board.

Baylor College of Medicine. In 1990, we established an exclusive relationship with Baylor, which is a center of IR technology. We entered into a series of agreements with Baylor under which we have an exclusive, worldwide license to IR technology developed at Baylor and to future improvements made in the laboratory of Dr. Bert W. O'Malley through the life of the related patents. Dr. O'Malley is a professor and the Chairman of the Department of Cell Biology at the Baylor College of Medicine and the Director of the Center for Reproductive Biology. He leads IR research at Baylor.

We work closely with Dr. O'Malley and Baylor in scientific IR research, particularly in the area of sex steroids and orphan IRs. Under our agreement, we are obligated to make certain royalty payments based on the sales of products developed using the licensed technology. Dr. O'Malley is a member of Ligand's Scientific Advisory Board.

Rockefeller University. In September 1992, we 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 a royalty on any commercialized products developed using the technology. Related technology was assigned by NYU to Rockefeller University and is covered by the license agreement with us.

In addition to the collaborations discussed above, we also have a number of other consulting, licensing, development and academic agreements by which we strive to advance our technology.

Manufacturing

We currently have no manufacturing facilities and, accordingly, rely on third parties, including our collaborative partners, for commercial or clinical production of any products or compounds. Each of our major products is manufactured by a single supplier: Elan manufactures AVINZA®; Cambrex manufactures ONTAK® and Cardinal Health and Raylo manufacture Targretin® capsules. We recently entered into a contract with Cardinal Health to provide a second source for AVINZA®, and with Hollister-Stier to fill and finish ONTAK®.

Certain raw materials necessary for the commercial manufacturing of our products are custom and must be obtained from a specific sole source. In addition, our finished products are produced by sole source manufacturers. We currently attempt to manage the risk associated with such sole source raw materials and production by actively managing our inventories and supply and production arrangements. We attempt to remain appraised of the financial condition of our suppliers and their ability to continue to supply our raw materials and finished products in an uninterrupted and timely manner. Unavailability of certain materials or the loss of current sources of production could cause an interruption in production and a reduced supply of finished product pending establishment of new sources, or in some cases, implementation of alternative processes. For a discussion of the risks associated with manufacturing, see "Risks and Uncertainties."

Quality Assurance

Our success depends in great measure upon customer confidence in the quality of our products and in the integrity of the data that support their safety and effectiveness. The quality of our products arises from our total commitment to quality in all aspects of our business, including research and development, purchasing, manufacturing and distribution. Quality assurance procedures have been developed relating to the quality and integrity of our scientific information and production processes.

Control of production processes involves rigid specifications for ingredients, equipment, facilities, manufacturing methods, packaging materials, and labeling. Control tests are made at various stages of production processes and on the final product to assure that the product meets all regulatory requirements and our standards. These tests may involve chemical and physical microbiological testing, preclinical testing, human clinical trials, or a combination of these trials.

Commercial

Our practices with respect to working capital items are similar to comparable companies in the industry. We accept the return of pharmaceuticals that have reached their expiration date. Our policy for returns allows customers, primarily wholesale distributors, to return our oncology products three months prior to and six months after expiration. Our policy for returns of AVINZA® allows customers to return the product six months prior to and six months after expiration. The level of actual returns can be influenced by a number of factors including the dating of product when shipped to the customer, the amount of product subsequently shipped by the wholesale distributor to their customers, pricing adjustments, and competing products. Actual product returns may differ from our estimates.

We have offered and may in the future offer special payment terms as part of promotional launch and other commercial programs such as those that provide customers with discounts off wholesale price and extended payment terms instead of our normal 30-day terms. We offered such special terms, for example, in our launch of AVINZA®.

For the year ended December 31, 2003, revenues from sales to three wholesale distributors each accounted for more than 10% of total revenues and in the aggregate, represented 67% of total revenues. These were AmerisourceBergen Corporation, Cardinal Health, Inc., and McKesson Corporation. Each wholesaler individually represented 10% or more of the Company's product sales and in the aggregate represented approximately 82% of product sales.

Substantially all of our revenues are attributable to customers in the United States; likewise, substantially all of our long-lived assets are located in the United States.

For further discussion of these items, as well as a discussion of inventories, see below under "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Policies" and "Management's Discussion and Analysis of Financial Condition and Results of Operations - New Accounting Policies."

Research and Development Expenses

Research and development expenses were $67.7 million, $58.8 million and $51.1 million in fiscal 2003, 2002 and 2001, respectively, of which approximately 86%, 75% and 70%, respectively, we sponsored, and the remainder of which was funded pursuant to collaborative research and development arrangements.

Competition

Some of the drugs we are developing will compete with existing therapies. In addition, a number of companies are pursuing the development of novel pharmaceuticals that target the same diseases we are targeting. A number of pharmaceutical and biotechnology companies are pursuing IR-related or STAT-related approaches to drug discovery and development. Furthermore, academic institutions, government agencies, and other public and private organizations conducting research may seek patent protection with respect to potentially competing products or technologies and may establish collaborative arrangements with our competitors.

Our competitive position also depends upon our ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary products or processes, and secure sufficient capital resources for the often substantial period between technological conception and commercial sales. For a discussion of the risks associated with competition, see "Risks and Uncertainties."

Government Regulation

The manufacturing and marketing of our products, our ongoing research and development activities, and products being developed by our collaborative partners 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 regulation by federal and various state authorities, including the FDA. 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 our products. There are often comparable regulations that apply at the state level. 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 (1) preclinical laboratory tests, (2) the submission to the FDA of an IND, which must become effective before human clinical trials may commence, (3) adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug, (4) the submission of a NDA to the FDA and (5) 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 and, in California, with the Food and Drug Branch of California. Domestic manufacturing establishments are subject to pre-approval inspections by the FDA prior to marketing approval, then to biennial inspections, and must comply with current Good Manufacturing Practices (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.

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 existing regulations could have a material adverse effect to us.

For marketing outside the United States before FDA approval to market, we must submit an export permit application to the FDA. We also are 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 we or any of our partners will meet and sustain any such requirements. For a discussion of the risks associated with government regulations, see "Risks and Uncertainties."

Patents and Proprietary Rights

We believe that patents and other proprietary rights are important to our business. Our policy is to file patent applications to protect technology, inventions and improvements to our inventions that are considered important to the development of our business. We also rely upon trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain our competitive position.

To date, we have filed or participated as licensee in the filing of approximately 93 currently pending patent applications in the United States relating to our technology, as well as foreign counterparts of certain of these applications in many countries. In addition, we own or have licensed rights covered by approximately 344 patents issued or applications, granted or allowed worldwide, including United States patents and foreign counterparts to United States patents. With a few immaterial exceptions, these patents and applications will expire between 2004 and 2021. Our marketed products are expected to have patent protection in the United States and Europe that does not expire until between 2011 and 2017. Subject to compliance with the terms of the respective agreements, our rights under our licenses with our exclusive licensors extend for the life of the patents covering such developments. For a discussion of the risks associated with patent and proprietary rights, see "Risks and Uncertainties."

Human Resources

As of February 29, 2004, we had 461 full-time employees, of whom 230 were involved directly in scientific research and development activities. Of these employees, approximately 68 hold Ph.D. or M.D. degrees.

Available Information

We file electronically with the Securities and Exchange Commission (or SEC) our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and, as necessary, amendments to these reports, pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934. The public may read or copy any materials we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, NW, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is <http://www.sec.gov>.

You may obtain a free copy of our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports which are posted as soon as reasonably practicable after filing on our website on the World Wide Web at <http://www.ligand.com>, by contacting the Investor Relations Department at our corporate offices by calling (858) 550-7500 or by sending an e-mail message to investors@ligand.com. You may also request information via the Investor Relations page of our Web site.

Risks and Uncertainties

The following is a summary description of some of the many risks we face in our business. You should carefully review these risks in evaluating our business, including the businesses of our subsidiaries. You should also consider the other information described in this report.

Our product development and commercialization involves a number of uncertainties, and we may never generate sufficient revenues from the sale of products to become profitable.

We were founded in 1987. We have incurred significant losses since our inception. At December 31, 2003, our accumulated deficit was approximately $656 million. To date, we have received the majority of our revenues from our collaborative arrangements and only began receiving revenues from the sale of pharmaceutical products in 1999. We achieved quarterly net income for the first time in our corporate history during the fourth quarter of fiscal 2003. To consistently be profitable, we must successfully develop, clinically test, market and sell our products. Even if we consistently achieve profitability, we cannot predict the level of that profitability or whether we will be able to sustain profitability. We expect that our operating results will fluctuate from period to period as a result of differences in when we incur expenses and receive revenues from product sales, collaborative arrangements and other sources. Some of these fluctuations may be significant.

Most of our products in development will require extensive additional development, including preclinical testing and human studies, as well as regulatory approvals, before we can market them. We cannot predict if or when any of the products we are developing or those being co-developed with our partners will be approved for marketing. There are many reasons that we or our collaborative partners may fail in our efforts to develop our other potential products, including the possibility that:

- preclinical testing or human studies may show that our potential products are ineffective or cause harmful side effects;
- the products may fail to receive necessary regulatory approvals from the FDA or foreign authorities in a timely manner, or at all;
- the products, if approved, may not be produced in commercial quantities or at reasonable costs;
- the products, once approved, may not achieve commercial acceptance;
- regulatory or governmental authorities may apply restrictions to our products, which could adversely affect their commercial success; or
- the proprietary rights of other parties may prevent us or our partners from marketing the products.

We are building marketing and sales capabilities in the United States and Europe which is an expensive and time-consuming process and may increase our operating losses.

Developing the sales force to market and sell products is a difficult, expensive and time-consuming process. We have developed a US sales force of about 95 people. We also rely on third-party distributors to distribute our products. The distributors are responsible for providing many marketing support services, including customer service, order entry, shipping and billing and customer reimbursement assistance. In Europe, we currently rely on other companies to distribute and market our products. We have entered into agreements for the marketing and distribution of our products in territories such as the United Kingdom, Germany, France, Spain, Portugal, Greece, Italy and Central and South America and have established a subsidiary, Ligand Pharmaceuticals International, Inc., with a branch in London, England, to coordinate our European marketing and operations. Our reliance on these third parties means our results may suffer if any of them are unsuccessful or fail to perform as expected. We may not be able to continue to expand our sales and marketing capabilities sufficiently to successfully commercialize our products in the territories where they receive marketing approval. With respect to our co-promotion or licensing arrangements, for example our co-promotion agreement for AVINZA®, any revenues we receive will depend substantially on the marketing and sales efforts of others, which may or may not be successful.

Our small number of products means our results are vulnerable to setbacks with respect to any one product.

We currently have only five products approved for marketing and a handful of other products/indications that have made significant progress through development. Because these numbers are small, especially the number of marketed products, any significant setback with respect to any one of them could significantly impair our operating results and/or reduce the market prices for our securities. Setbacks could include problems with shipping, distribution, manufacturing, product safety, marketing, government licenses and approvals, intellectual property rights and physician or patient acceptance of the product.

Sales of our specialty pharmaceutical products may significantly fluctuate each period based on the nature of our products, our promotional activities and wholesaler purchasing and stocking patterns.

Excluding AVINZA®, our products are small-volume specialty pharmaceutical products that address the needs of cancer patients in relatively small niche markets with substantial geographical fluctuations in demand. To ensure patient access to our drugs, we maintain broad distribution capabilities with inventories held at approximately 150 locations throughout the United States. Furthermore, the purchasing and stocking patterns of our wholesaler customers are influenced by a number of factors that vary with each product, including but not limited to overall level of demand, periodic promotions, required minimum shipping quantities and wholesaler competitive initiatives. As a result, the overall level of product in the distribution channel may average from two to six months' worth of projected inventory usage. If any or all of our major distributors decide to substantially reduce the inventory they carry in a given period, our sales for that period could be substantially lower than historical levels.

Our drug development programs will require substantial additional future funding which could hurt our operational and financial condition.

Our drug development programs require substantial additional capital to successfully complete them, arising from costs to:

- conduct research, preclinical testing and human studies;
- establish pilot scale and commercial scale manufacturing processes and facilities; and
- establish and develop quality control, regulatory, marketing, sales and administrative capabilities to support these programs.

Our future operating and capital needs will depend on many factors, including:

- the pace of scientific progress in our research and development programs and the magnitude of these programs;
- the scope and results of preclinical testing and human studies;
- the time and costs involved in obtaining regulatory approvals;
- the time and costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims;
- competing technological and market developments;
- our ability to establish additional collaborations;
- changes in our existing collaborations;
- the cost of manufacturing scale-up; and
- the effectiveness of our commercialization activities.

We currently estimate our research and development expenditures over the next 3 years to range between $250 million and $325 million. However, we base our outlook regarding the need for funds on many uncertain variables. Such uncertainties include regulatory approvals, the timing of events outside our direct control such as product launches by partners and the success of such product launches, negotiations with potential strategic partners and other factors. Any of these uncertain events can significantly change our cash requirements as they determine such one-time events as the receipt of major milestones and other payments.

While we expect to fund our research and development activities from cash generated from internal operations to the extent possible, if we are unable to do so we may need to complete additional equity or debt financings or seek other external means of financing. If additional funds are required to support our operations and we are unable to obtain them on terms favorable to us, we may be required to cease or reduce further development or commercialization of our products, to sell some or all of our technology or assets or to merge with another entity.

Some of our key technologies have not been used to produce marketed products and may not be capable of producing such products.

To date, we have dedicated most of our resources to the research and development of potential drugs based upon our expertise in our IR and STAT technologies. Even though there are marketed drugs that act through IRs, some aspects of our IR technologies have not been used to produce marketed products. In addition, we are 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. If we are unable to apply our IR and STAT technologies to the development of our potential products, we will not be successful in developing new products.

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

We have incurred losses since our inception and may not generate positive cash flow to fund our operations for one or more years. As a result, we may need to complete additional equity or debt financings to fund our operations. Our inability to obtain additional financing could adversely affect our business. Financings may not be available at all or on favorable terms. In addition, these financings, if completed, still may not meet our capital needs and could result in substantial dilution to our stockholders. For instance, in February and March 2002 we issued to Elan 6.3 million shares upon the conversion of zero coupon convertible senior notes held by Elan, and in April 2002 and September 2003 we issued an aggregate of 7.7 million shares of our common stock in a private placement. These transactions have resulted in the issuance of significant numbers of new shares. In addition, in November 2002 we issued in a private placement $155.3 million in aggregate principal amount of our 6% convertible subordinated notes due 2007, which could be converted into 25,149,025 shares of our common stock.

If adequate funds are not available, we may be required to delay, reduce the scope of or eliminate one or more of our research or drug development programs, or our marketing and sales initiatives. Alternatively, we may be forced to attempt to continue development by entering into arrangements with collaborative partners or others that require us to relinquish some or all of our rights to technologies or drug candidates that we would not otherwise relinquish.

Our products face significant regulatory hurdles prior to marketing which could delay or prevent sales. Even after approval, government regulation of our business is extensive.

Before we obtain the approvals necessary to sell any of our potential products, we must show through preclinical studies and human testing that each product is safe and effective. We and our partners have a number of products moving toward or currently in clinical trials, the most significant of which are our Phase III trials for Targretin® capsules in non-small cell lung cancer and three Phase III trials by our partners involving bazedoxifene and lasofoxifene. Failure to show any product's safety and effectiveness would delay or prevent regulatory approval of the product and could adversely affect our business. The clinical trials process is complex and uncertain. The results of preclinical studies and initial clinical trials may not necessarily predict the results from later large-scale clinical trials. In addition, clinical trials may not demonstrate a product's safety and effectiveness to the satisfaction of the regulatory authorities. A number of companies have suffered significant setbacks in advanced clinical trials or in seeking regulatory approvals, despite promising results in earlier trials. The FDA may also require additional clinical trials after regulatory approvals are received, which could be expensive and time-consuming, and failure to successfully conduct those trials could jeopardize continued commercialization.

The rate at which we complete our clinical trials depends on many factors, including our ability to obtain adequate supplies of the products to be tested and patient enrollment. Patient enrollment is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites and the eligibility criteria for the trial. For example, each of our Phase III Targretin® clinical trials involves approximately 600 patients and requires significant time and investment to complete enrollments. Delays in patient enrollment may result in increased costs and longer development times. In addition, our collaborative partners have rights to control product development and clinical programs for products developed under the collaborations. As a result, these collaborators may conduct these programs more slowly or in a different manner than we had expected. Even if clinical trials are completed, we or our collaborative partners still may not apply for FDA approval in a timely manner or the FDA still may not grant approval.

In addition, the manufacturing and marketing of approved products is subject to extensive government regulation, including by the FDA, DEA and state and other territorial authorities. The FDA administers processes to assure that marketed products are safe, effective, consistently of uniform, high quality and marketed only for approved indications. For example, while our products are prescribed legally by some physicians for unapproved uses, we may not market our products for such uses. Failure to comply with applicable regulatory requirements can result in sanctions up to the suspension of regulatory approval as well as civil and criminal sanctions.

We face substantial competition which may limit our revenues.

Some of the drugs that we are developing and marketing will compete with existing treatments. In addition, several companies are developing new drugs that target the same diseases that we are targeting and are taking IR-related and STAT-related approaches to drug development. The principal products competing with our products targeted at the cutaneous t-cell lymphoma market are Supergen/Abbott's Nipent and interferon, which is marketed by a number of companies, including Schering-Plough's Intron A. Products that compete with AVINZA® include Purdue Pharma L.P.'s OxyContin and MS Contin, Janssen Pharmaceutica Products, L.P.'s Duragesic, aai Pharma's Oramorph SR, Faulding's Kadian, and generic sustained release morphine sulfate. Many of our existing or potential competitors, particularly large drug companies, have greater financial, technical and human resources than us and may be better equipped to develop, manufacture and market products. Many of these companies also have extensive experience in preclinical testing and human clinical trials, obtaining FDA and other regulatory approvals and manufacturing and marketing pharmaceutical products. In addition, academic institutions, governmental agencies and other public and private research organizations are developing products that may compete with the products we are developing. These institutions are becoming more aware of the commercial value of their findings and are seeking patent protection and licensing arrangements to collect payments for the use of their technologies. These institutions also may market competitive products on their own or through joint ventures and will compete with us in recruiting highly qualified scientific personnel.

Third-party reimbursement and health care reform policies may reduce our future sales.

Sales of prescription drugs depend significantly on access to the formularies, or lists of approved prescription drugs, of third-party payers such as government and private insurance plans, as well as the availability of reimbursement to the consumer from these third party payers. These third party payers frequently require drug companies to provide predetermined discounts from list prices, and they are increasingly challenging the prices charged for medical products and services. Our current and potential products may not be considered cost-effective, may not be added to formularies and reimbursement to the consumer may not be available or sufficient to allow us to sell our products on a competitive basis. For example, we have current and recurring discussions with insurers regarding formulary access, discounts and reimbursement rates for our drugs, including AVINZA®. We may not be able to negotiate favorable reimbursement rates and formulary status for our products or may have to pay significant discounts to obtain favorable rates and access. Only one of our products, ONTAK®, is currently eligible to be reimbursed by Medicare. Recently enacted changes by Medicare to the hospital outpatient payment reimbursement system may adversely affect reimbursement rates for ONTAK®.

In addition, the efforts of governments and third-party payers to contain or reduce the cost of health care will continue to affect the business and financial condition of drug companies such as us. A number of legislative and regulatory proposals to change the health care system have been discussed in recent years, including price caps and controls for pharmaceuticals. These proposals could reduce and/or cap the prices for our products or reduce government reimbursement rates for products such as ONTAK®. In addition, an increasing emphasis on managed care in the United States has and will continue to increase pressure on drug pricing. We cannot predict whether legislative or regulatory proposals will be adopted or what effect those proposals or managed care efforts may have on our business. The announcement and/or adoption of such proposals or efforts could adversely affect our profit margins and business.

We rely heavily on collaborative relationships and termination of any of these programs could reduce the financial resources available to us, including research funding and milestone payments.

Our strategy for developing and commercializing many of our potential products, including products aimed at larger markets, includes entering into collaborations with corporate partners, licensors, licensees and others. These collaborations provide us with funding and research and development resources for potential products for the treatment or control of metabolic diseases, hematopoiesis, women's health disorders, inflammation, cardiovascular disease, cancer and skin disease, and osteoporosis. These agreements also give our collaborative partners significant discretion when deciding whether or not to pursue any development program. Our collaborations may not continue or be successful.

In addition, our collaborators may develop drugs, either alone or with others, that compete with the types of drugs they currently are developing with us. This would result in less support and increased competition for our programs. If products are approved for marketing under our collaborative programs, any revenues we receive will depend on the manufacturing, marketing and sales efforts of our collaborators, who generally retain commercialization rights under the collaborative agreements. Our current collaborators also generally have the right to terminate their collaborations under specified circumstances. If any of our collaborative partners breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully, our product development under these agreements will be delayed or terminated.

We may have disputes in the future with our collaborators, including disputes concerning which of us owns the rights to any technology developed. For instance, we were involved in litigation with Pfizer, which we settled in April 1996, concerning our right to milestones and royalties based on the development and commercialization of droloxifene. These and other possible disagreements between us and our collaborators could delay our ability and the ability of our collaborators to achieve milestones or our receipt of other payments. In addition, any disagreements could delay, interrupt or terminate the collaborative research, development and commercialization of certain potential products, or could result in litigation or arbitration. The occurrence of any of these problems could be time-consuming and expensive and could adversely affect our business.

Challenges to or failure to secure patents and other proprietary rights may significantly hurt our business.

Our success will depend on our ability and the ability of our licensors to obtain and maintain patents and proprietary rights for our potential products and to avoid infringing the proprietary rights of others, both in the United States and in foreign countries. Patents may not be issued from any of these applications currently on file, or, if issued, may not provide sufficient protection. In addition, disputes with licensors under our license agreements may arise which could result in additional financial liability or loss of important technology and potential products and related revenue, if any.

Our patent position, like that of many pharmaceutical companies, is uncertain and involves complex legal and technical questions for which important legal principles are unresolved. We may not develop or obtain rights to products or processes that are patentable. Even if we do obtain patents, they may not adequately protect the technology we own or have licensed. In addition, others may challenge, seek to invalidate, infringe or circumvent any patents we own or license, and rights we receive under those patents may not provide competitive advantages to us. Further, the manufacture, use or sale of our products may infringe the patent rights of others.

Several drug companies and research and academic institutions have developed technologies, filed patent applications or received patents for technologies that may be related to our business. Others have filed patent applications and received patents that conflict with patents or patent applications we have licensed for our use, either by claiming the same methods or compounds or by claiming methods or compounds that could dominate those licensed to us. In addition, we may not be aware of all patents or patent applications that may impact our ability to make, use or sell any of our potential products. For example, US patent applications may be kept confidential while pending in the Patent and Trademark Office and patent applications filed in foreign countries are often first published six months or more after filing. Any conflicts resulting from the patent rights of others could significantly reduce the coverage of our patents and limit our ability to obtain meaningful patent protection. While we routinely receive communications or have conversations with the owners of other patents, none of these third parties have directly threatened an action or claim against us. If other companies obtain patents with conflicting claims, we may be required to obtain licenses to those patents or to develop or obtain alternative technology. We may not be able to obtain any such licenses on acceptable terms, or at all. Any failure to obtain such licenses could delay or prevent us from pursuing the development or commercialization of our potential products.

We have had and will continue to have discussions with our current and potential collaborators regarding the scope and validity of our patents and other proprietary rights. If a collaborator or other party successfully establishes that our patent rights are invalid, we may not be able to continue our existing collaborations beyond their expiration. Any determination that our patent rights are invalid also could encourage our collaborators to terminate their agreements where contractually permitted. Such a determination could also adversely affect our ability to enter into new collaborations.

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

Hoffmann-La Roche Inc. has received a US patent, has made patent filings and has issued patents in foreign countries that relate to our Panretin gel products. While we were unsuccessful in having certain claims of the US patent awarded to Ligand in interference proceedings, we continue to believe that any relevant claims in these Hoffman-La Roche patents in relevant jurisdictions are invalid and that our current commercial activities and plans relating to Panretin are not covered by these Hoffman-La Roche patents in the US or elsewhere. In addition, we have our own portfolio of issued and pending patents in this area which cover our commercial activities, as well as other uses of 9-*cis* retinoic acid, in the US, Europe and elsewhere. However, if the claims in these Hoffman-La Roche patents are not invalid and/or unenforceable, they might block the use of Panretin gel in specified cancers, not currently under active development or commercialization by us.

We have also learned that Novartis AG has filed an opposition to our European patent that covers the principal active ingredient of our ONTAK® drug. We are currently investigating the scope and merits of this opposition. If the opposition is successful, we could lose our ONTAK® patent protection in Europe which could substantially reduce our future ONTAK® sales in that region. We could also incur substantial costs in asserting our rights in this opposition proceeding, as well as in other possible future proceedings in the United States.

We also rely on unpatented trade secrets and know-how to protect and maintain our competitive position. We require our employees, consultants, collaborators and others to sign confidentiality agreements when they begin their relationship with us. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our competitors may independently discover our trade secrets.

Reliance on third-party manufacturers to supply our products risks supply interruption or contamination and difficulty controlling costs.

We currently have no manufacturing facilities, and we rely on others for clinical or commercial production of our marketed and potential products. In addition, some raw materials necessary for the commercial manufacturing of our products are custom and must be obtained from a specific sole source. Elan manufactures AVINZA® for us, Cambrex manufactures ONTAK® for us and Cardinal Health and Raylo manufacture Targretin® capsules for us. We also recently entered into contracts with Cardinal Health to manufacture and package AVINZA® and with Hollister-Stier for the filling and finishing of ONTAK®. Each of these recent contracts calls for manufacturing and packaging the product at a new facility. Qualification and regulatory approval for these facilities are required prior to starting commercial manufacturing. Any delays or failures of the qualification or approval process could cause inventory problems or product shortages.

To be successful, we will need to ensure continuity of the manufacture of our products, either directly or through others, in commercial quantities, in compliance with regulatory requirements at acceptable cost and in sufficient quantities to meet product growth demands. Any extended or unplanned manufacturing shutdowns, shortfalls or delays could be expensive and could result in inventory and product shortages. If we are unable to reliably manufacture our products our revenues could be adversely affected. In addition, if we are unable to supply products in development, our ability to conduct preclinical testing and human clinical trials will be adversely affected. This in turn could also delay our submission of products for regulatory approval and our initiation of new development programs. In addition, although other companies have manufactured drugs acting through IRs and STATs on a commercial scale, we may not be able to do so at costs or in quantities to make marketable products.

The manufacturing process also may be susceptible to contamination, which could cause the affected manufacturing facility to close until the contamination is identified and fixed. In addition, problems with equipment failure or operator error also could cause delays in filling our customers' orders.

Our business exposes us to product liability risks or our products may need to be recalled, and we may not have sufficient insurance to cover any claims.

Our business exposes us to potential product liability risks. Our products also may need to be recalled to address regulatory issues. A successful product liability claim or series of claims brought against us could result in payment of significant amounts of money and divert management's attention from running the business. Some of the compounds we are investigating may be harmful to humans. For example, retinoids as a class are known to contain compounds which can cause birth defects. We may not be able to maintain our insurance on acceptable terms, or our insurance may not provide adequate protection in the case of a product liability claim. To the extent that product liability insurance, if available, does not cover potential claims, we will be required to self-insure the risks associated with such claims. We believe that we carry reasonably adequate insurance for product liability claims.

We use hazardous materials which requires us to incur substantial costs to comply with environmental regulations.

In connection with our research and development activities, we handle hazardous materials, chemicals and various radioactive compounds. To properly dispose of these hazardous materials in compliance with environmental regulations, we are required to contract with third parties at substantial cost to us. Our annual cost of compliance with these regulations is approximately $600,000. We cannot completely eliminate the risk of accidental contamination or injury from the handling and disposing of hazardous materials, whether by us or by our third-party contractors. In the event of any accident, we could be held liable for any damages that result, which could be significant. We believe that we carry reasonably adequate insurance for toxic tort claims.

Our stock price may be adversely affected by volatility in the markets.

The market prices and trading volumes for our securities, and the securities of emerging companies like us, have historically been highly volatile and have experienced significant fluctuations unrelated to operating performance. For example, in 2003, the intraday sale price of our common stock on the Nasdaq National Market was as high as $16.59 and as low as $3.69. Future announcements concerning us or our competitors as well as other companies in our industry and other public companies may impact the market price of our common stock. These announcements might include:

- the results of research or development testing of ours or our competitors' products;
- technological innovations related to diseases we are studying;
- new commercial products introduced by our competitors;
- government regulation of our industry;
- receipt of regulatory approvals by our competitors;
- our failure to receive regulatory approvals for products under development;
- developments concerning proprietary rights;
- litigation or public concern about the safety of our products; or
- intent to sell or actual sale of our stock held by our corporate partners.

Future sales of our securities may depress the price of our securities.

Sales of substantial amounts of our securities in the public market could seriously harm prevailing market prices for our securities. These sales might make it difficult or impossible for us to sell additional securities when we need to raise capital.

You may not receive a return on your securities other than through the sale of your securities.

We have not paid any cash dividends on our common stock to date. We intend to retain any earnings to support the expansion of our business, and we do not anticipate paying cash dividends on any of our securities in the foreseeable future.

Our shareholder rights plan and charter documents may hinder or prevent change of control transactions.

Our shareholder rights plan and provisions contained in our certificate of incorporation and bylaws may discourage transactions involving an actual or potential change in our ownership. In addition, our board of directors may issue shares of preferred stock without any further action by you. Such issuances may have the effect of delaying or preventing a change in our ownership. If changes in our ownership are discouraged, delayed or prevented, it would be more difficult for our current board of directors to be removed and replaced, even if you or our other stockholders believe that such actions are in the best interests of us and our stockholders.

Item 2. Properties

We currently lease and occupy office and laboratory facilities in San Diego, California. These include a 52,800 square foot facility leased through July 2015 and an 82,500 square foot facility leased through February 2014. The 82,500 square foot facility is owned by our consolidated subsidiary, Nexus Equity VI LLC. In December 2003, we notified the other shareholder of our consolidated subsidiary of our intent to acquire the portion of the subsidiary that we do not currently own. We expect the purchase to close in the first quarter of 2004. See note 2 to notes to consolidated financial statements - *Cumulative Effect of Accounting Change* for further discussion of this lease. We believe these facilities will be adequate to meet our near-term space requirements.

Item 3. Legal Proceedings

Seragen, Inc., our subsidiary, and Ligand, were named parties to *Sergio M. Oliver, et al. v. Boston University, et al.*, a putative shareholder class action filed on December 17, 1998 in the Court of Chancery in the State of Delaware in and for New Castle County, C.A. No. 16570NC, by Sergio M. Oliver and others against Boston University and others, including Seragen, its subsidiary Seragen Technology, Inc. and former officers and directors of Seragen. The complaint, as amended, alleged that Ligand aided and abetted purported breaches of fiduciary duty by the Seragen related defendants in connection with the acquisition of Seragen by Ligand and made certain misrepresentations in related proxy materials and seeks compensatory and punitive damages of an unspecified amount. On July 25, 2000, the Delaware Chancery Court granted in part and denied in part defendants' motions to dismiss. Seragen, Ligand, Seragen Technology, Inc. and our acquisition subsidiary, Knight Acquisition Corporation, were dismissed from the action. Claims of breach of fiduciary duty remain against the remaining defendants, including the former officers and directors of Seragen. The hearing on the plaintiffs' motion for class certification took place on February 26, 2001. The court certified a class consisting of shareholders as of the date of the acquisition and on the date of an earlier business unit sale by Seragen. The litigation is currently in the discovery phase. While Ligand and its subsidiary Seragen have been dismissed from the action, such dismissal is subject to a possible subsequent appeal upon judgment in the action against the remaining parties.

On December 11, 2001, a lawsuit was filed in the United States District Court for the District of Massachusetts against Ligand by the Trustees of Boston University and other former stakeholders of Seragen. The suit was subsequently transferred to federal district court in Delaware. The complaint alleges breach of contract, breach of the implied covenants of good faith and fair dealing and unfair and deceptive trade practices based on, among other things, allegations that Ligand wrongfully withheld approximately $2.1 million in consideration due the plaintiffs under the Seragen acquisition agreement. This amount had been previously accrued for in the Company's financial statements. The complaint seeks payment of the withheld consideration and treble damages. Ligand filed a motion to dismiss the unfair and deceptive trade practices claim. The court subsequently granted Ligand's motion to dismiss the unfair and deceptive trade practices claim (i.e. the treble damages claim), granted Boston University's motion for summary judgment, and in November 2003 entered judgment for Boston University. In January 2004, the district court issued an amended judgment awarding interest of approximately $739,000 to the plaintiffs in addition to the $2.1 million withheld. We have appealed the judgment in this case as well as the award of interest and the calculation of damages.

We believe that each of these lawsuits is without merit and intend to vigorously defend against each of such lawsuits. Due to the uncertainty of the ultimate outcome of these matters, the impact on future financial results is not subject to reasonable estimates.

Item 4. Submission of Matters to a Vote of Security Holders

There were no matters submitted to a vote of security holders in the fourth quarter ended December 31, 2003.

PART II

Item 5. Market for Registrant's Common Stock, Related Stockholder Matter, and Issuer Purchases of Equity Securities

(a) Market Information

Our common stock trades on the NASDAQ National Market tier of the NASDAQ Stock Market under the symbol “LGND.” The following table sets forth the high and low intraday sales prices for our common stock on the NASDAQ National Market for the periods indicated.

	Price Range	
	High	**Low**
Year Ended December 31, 2003:		
1st Quarter	$ 6.90	$ 3.69
2nd Quarter	16.59	6.25
3rd Quarter	15.90	9.90
4th Quarter	15.75	11.35
Year Ended December 31, 2002:		
1st Quarter	20.50	12.65
2nd Quarter	20.25	11.70
3rd Quarter	14.72	5.75
4th Quarter	8.15	4.64

(b) Holders

As of February 27, 2004, there were approximately 1,949 holders of record of the common stock.

(c) Dividends

We have never declared or paid any cash dividends on our capital stock and do not intend to pay any cash dividends in the foreseeable future. We currently intend to retain our earnings, if any, to finance future growth.

Item 6. Selected Consolidated Financial Data

The selected financial data set forth below with respect to our consolidated financial statements has been derived from the audited financial statements. 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 consolidated financial statements and related notes included elsewhere in this filing.

	Year Ended December 31,				
	2003	2002	2001	2000	1999
	(in thousands, except loss per share data)				
Consolidated Statement of Operations Data:					
Product sales (1)	$ 114,632	$ 54,522	$ 45,623	$ 22,910	$ 11,307
Collaborative research and development and other revenues	26,508	42,118	30,718	25,200	29,588
Cost of products sold (1)	31,618	20,306	13,947	8,591	3,563
Research and development expenses	67,679	58,807	51,104	51,287	59,442
Selling, general and administrative expenses	51,661	41,678	34,427	34,114	27,257
Co-promotion expense (2)	9,360	—	—	—	—
Loss from operations	(19,178)	(24,151)	(23,137)	(45,882)	(61,293)
Loss before cumulative effect of changes in accounting principles	(35,457)	(32,596)	(42,995)	(59,277)	(74,719)
Cumulative effect on prior years of changing method of revenue recognition (3)	—	—	—	(13,099)	—
Cumulative effect through December 31, 2003 of changing method of accounting for variable interest entity (4)	(2,005)	—	—	—	—
Net loss	(37,462)	(32,596)	(42,995)	(72,376)	(74,719)
Basic and diluted per share amounts:					
Loss before cumulative effect of changes in accounting principles	$ (0.50)	$ (0.47)	$ (0.72)	$ (1.06)	$ (1.58)
Cumulative effect on prior years of changing method of revenue recognition (3)	—	—	—	(0.24)	—
Cumulative effect through December 31, 2003 of changing method of accounting for variable interest entity (4)	(0.03)	—	—	—	—
Net loss	$ (0.53)	$ (0.47)	$ (0.72)	$ (1.30)	$ (1.58)
Weighted average number of common shares	70,685,234	69,118,976	59,413,270	55,664,921	47,146,312
Pro forma amounts assuming the changed revenue recognition method is applied retroactively:					
Net loss				$ (59,277)	$ (73,131)
Basic and diluted net loss per share				$ (1.06)	$ (1.55)
Pro forma amounts assuming the changed method of accounting for variable interest entity is applied retroactively:					
Net loss	$ (35,557)	$ (32,795)	$ (43,290)	$ (72,833)	$ (75,166)
Basic and diluted net loss per share	$ (0.50)	$ (0.47)	$ (0.73)	$ (1.31)	$ (1.59)

	Year Ended December 31,				
	2003	2002	2001	2000	1999
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents, short-term investments and restricted investments	$ 100,690	$ 74,894	$ 40,058	$ 25,097	$ 49,166
Working capital	76,108	53,218	21,848	16,234	35,978
Total assets	301,255	270,609	117,473	113,422	134,645
Long-term liabilities	176,478	166,059	143,622	140,132	139,534
Accumulated deficit	(655,778)	(618,316)	(585,720)	(542,725)	(470,349)
Total stockholders' equity (deficit)	70,728	74,015	(57,875)	(55,125)	(25,590)

(1) We began selling ONTAK ® and Panretin ® gel in 1999 and Targretin ® capsules and Targretin ® gel in 2000. AVINZA ® was

approved by the FDA in March 2002 and subsequently launched in the U.S. in June 2002.

(2) Represents amount due Organon Pharmaceuticals USA, Inc. under our AVINZA ® co-promotion agreement entered into in February 2003.

(3) In 2000, we changed our policy for the recognition of revenue related to up-front fees in accordance with Staff Accounting Bulletin No. 101, *Revenue Recognition*. See Note 2 (Revenue Recognition) of the notes to consolidated financial statements.

(4) In December 2003, we adopted FIN 46(R), *Consolidation of Variable Interest Entities, an interpretation of ARB No. 51*. Under FIN 46(R), we are required to consolidate the entity from which we lease our corporate headquarters. Accordingly, we consolidated assets with a carrying value of $13.5 million, debt of $12.5 million, and a non-controlling interest of $0.6 million. In connection with the adoption of FIN 46(R), we recorded a charge of $2.0 million as a cumulative effect of the accounting change on December 31, 2003. See Note 2 (Cumulative Effect of Accounting Change) of the notes to consolidated financial statements.

Item 7. Management's Discussion And Analysis Of Financial Condition And Results Of Operations

Caution: This discussion and analysis may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed in Item 1 – Business at "Risks and Uncertainties". This outlook represents our current judgment on the future direction of our business. Such risks and uncertainties could cause actual results to differ materially from any future performance suggested. We undertake no obligation to release publicly the results of any revisions to these forward-looking statements to reflect events or circumstances arising after the date of this annual report. This caution is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995.

Our trademarks, trade names and service marks referenced herein include Ligand®, AVINZA®, ONTAK®, Panretin® and Targretin®. Each other trademark, trade name or service mark appearing in this annual report belongs to its owner.

Overview

We discover, develop and market drugs that address patients' critical unmet medical needs in the areas of cancer, pain, men's and women's health or hormone-related health issues, skin diseases, osteoporosis, and metabolic, cardiovascular and inflammatory diseases. Our drug discovery and development programs are based on our proprietary gene transcription technology, primarily related to Intracellular Receptors, also known as IRs, a type of sensor or switch inside cells that turns genes on and off, and Signal Transducers and Activators of Transcription, also known as STATs, which are another type of gene switch.

We currently market five products in the United States: AVINZA®, for the relief of chronic, moderate to severe pain; ONTAK®, for the treatment of patients with persistent or recurrent cutaneous T-cell lymphoma (or CTCL); Targretin® capsules, for the treatment of CTCL in patients who are refractory to at least one prior systemic therapy; Targretin® gel, for the topical treatment of cutaneous lesions in patients with early stage CTCL; and Panretin® gel, for the treatment of Kaposi's sarcoma in AIDS patients. In March 2002, the Food and Drug Administration (or FDA) approved AVINZA®, which was subsequently launched in the U.S. in June 2002. In Europe, we were granted a marketing authorization for Panretin® gel in 2000 and for Targretin® capsules in 2001. Targretin® capsules and Panretin® gel were launched in Europe in the fourth quarter of 2001. In April 2003, we withdrew a marketing authorization application (or MAA) under review in Europe for ONZAR (ONTAK® in the U.S.) due to requests for additional clinical and technical information that we judged to be uneconomic.

In February 2003, we announced that we had entered into an agreement for the co-promotion of AVINZA® with Organon Pharmaceuticals USA Inc. ("Organon"). Under the terms of the agreement, Organon committed to specified numbers of primary and secondary product calls delivered to certain high prescribing physicians and hospitals. In exchange, we pay Organon a percentage of AVINZA® net sales based on the following schedule:

Annual Net Sales of AVINZA®	% of Incremental Net Sales Paid to Organon by Ligand
$0-35 million (2003 only)	0% (2003 only)
$0-150 million	30%
$150-300 million	40%
$300-425 million	50%
>$425 million	45%

For 2003, net sales of AVINZA® amounted to $66.2 million. As a result, we recognized co-promote expense of $9.4 million.

Additionally, both companies agreed to share equally all costs for AVINZA® advertising and promotion, medical affairs and clinical trials. Each company is responsible for its own sales force costs and other expenses. The initial term of the co-promotion agreement is 10 years. Organon has the option any time prior to the end of year five to extend the agreement to 2017 by making a $75.0 million payment to us.

We are currently involved in the research phase of research and development collaborations with Eli Lilly and Company (or "Lilly") and TAP Pharmaceutical Products Inc. (or "TAP"). Collaborations in the development phase are being pursued by Abbott Laboratories, Allergan, Inc., GlaxoSmithKline, Organon, Pfizer Inc. and Wyeth. We receive funding during the research phase of the arrangements and milestone and royalty payments as products are developed and marketed by our corporate partners. In addition, in connection with some of these collaborations, we received non-refundable up-front payments.

We have been unprofitable since our inception on an annual basis. We achieved quarterly net income for the first time in our corporate history during the fourth quarter of fiscal 2003. To consistently be profitable, we must successfully develop, clinically test, market and sell our products. Even if we consistently achieve profitability, we cannot predict the level of that profitability or whether we will be able to sustain profitability. We expect that our operating results will fluctuate from period to period as a result of differences in the timing of expenses incurred, revenues earned from product sales, collaborative arrangements and other sources. Some of these fluctuations may be significant.

Results of Operations

Total revenues for 2003 increased to $141.1 million compared to $96.6 million in 2002 and $76.3 million in 2001. Loss before the cumulative effect of a change in accounting principle was $35.5 million ($0.50 per share), compared to $32.6 million ($0.47 per share) in 2002 and $43.0 million ($0.72 per share) in 2001. Net loss for 2003 was $37.5 million or $0.53 per share, compared to $32.6 million or $0.47 per share in 2002 and $43.0 million or $0.72 per share in 2001. As more fully described in Note 2 of the notes to consolidated financial statements, results for 2003 reflect the implementation of FASB Interpretation No. 46, *Consolidation of Variable Interest Entites, an interpretation of ARB No. 51* , as revised December 2003, effective December 31, 2003 which required us to consolidate the entity from which we lease one of our corporate office buildings under a synthetic lease arrangement. The effect on 2003 results, recorded as a cumulative effect of a change in accounting principle, increased net loss by $2.0 million or $0.03 per share.

Product Sales

Ligand's total net product sales for 2003 were $114.6 million, compared to $54.5 million in 2002 and $45.6 million in 2001. A comparison of sales by product is as follows (in thousands):

	Year ended December 31,		
	2003	**2002**	**2001**
AVINZA®	$ 66,200	$ 12,174	$ —
ONTAK®	34,343	26,642	24,298
Targretin® capsules	10,077	12,188	14,571
Targretin® gel and Panretin® gel	4,012	3,518	6,754
Total net product sales	$ 114,632	$ 54,522	$ 45,623

The increase in AVINZA®, which was launched in June 2002, is due to increasing prescriptions and additional retail and wholesaler stocking resulting from the increased level of marketing and sales activity under our co-promotion arrangement with Organon, and to 2003 being the first full year of AVINZA® sales. Sales of AVINZA® in the fourth quarter of 2003 also benefited from wholesaler purchases made in advance of a previously announced price increase which became effective January 1, 2004. While we limited shipments of product to wholesalers for good inventory management and supply purposes, we expect there could be some effect on wholesaler purchases in the first quarter of 2004.

As a result of the co-promotion agreement, AVINZA® is now promoted by approximately 800 sales representatives, compared to approximately 50 prior to co-promotion. According to IMS NPA monthly data, AVINZA® ended 2003 with a market share of prescriptions in the sustained-release opioid market of 3.8% compared to less than 1% prior to the commencement of co-promotion activities. We expect that AVINZA® prescription market share will continue to increase in 2004 as a result of a higher level of sales and marketing activity compared to 2003.

The increase in ONTAK® sales in 2003 compared to 2002 reflects price increases and increasing use (impacted in part by expanded clinical data) in CTCL, chronic lymphocytic leukemia (CLL), non-Hodgkins lymphoma (NHL) and graft-versus-host disease (GVHD). Overall demand for ONTAK® measured by unit shipments to end users, increased 22% for 2003 compared to the prior year. Sales of Targretin® capsules also benefited from a 14% increase in prescriptions in 2003 compared to the prior year. Targretin® capsules sales were negatively impacted, however, by management decisions to better balance wholesale inventories through reductions of product at two major customers. Additionally, sales of ONTAK® and Targretin® capsules were negatively impacted by increased chargebacks and rebates reflecting changes in our patient mix and evolving reimbursement rates. We continue to study recently enacted changes to the 2004 Centers for Medicare and Medicaid Services reimbursement rates (ONTAK®) and Section 641 of the Medicare Prescription Drug Improvement and Modernization Act relating to anti-cancer drugs (Targretin®). Early assessments indicate a much improved patient access for Targretin® capsules and increased challenges for a small sub-segment of our ONTAK®/Medicare patients in 2004 and 2005.

The increase in ONTAK® sales in 2002 compared to 2001 reflects price increases, further penetration of private oncology practices and a higher level of use for indications where the product may be effective but for which registration clinical trials have not been completed and for which FDA approval has not yet been granted. These indications include chronic lymphocytic leukemia (CLL), B- and T-cell non-Hodgkins Lymphoma (NHL) and graft-versus-host disease (GVHD). Likewise, demand for Targretin® capsules in 2002 benefited from growing prescriptions for treatment of non-small cell lung cancer (NSCLC) as well as increased use in CTCL. Sales of both ONTAK® and Targretin® capsules in 2002 were negatively impacted, however, by lower than expected demand growth in the first half of 2002 due to delays in completion and data publication of key ongoing, expanded-use clinical trials and physician initiated studies, as well as a lower company-wide focus on these products as commercial resources were shifted to assist in the launch of AVINZA®. Sales of all in-line products were further negatively impacted by decisions made by several of our major wholesaler customers during 2002 to purchase lower quantities of our products in order to reduce inventory carrying levels as well as the effect of incremental wholesaler purchases in the fourth quarter of 2001 made in advance of announced price increases that became effective in 2002. Sales for 2002 also reflect a reduction of $1.5 million for higher than estimated returns of expired product resulting from the lower than expected demand growth and inconsistent inventory rotation by certain wholesaler distributors.

Our product sales for any individual quarter or annual period can be influenced by a number of factors including changes in demand for a particular product, the level and nature of promotional activity, the timing of announced price increases, and wholesaler inventory practices. We expect that product sales will increase in 2004 due primarily to higher sales of AVINZA®, which will further benefit from our co-promotion arrangement with Organon. We also continue to expect that demand for and sales of ONTAK® and Targretin® capsules will increase when and as further data is obtained from ongoing expanded-use clinical trials and the initiation of new expanded-use trials. The level and timing of any such increases, however, are influenced by a number of factors including efforts of our co-promotion partner, the accrual of patients and overall progress of clinical trials which are managed by third parties.

Excluding AVINZA®, our products are small-volume specialty pharmaceutical products that address the needs of cancer patients in relatively small niche markets with substantial geographical fluctuations in demand. To ensure patient access to our drugs, we maintain broad distribution capabilities with inventories held at approximately 150 locations throughout the United States. Furthermore, the purchasing and stocking patterns of our wholesaler customers are influenced by a number of factors that vary with each product including overall level of demand, periodic promotions, required minimum shipping quantities and wholesaler competitive initiatives. As a result, the overall level of product in the distribution channel may average from two to six months' worth of projected inventory usage. If any or all of our major distributors decide to substantially reduce the inventory they carry in a given period, our sales for that period could be substantially lower than historical levels.

Certain of our products are included on the formularies (or lists of approved and reimbursable drugs) of many states' health care plans, as well as the formulary for certain Federal government agencies. In order to be placed on these formularies, we generally sign contracts which provide discounts to the purchaser off the then-current list price and limit how much of an annual price increase we can implement on sales to these groups. As a result, the discounts off list price for these groups can be significant for products where we have implemented list price increases. We monitor the portion of our sales subject to these discounts, and accrue for the cost of these discounts at the time of the sale of the product to the wholesaler. We believe that by being included on these formularies, we will gain better physician acceptance, which will then result in greater overall usage of our products. If the relative percentage of our sales subject to these discounts increases materially in any period, our sales and gross margin could be substantially lower than historical levels.

Collaborative Research and Development and Other Revenues

Collaborative research and development and other revenues for 2003 were $26.5 million, compared to $42.1 million for 2002 and $30.7 million for 2001. A comparison of the components of collaborative research and development and other revenues is as follows (in thousands):

	Year ended December 31,		
	2003	**2002**	**2001**
Collaborative research and development	$ 13,694	$ 23,328	$ 25,725
Royalty sale	12,500	18,275	—
Distribution agreements	311	311	4,787
Other	3	204	206
	$ 26,508	$ 42,118	$ 30,718

Collaborative research and development revenue includes reimbursement for ongoing research activities, earned development milestones and recognition of prior years' up-front fees previously deferred in accordance with Staff Accounting Bulletin ("SAB") No. 101, *Revenue Recognition in Financial Statements*. Royalty sale revenue represents the sale to third parties of rights and options to future royalties we may earn from the sale of products now in development with our collaborative partners. Revenue from distribution agreements includes recognition of up-front fees collected upon contract signing and deferred over the life of the distribution arrangement and milestones achieved under such agreements.

The decrease in ongoing research activities reimbursement revenue in 2003 compared to 2002 is due to lower funding from our research arrangement with Lilly, which contributed $5.7 million to revenue in 2003 compared to $8.2 million in 2002. The initial research term of the Lilly collaboration was extended for one year in November 2002 at a lower level of ongoing research funding. In the second quarter of 2003, we agreed to extend the collaboration again, through November 2004. Additionally, the decrease is due to the contractually agreed lower level of research activity and funding under our research arrangement with TAP, which contributed $4.2 million to revenue in 2003 compared to $5.0 million in 2002.

We earned milestone revenues of $2.8 million in 2003, net of royalties owed, under our collaborative agreements with Lilly, Wyeth, and GlaxoSmithKline, compared to $5.1 million in 2002. Revenue from up-front fees, which we recognize over the period during which we provide research services, decreased to $1.0 million in 2003 from $4.8 million in 2002 due primarily to the completion of the initial research term of the Lilly collaboration.

Revenues from royalty sales represents revenue earned from the sale to Royalty Pharma AG of rights to future royalties from certain collaborative partners' net sales of three selective estrogen receptor modulator (SERM) products. These products are currently in Phase III clinical development. The royalty purchase agreement, entered into in March 2002, provided for the initial sale of rights to 0.25% of such product net sales and granted Royalty Pharma options to acquire up to an additional 1.00% of net sales for $50.0 million. Later in 2002, the agreement was amended to replace the existing options with new options providing for the rights to acquire an additional 1.3125% of net sales for $63.8 million. We earned $6.0 million upon the initial sales of rights and $12.3 million subsequently upon Royalty Pharma's exercise of the first three options, as amended, to acquire rights to an additional 0.4375% of such product net sales.

In October 2003, we and Royalty Pharma again amended the royalty agreement, and Royalty Pharma exercised an option for $12.5 million in exchange for 0.7% of potential future sales of the SERM products. Under the revised agreement, Royalty Pharma has three additional options to purchase up to 1.3% of such product net sales for $39.0 million, including one option exercisable in the third quarter of 2004 to acquire 0.45% of such product net sales for $13.3 million. Additionally, Royalty Pharma agreed to pay cumulative milestones of up to $2.5 million upon the launches of the SERM products (provided they are approved by September 30, 2005). The options are currently structured to expire as NDA acceptance and approval milestones or specified dates are achieved in 2004 and 2005. For the options that are currently structured to expire in 2004 and 2005, the royalty rates owed to Royalty Pharma will be reduced if certain events occur, and if sales of SERM products exceed certain thresholds. In addition, if Phase III data for at least one of the SERM products have not been published by March 31, 2004, these options will have no fixed expiration date. Instead, they must be exercised within 30 days of the applicable development milestone.

The increase in 2002 collaborative research and development revenue compared to 2001 is primarily due to the $18.3 million revenue earned from the sale to Royalty Pharma AG of rights to future royalties. The increase in revenue from royalty sales is offset by a decrease in revenue from distributor agreements in 2002 compared to 2001. The 2001 revenue reflects milestones earned under a 2001 distribution agreement with Elan for the European submission of an MAA for Targretin gel and ONTAK® and the European grant of an MAA for Targretin® capsules.

Gross Margin

Gross margin on product sales was 72.4% in 2003 compared to 62.8% in 2002 and 69.4% in 2001. The increase in the margin in 2003 is primarily due to increased sales of AVINZA® compared to 2002. AVINZA® cost of product sold includes the amortization of license and royalty rights capitalized in connection with the restructuring of our AVINZA® license and supply agreement in November 2002. The total amount of capitalized license and royalty rights, $114.4 million, is being amortized to cost of product sold on a straight-line basis over 15 years. Additionally, the increase in ONTAK® sales in 2003 compared to 2002 resulted in a higher base to absorb the fixed amortization of the ONTAK® acquired technology. The total amount of acquired technology, $45.3 million, is amortized to cost of product sold on a straight-line basis over 15 years. The increase in the margin in 2003 was partially offset by higher chargebacks and rebates relecting changes in our patient mix and evolving reimbursement rates. These changes impacted the 2003 gross margin by approximately 0.5%. Given the fixed level of amortization of the capitalized AVINZA® license and royalty rights and the ONTAK® acquired technology, we expect the AVINZA® and ONTAK® gross margin percentages to continue to increase as sales of AVINZA® and ONTAK® increase. Gross margins are also expected to be favorably impacted by price increases on our products which became effective January 1, 2004.

The decrease in the 2002 margin compared to 2001 was primarily due to sales of AVINZA®, which prior to the restructuring of the AVINZA® license and supply agreement discussed below, had higher product costs than our in-line products. The margin was further negatively impacted by higher than estimated returns of expired products recorded in the second quarter of 2002 and the final annual increase in the contractual royalty rate on ONTAK®.

Through November 2002, we purchased AVINZA® from Elan at a cost of approximately 30% of the net sales price of AVINZA®. In November 2002, we and Elan agreed to amend the terms of the AVINZA® license and supply agreement for purchases of product starting in December 2002. Under the terms of the amendment, we paid Elan approximately $100.0 million in exchange for a reduction in the royalty and supply price of AVINZA® to approximately 10% of the product's net sales, and certain other manufacturing and promotional rights.

Research and Development Expenses

Research and development expenses were $67.7 million in 2003 compared to $58.8 million in 2002 and $51.1 million in 2001. The major components of research and development expenses are as follows (in thousands):

	Year ended December 31,		
	2003	2002	2001
Research			
Research performed under collaboration agreements	$ 10,728	$ 15,474	$ 20,442
Internal research programs	12,022	10,371	5,737
Total research	22,750	25,845	26,179
Development			
New product development	31,177	20,756	9,514
Existing product support (1)	13,752	12,206	15,411
Total development	44,929	32,962	24,925
Total research and development	$ 67,679	$ 58,807	$ 51,104

(1) Includes costs incurred to comply with U.S. post-marketing regulatory commitments.

The overall increase in research and development expenses in 2003 compared to 2002 is primarily due to development funding of Phase III clinical trials for Targretin® capsules in non-small cell lung cancer (NSCLC) which increased approximately $12.2 million in 2003 relative to the prior year. This increase was partially offset by a lower level of research funding agreed to with Lilly in connection with the two one-year extensions of our collaboration agreements through November 2004. This lower level of funding resulted in lower research expenses performed under collaboration agreements by approximately $3.1 million in 2003 compared to 2002.

The increase in the expense for 2002 compared to 2001 is due to the development funding of Phase III clinical trials for Targretin® capsules in NSCLC and research costs incurred on our selective glucocorticoid receptor modulator (SGRM) program. SGRMs are non-steroidal molecules that may be useful in treating asthma, rheumatoid arthritis, and certain leukemias and myelomas. The increase in expenses for these programs was partially offset by decreased research efforts on our collaboration programs in connection with the loss of research funding under our arrangement with Bristol-Myers Squibb, which was terminated in June 2001, and Organon, the research phase of which concluded in February 2002; lower expenses on post-marketing regulatory commitments; and lower expenses associated with the clinical trial stages of AVINZA® development prior to FDA approval in March 2002.

We expect development expenses to further increase in 2004 related to increased AVINZA® post-marketing regulatory commitments, increased activity on the development of our ONTAK® second generation product, expanded ONTAK® trials for indications other than CTCL, ongoing expenses on the Phase III clinical trials for Targretin® capsules in NSCLC, and initiation of additional clinical trials for Targretin® capsules in second/third line NSCLC and Targretin® gel in hand dermatitis.

A summary of our significant internal research and development programs is as follows:

Program	Disease/Indication	Development Phase
AVINZA®	Chronic, moderate-to-severe pain	Marketed in U.S. Phase IIIB/IV
ONTAK®	CTCL	Marketed in U.S.
	Chronic lymphocytic leukemia	Phase II
	B-cell Non-Hodgkin's lymphoma	Phase II
	Psoriasis (severe)	Phase II
	Peripheral T-cell lymphoma	Planned Phase II
Targretin® capsules	CTCL	Marketed in U.S. and Europe
	NSCLC first-line	Phase III
	NSCLC second/third line	Planned Phase II/III
	Advanced breast cancer	Phase II
	Psoriasis (moderate to severe)	Phase II
	Renal cell cancer	Phase II

Program	Disease/Indication	Development Phase
Targretin® gel	CTCL Hand dermatitis (eczema) Psoriasis	Marketed in U.S. Phase II Phase II
Panretin® gel	Kaposi's sarcoma	Marketed in U.S. and Europe
LGD1550 (RAR agonist)	Advanced cancers Acne Psoriasis	Phase II Pre-clinical Pre-clinical
LGD1331 (Androgen antagonist)	Prostate cancer, hirsutism, acne, androgenetic alopecia	Pre-clinical
Glucocorticoid agonists	Inflammation, cancer	Pre-clinical
Mineralocorticoid receptor modulators	Congestive heart failure, hypertension	Research

We do not provide forward-looking estimates of costs and time to complete our ongoing research and development projects, as such estimates would involve a high degree of uncertainty. Uncertainties include our ability to predict the outcome of complex research, our ability to predict the results of clinical studies, regulatory requirements placed upon us by regulatory authorities such as the FDA and EMEA, our ability to predict the decisions of our collaborative partners, our ability to fund research and development programs, competition from other entities of which we may become aware in future periods, predictions of market potential from products that may be derived from our research and development efforts, and our ability to recruit and retain personnel or third-party research organizations with the necessary knowledge and skills to perform certain research. Refer to the “Risks and Uncertainties” section for additional discussion of the uncertainties surrounding our research and development initiatives.

Selling, General and Administrative Expenses

Selling, general and administrative expenses were $51.6 million for 2003 compared to $41.7 million for 2002 and $34.4 million for 2001. The increase in 2003 compared to the prior year is primarily due to costs associated with additional Ligand sales representatives hired to promote AVINZA® (an increase of approximately $5.7 million) and higher advertising and promotion expenses for AVINZA® which was launched in June 2002 (an increase of approximately $3.3 million). Additionally, marketing expenses increased in 2003 in connection with our increased emphasis on physician-attended product information and advisory meetings for our oncology products (an increase of approximately $1.6 million). Selling, general and administrative expenses are expected to continue to increase in 2004 as a result of increased selling and marketing activities for AVINZA® which is now promoted on a broader scale and by a significantly larger sales force as a result of our co-promotion agreement with Organon. Under the co-promotion agreement, we and Organon share equally all costs for AVINZA® advertising and promotion, medical affairs and clinical trials.

The increase in 2002 compared to 2001 is due to higher advertising and promotion expenses in connection with the launch of AVINZA® and costs associated with approximately 25 additional sales representatives hired in the second quarter of 2002 to target general pain centers not served by our existing oncology and dermatology sales forces. The impact from the launch of AVINZA® is partially offset by lower Targretin® related expenses in 2002 compared to 2001 when significant advertising and promotion expenses were incurred in connection with the commencement of post-approval trials and post-launch promotions for Targretin® capsules.

Co-promotion Expense

Co-promotion expense payable to Organon amounted to $9.4 million in 2003 in connection with net sales of AVINZA® reaching $66.2 million. As further discussed under “Overview”, we were required to pay Organon, under the terms of our co-promotion agreement entered into in February 2003, 30% of net AVINZA® sales in excess of $35.0 million. We expect this expense to increase in 2004 when we are required to pay Organon 30% of net AVINZA® sales up to $150.0 million and higher percentage payments for net sales in excess of $150.0 million.

Other Expenses, Net

Other expenses, net were $16.3 million for 2003 compared to $8.4 million for 2002 and $19.9 million for 2001. The increase in other expenses, net for 2003 compared to 2002 includes the write-off of a $5.0 million one-time payment made in July 2002 to X-Ceptor Therapeutics, Inc. (or X-Ceptor) to extend Ligand's right to acquire the outstanding stock of X-Ceptor not already held by Ligand. In March 2003, we informed X-Ceptor that we would not exercise the purchase right. Interest expense increased to $11.0 million in 2003 compared to $6.3 million in 2002. The 2003 expense primarily represents interest on the $155.3 million of 6% convertible subordinated notes that we issued in November 2002. The 2002 expense represents interest on the $20.0 million in issue price of zero coupon convertible senior notes that were converted into common stock in March 2002 and interest on our outstanding $50.0 million face value of convertible subordinated debentures that were redeemed in June 2002. This increase is partially offset by the reduction of debt conversion expense of which $2.0 million was incurred in March 2002 in connection with the early conversion of $20.0 million in issue price of zero coupon convertible senior notes into common stock.

The decrease in other expense, net for 2002 compared to 2001 is primarily due to lower interest expenses as a result of the conversion of all outstanding zero coupon convertible senior notes owed to Elan in the fourth quarter of 2001 and the first quarter of 2002 and the early redemption of $50.0 million in face value of convertible subordinated debentures in June 2002. In addition, we recognized $2.0 million of debt conversion expense in 2002 upon the conversion of the Elan convertible securities compared to $5.0 million in 2001, and recorded a one time charge in 2001 of $2.5 million related to a payment subsequently made in 2002 to one of our licensors in connection with the amendment of an existing license agreement. The decrease in the net expense was partially offset by $1.8 million of accelerated accretion to face value in 2002 in connection with the early redemption of the convertible subordinated debentures, lower interest income earned on our investments due to declining interest rates and lower average investment balances during the year, and the accrual of interest on the $155.3 million of 6% convertible subordinated notes that we issued in November 2002.

Cumulative Effect of Accounting Change

In January 2003, the Financial Accounting Standards Board ("FASB") issued FASB Interpretation No. 46 ("FIN 46"), *Consolidation of Variable Interest Entities, an interpretation of ARB No. 51*, which was subsequently revised in December 2003 ("FIN 46(R)"). FIN 46(R) requires the consolidation of certain variable interest entities ("VIEs") by the primary beneficiary of the entity if the equity investment at risk is not sufficient to permit the entity to finance its activities without additional subordinated financial support from other parties, or if the equity investors lack the characteristics of a controlling financial interest.

We implemented FIN 46(R) effective December 31, 2003, and consolidated the entity from which we lease one of our two corporate office buildings as of that date, as we determined that the entity is a VIE, as defined by FIN 46(R), and that we would absorb a majority of its expected losses if any, as defined by the Interpretation. Accordingly, we consolidated the assets of the entity, which consist of land, the building, and related tenant improvements, with a total carrying value of $13.5 million, net of accumulated depreciation. Additionally, we consolidated the entity's debt of $12.5 million and non-controlling interest of $0.6 million. In connection with the implementation of FIN 46(R), we also recorded a $2.0 million charge ($0.03 per share) as a cumulative effect of the accounting change on December 31, 2003.

Net Operating Loss Carryforwards

At December 31, 2003, we had consolidated federal and combined California income tax net operating loss carryforwards of approximately $541.2 million and $81.8 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 60% limitation on California loss carryforwards. The federal tax loss and California tax loss carryforwards began expiring in 2002 and 1998, respectively. At December 31, 2003, we also had consolidated federal and combined California research tax credit carryforwards of approximately $24.1 million and $11.9 million, respectively, which began to expire in 2003.

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% that occurred within three periods during 1989, 1992 and 1996. In addition, use of Glycomed's and Seragen's preacquisition tax net operating and credit carryforwards will also be limited because the acquisitions by Ligand represent changes in ownership of more than 50%.

Liquidity and Capital Resources

We have financed our operations through private and public offerings of our equity securities, collaborative research and development and other revenues, issuance of convertible notes, product sales, capital and operating lease transactions, equipment financing arrangements, and investment income.

Working capital was $76.1 million at December 31, 2003 compared to $53.2 million at December 31, 2002. Cash, cash equivalents, short-term investments, and restricted investments totaled $100.7 million at December 31, 2003 compared to $74.9 million at December 31, 2002. We primarily invest our cash in United States government and investment grade corporate debt securities. Restricted investments consist of U.S. government securities required to be held with a trustee to pay semi-annual interest payments due in 2004 on the 6% convertible subordinated notes issued in November 2002 and certificates of deposit held with a financial institution as collateral under equipment financing and third-party service provider arrangements.

Operating Activities

Operating activities provided cash of $0.3 million in 2003 and used cash of $25.1 million in 2002 and $19.9 million in 2001. Operating cash flow in 2003 compared to 2002 primarily benefited from $54.0 million higher product sales of AVINZA® and from the receipt of $27.5 million in the fourth quarter upon the non-recourse sale of trade accounts receivable under a one-year factoring arrangement that we entered into in June 2003. Operating cash was negatively impacted, however, by higher operating expenses including development expenses to fund clinical trials of our existing products in new indications including Phase III registration trials for Targretin® capsules in NSCLC, and higher selling and marketing expenses for AVINZA®.

Non-cash expenses in 2003 increased $8.6 million compared to 2002. The increase includes the $5.0 million write-off of the X-Ceptor purchase right in March 2003, and the non-cash cumulative effect of the change in accounting principle (approximately $2.0 million) recognized in connection with the implementation of FIN 46(R). Net increases in operating assets used an additional $3.2 million compared to the prior year. This was due primarily to an increase in receivables from the finance company, partially offset by a decrease in our trade receivables accounts due to the factoring arrangement of $14.1 million and an increase in inventories of $3.4 million, partially offset by a decrease in other assets of $3.5 million, primarily due to the collection of non-trade accounts receivable. Additionally, net increases in operating liabilities generated $24.9 million more than 2002. This was primarily due to our co-promotion liability to Organon of $9.4 million, increases in our sales-related liability accounts of approximately $6.2 million, and increases in accruals for royalty payments of approximately $1.3 million.

Operating cash flow in 2002 compared to 2001 benefited from increased product sales and $16.4 million of cash received in connection with the sale to Royalty Pharma AG of rights and options to future royalties from certain collaborative partners' net sales of three selective estrogen receptor modulator (SERM) products and a 1% royalty interest in sales of Targretin® capsules. The increase in 2002 revenue was offset by higher operating expenses and $6.8 million in negative working capital changes attributed to an increase in other current assets of $5.0 million and a decrease in deferred revenue of $5.2 million partially offset by a decrease in accounts receivable of $2.4 million and an increase in accounts payable and accrued liabilities of $2.0 million. Working capital changes in 2001 had a neutral impact on net operating cash flows.

We expect operating cash flows to continue to benefit in 2004 from increased product sales driven by AVINZA®. Operating cash will be negatively impacted, however, by the expense related to our co-promotion arrangement with Organon and higher development expenses to fund clinical trials of our existing products in new indications including Phase III registration trials for Targretin® capsules in non-small cell lung cancer, and higher selling and marketing expenses on AVINZA®. Additionally, we will be required to pay interest of approximately $9.3 million in 2004 on the $155.3 million in 6% convertible subordinated notes issued in November 2002. We are also considering extending our current accounts receivable factoring arrangement beyond its June 2004 expiration date.

Investing Activities

Investing activities used cash of $24.6 million in 2003, $105.2 million in 2002 and $4.2 million in 2001. The use of cash in 2003 reflects the net purchase of short-term investments of $18.0 million, a $4.1 million payment to Elan in connection with the November 2002 restructuring of the AVINZA® license and supply agreement and capital expenditures of $2.8 million to purchase lab and computer equipment.

The use of cash in 2002 includes $100.0 million paid to Elan to restructure the AVINZA® license and supply agreement and $1.3 million in related transaction fees. Other investing activity in 2002 includes a $5.0 million payment to X-Ceptor Therapeutics, Inc. (X-Ceptor) and capital expenditures of $3.2 million, partially offset by net proceeds of $4.1 million from the sale of short-term investments. The payment to X-Ceptor was pursuant to a 1999 investment agreement where we maintained the right to acquire all of the outstanding stock of X-Ceptor not held by Ligand at June 30, 2002, or to extend the purchase right for 12 months by providing additional funding of $5.0 million. In April 2002, we elected to extend the purchase right and payment was subsequently made in July 2002. In March 2003, Ligand informed X-Ceptor that it would not exercise the purchase right. The use of cash in 2001 reflects the net purchase of short-term investments of $2.5 million and purchases of property and equipment of $2.0 million.

Financing Activities

Financing activities provided cash of $41.0 million in 2003 compared to $152.0 million in 2002 and $35.6 million in 2001. Cash provided by financing activities in 2003 includes net proceeds of $45.0 million from the issuance of common stock through a private placement of 3,483,593 shares of our common stock, $8.8 million from the maturing of restricted investments which was subsequently used to pay interest on our 6% convertible subordinated notes, $4.5 million from the exercise of employee stock options and employee stock purchases, and $1.1 million from equipment financing arrangements. The net proceeds of $45.0 million from the private placement are being used to support our working capital priorities, including qualifying second source manufacturer(s) for AVINZA® and ONTAK®, completion of a second generation formulation of ONTAK®, continuing expansion of commercial support activities for AVINZA® and ONTAK®, and for general corporate purposes. These proceeds were offset by the $15.9 million repurchase and retirement of approximately 2.2 million shares of our outstanding common stock held by an affiliate of Elan in connection with a November 2002 share repurchase agreement completed in February 2003, and payments of $2.5 million on equipment financing arrangements.

Cash provided by financing activities in 2002 includes net proceeds of $150.1 million from the issuance of 6% convertible subordinated notes in November 2002, net proceeds of $65.9 million through a private placement of 4,252,500 shares of our common stock, and $3.8 million from the exercise of employee stock options and employee stock purchases. This was partially offset by the $50.0 million early redemption of convertible subordinated debentures in June 2002. The convertible subordinated notes issued in November 2002 pay interest at a semi-annual rate of 6% and mature on November 16, 2007. Of the net proceeds, $18.0 million was invested in U.S. government securities and placed with a trustee to pay the first four scheduled interest payments. The first two interest payments, totaling $9.1 million, were made in 2003.

Cash provided from financing activities in 2001 includes $22.4 million from a private placement of our common stock, $10.0 million received in connection with the issuance of zero coupon convertible senior notes to Elan and $6.2 million upon the exercise of employee stock options, partially offset by net repayments of $2.0 million on equipment financing arrangements.

Certain of our property and equipment is pledged as collateral under various equipment financing arrangements. As of December 31, 2003, $4.8 million was outstanding under such arrangements with $2.2 million classified as current. Our equipment financing arrangements have terms of three to five years with interest ranging from 4.73% to 10.66%.

We believe our available cash, cash equivalents, short-term investments and existing sources of funding will be sufficient to satisfy our anticipated operating and capital requirements through at least the next 12 months. Our future operating and capital requirements will depend on many factors, including: the effectiveness of our commercial activities; the pace of scientific progress in our research and development programs; the magnitude of these programs; the scope and results of preclinical testing and clinical trials; the time and costs involved in obtaining regulatory approvals; the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims; competing technological and market developments; the ability to establish additional collaborations or changes in existing collaborations; the efforts of our collaborators; and the cost of production. We will also consider additional equipment financing arrangements similar to arrangements currently in place.

Leases and Off-Balance Sheet Arrangements

We lease our office and research facilities under operating leases that generally require us to pay taxes, insurance, maintenance and minimum lease payments. Some of our leases have options to renew. An operating lease for one of our two corporate office buildings is commonly referred to as a "synthetic lease." Prior to the issuance of Financial Accounting Standards Board (or FASB) Interpretation No. 46, as revised (or "FIN 46(R)"), *Consolidation of Variable Interest Entities, an interpretation of Accounting Research Bulletin No. 51*, synthetic leases represented a form of off-balance sheet financing which allowed us to treat the leases as operating leases for accounting purposes and as financing leases for tax purposes. As more fully discussed under "Results of Operations – Cumulative Effect of Accounting Change", we implemented FIN 46(R) effective December 31, 2003 and as a result, consolidated the entity from which we lease the subject office building.

As of December 31, 2003, we are not involved in any off-balance sheet arrangements.

Contractual Obligations

As of December 31, 2003, future minimum payments due under our contractual obligations are as follows (in thousands):

		Payments Due by Period			
	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
Capital lease obligations	$ 4,828	$ 2,171	$ 2,443	$ 214	$ —
Operating lease obligations	20,169	1,795	3,717	3,415	11,242
Loan payable to bank (1)	12,453	295	663	11,495	—
6% Convertible Subordinated Notes	155,250	—	—	155,250	—
Other long-term liabilities (2)	4,151	123	3,476	—	552
Total contractual obligations	$196,851	$ 4,384	$10,299	$170,374	$11,794

(1) In connection with the implementation of FIN 46(R), we consolidated the entity from which we lease one of our corporate office buildings. Amounts consolidated include the entity's debt of $12.5 million and non-controlling interest of $0.6 million which are included in long-term debt and other long-term liabilities, respectively, at December 31, 2003.

(2) Other long-term liabilities include merger contingencies, a liability under a royalty financing arrangement and a non-controlling interest in a VIE. Deferred revenues are excluded because they have no effect on future liquidity.

As of December 31, 2003, we have net open purchase orders (defined as total open purchase orders at year end less any accruals or invoices charged to or amounts paid against such purchase orders) totaling approximately $13.8 million. In the next twelve months, we also plan to spend approximately $4.0 to $5.0 million on capital expenditures.

In November 2002, Ligand and Elan agreed to amend the terms of the AVINZA® license and supply agreement. Under the terms of the amendment, we paid Elan $100.0 million in return for a reduction in Elan's product supply price on sales of AVINZA® by Ligand, rights to sublicense and obtain a co-promotion partner in its territories, and rights to qualify, and purchase AVINZA® from a second manufacturing source. Elan's adjusted royalty and supply price of AVINZA® is approximately 10% of the product's net sales. We also committed to purchase an annual minimum number of batches of AVINZA® from Elan through 2005 estimated at approximately $9.2 million per year.

In March 2004, we entered into a five-year manufacturing and packaging agreement with Cardinal Health PTS, LLC ("Cardinal") under which Cardinal will manufacture AVINZA® at its Winchester, Kentucky facility. Under the terms of the agreement, we committed to certain minimum annual purchases ranging from approximately $1.6 million to $2.3 million. In addition, if regulatory approval for the manufacture of AVINZA® at the Kentucky facility has not been obtained within 30 months of the agreement's effective date, we will pay Cardinal $50,000 per month until such approval is obtained or through the initial term of the contract. The technology transfer and regulatory approval is expected to be complete in 2005 after which commercial product manufacturing will commence.

Critical Accounting Policies

Certain of our policies require the application of management judgment in making estimates and assumptions that affect the amounts reported in the consolidated financial statements and disclosures made in the accompanying notes. Those estimates and assumptions are based on historical experience and various other factors deemed to be applicable and reasonable under the circumstances. The use of judgment in determining such estimates and assumptions is by nature, subject to a degree of uncertainty. Accordingly, actual results could differ from the estimates made. Our critical accounting policies are as follows:

Revenue Recognition and Accounts Receivable

We recognize revenue upon product delivery, net of allowances for returns, rebates, discounts and chargebacks. Revenue associated with the launch of retail products sold with promotional terms that are more favorable to the customer than our standard terms (for example, to facilitate broad retail pharmacy distribution of the product) are deferred. The amount of deferred revenue recognized in subsequent periods is determined based on an estimate, using available market information, of the level of product at wholesalers that will sell through to retail outlets.

Our policy for returns of AVINZA® allows customers to return the product six months prior to and six months after expiration. Our policy for returns of our oncology products allows customers, primarily wholesale distributors, to return the product three months prior to and six months after expiration. The level of actual returns can be influenced by a number of factors including the dating of product when shipped to the customer, the amount of product subsequently shipped by the wholesale distributor to their customers, pricing adjustments, and competing products. In recording adjustments to sales for estimated returns, we consider each of these factors as well as historical return patterns of our products, independent reports of the level of our product in the distribution channel, and industry trends. Actual product returns may differ from our estimates.

We may provide rebates and/or chargebacks to our wholesaler distributors who sell to customers that have a purchasing contract with us, members of group purchasing organizations and managed care organizations who purchase our product through wholesalers and state agencies that administer certain government sponsored health programs. Such rebates and chargebacks are generally determined based on the volume of purchases or by reference to a specific price for a product. We accrue for these liabilities when we record the product sale. The underlying accrual rates and related reserves are regularly reviewed and adjusted, if necessary, based on newly enacted legislation, changes in historical trends, significant new contracts or amendments to existing contracts.

We record allowances for doubtful accounts for estimated losses resulting from our customers' inability to pay amounts owed. If the financial condition of one or more of our customers were to deteriorate, we may be required to record additional allowances or write-off all or a portion of the amount due us.

We recognize collaborative research and development and other revenues as services are performed consistent with the performance requirements of the contract. Non-refundable contract fees for which no further performance obligation exists and where we have no continuing involvement are recognized when payment is received or collection is assured. Revenue from non-refundable contract fees where we have continuing involvement through research and development collaborations or other contractual obligations is recognized ratably over the development period or the period for which we continue to have a performance obligation. Revenue from performance milestones is recognized upon the achievement of the milestones as specified in the respective agreement provided payment is proportionate to the effort expended. Payments received in advance of performance or delivery are recorded as deferred revenue and subsequently recognized over the period of performance or upon delivery.

Inventories

Our inventories are stated at the lower of cost or market value. Cost is determined using the first-in, first-out method. We record reserves for estimated obsolescence to account for unsaleable products including products that are nearing or have reached expiration, and slow-moving inventory.

Impairment of Long-Lived Assets

We review long-lived assets, including acquired technology and product rights and property and equipment, whenever events or circumstances indicate that the carrying amount of the assets may not be fully recoverable. We measure the recoverability of assets to be held and used by comparing the carrying amount of an asset to the future undiscounted net cash flows expected to be generated by the asset. If an asset is considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the asset exceeds its fair value. Fair value of our long-lived assets are determined using the expected cash flows discounted at a rate commensurate with the risk involved. We believe that the future cash flows to be received from our long-lived assets will exceed the assets' carrying value, and accordingly have not recorded any impairment losses through December 31, 2003.

Stock-Based Compensation

We grant stock options to our employees at an exercise price equal to the fair value of the shares at the date of grant and account for these stock option grants in accordance with APB Opinion No. 25, *Accounting for Stock Issued to Employees* ("APB 25") and related interpretations. Under APB 25, when stock options are issued with an exercise price equal to the market price of the underlying stock on the date of grant, no compensation expense is recognized in the statement of operations. Refer to Note 2 of the notes to consolidated financial statements for pro-forma disclosures of the impact on our financial statements of accounting for stock options under the fair-value requirements of SFAS No. 123, *Accounting for Stock-based Compensation*.

New Accounting Pronouncements

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), *Consolidation of Variable Interest Entities, an interpretation of ARB No. 51*, which was subsequently revised prior to implementation in December 2003. The revised Interpretation, known as "FIN 46(R)", requires the consolidation of certain variable interest entities ("VIEs") by the primary beneficiary of the entity if the equity investment at risk is not sufficient to permit the entity to finance its activities without additional subordinated financial support from other parties, or if the equity investors lack the characteristics of a controlling financial interest. We implemented FIN 46(R) on December 31, 2003, and consolidated the entity from which we lease one of our two corporate office buildings as of that date, as we determined that this entity was a VIE, as defined by FIN 46(R), and that we would absorb a majority of its expected losses, if any, as defined by the Interpretation. Please see Note 2 to the consolidated financial statements for a discussion of FIN 46(R) and its impact on Ligand.

In May 2003, the FASB issued SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*. SFAS 150 establishes standards for how an issuer classifies and measures certain financial instruments with the characteristics of both liability and equity, and requires that such financial instruments be reported as liabilities. The provisions of SFAS 150 are effective for instruments entered into or modified after May 31, 2003, and pre-existing instruments after June 15, 2003. The Company does not have any financial instruments covered by the Statement.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

At December 31, 2003 and 2002, our investment portfolio included fixed-income securities of $30.8 million and $12.8 million, respectively. These securities are subject to interest rate risk and will decline in value if interest rates increase. However, due to the short duration of our investment portfolio, an immediate 10% change in interest rates would have no material impact on our financial condition, results of operations or cash flows. Declines in interest rates over time will, however, reduce our interest income while increases in interest rates over time will increase our interest expense.

We do not have a significant level of transactions denominated in currencies other than U.S. dollars and as a result we have very limited foreign currency exchange rate risk. The effect of an immediate 10% change in foreign exchange rates would have no material impact on our financial condition, results of operations or cash flows.

Item 8. Consolidated Financial Statements and Supplementary Data

INDEX TO FINANCIAL STATEMENTS

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Stockholders
Ligand Pharmaceuticals Incorporated

We have audited the accompanying consolidated balance sheets of Ligand Pharmaceuticals Incorporated and subsidiaries as of December 31, 2003 and 2002, and the related consolidated statements of operations, stockholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 2003. 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 auditing standards generally accepted in the United States of America. 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 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, such consolidated financial statements present fairly, in all material respects, the financial position of Ligand Pharmaceuticals Incorporated and subsidiaries as of December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003, in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 2 to the consolidated financial statements, in 2003 the Company changed its method of accounting for variable interest entities to comply with the provisions of Financial Accounting Standards Board Interpretation No. 46 (Revised December 2003), *Consolidation of Variable Interest Entities, an interpretation of ARB No. 51*.

DELOITTE & TOUCHE LLP

San Diego, California
March 10, 2004

LIGAND PHARMACEUTICALS INCORPORATED

CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

ASSETS

	December 31, 2003	December 31, 2002
Current assets:		
Cash and cash equivalents	$ 59,030	$ 42,423
Short-term investments; $9,204 and $8,998 restricted at December 31, 2003 and 2002, respectively	40,004	21,825
Accounts receivable, net	19,051	12,176
Inventories	8,262	4,841
Other current assets	3,810	7,308
Total current assets	130,157	88,573
Restricted investments	1,656	10,646
Property and equipment, net	23,501	9,672
Acquired technology and product rights, net	137,857	148,546
Other assets	8,084	17,992
	$ 301,255	$ 275,429

LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)

Current liabilities:		
Accounts payable	$ 18,691	$ 11,979
Accrued liabilities	30,315	16,606
Current portion of deferred revenue	2,564	4,683
Current portion of equipment financing obligations	2,184	2,087
Current portion of long-term debt	295	—
Total current liabilities	54,049	35,355
Long-term debt	167,408	155,250
Long-term portion of deferred revenue	2,275	3,014
Long-term portion of equipment financing obligations	2,644	4,095
Other long-term liabilites	4,151	3,700
Total liabilities	230,527	201,414
Commitments and contingencies (Notes 5, 7, 9, 10 and 11)		
Stockholders' equity:		
Convertible preferred stock, $0.001 par value; 5,000,000 shares authorized; none issued	—	—
Common stock, $0.001 par value; 130,000,000 shares authorized, 73,264,785 shares and 71,522,156 shares issued at December 31, 2003 and 2002, respectively	73	72
Additional paid-in capital	727,410	693,213
Accumulated other comprehensive loss	(66)	(43)
Accumulated deficit	(655,778)	(618,316)
	71,639	74,926
Treasury stock, at cost; 73,842 shares	(911)	(911)
Total stockholders' equity	70,728	74,015
	$ 301,255	$ 275,429

	$ 301,255	$ 275,429

See accompanying notes.

CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year ended December 31,		
	2003	**2002**	**2001**
Revenues:			
Product sales	$ 114,632	$ 54,522	$ 45,623
Collaborative research and development and other revenues	26,508	42,118	30,718
Total revenues	141,140	96,640	76,341
Operating costs and expenses:			
Cost of products sold	31,618	20,306	13,947
Research and development	67,679	58,807	51,104
Selling, general and administrative	51,661	41,678	34,427
Co-promotion	9,360	—	—
Total operating costs and expenses	160,318	120,791	99,478
Loss from operations	(19,178)	(24,151)	(23,137)
Other income (expense):			
Interest income	783	1,086	2,106
Interest expense	(10,970)	(6,295)	(13,601)
Debt conversion expense	—	(2,015)	(5,043)
Other, net	(6,092)	(1,221)	(3,320)
Total other expense, net	(16,279)	(8,445)	(19,858)
Loss before cumulative effect of a change in accounting principle	(35,457)	(32,596)	(42,995)
Cumulative effect of changing method of accounting for variable interest entity (Note 2)	(2,005)	—	—
Net loss	$ (37,462)	$ (32,596)	$ (42,995)
Basic and diluted per share amounts:			
Loss before cumulative effect of a change in accounting principle	$ (0.50)	$ (0.47)	$ (0.72)
Cumulative effect of changing method of accounting for variable interest entity	(0.03)	—	—
Net loss	$ (0.53)	$ (0.47)	$ (0.72)
Weighted average number of common shares	70,685,234	69,118,976	59,413,270
Pro forma amounts assuming the changed method of accounting for variable interest entity is applied retroactively (Note 2):			
Net loss	$ (35,557)	$ (32,795)	$ (43,290)
Basic and diluted net loss per share	$ (0.50)	$ (0.47)	$ (0.73)

See accompanying notes.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
(in thousands, except share data)

	Common stock		Additional paid-in capital	Deferred warrant expense	Accumulated other comprehensive income (loss)	Accumulated deficit	Treasury stock		Total stockholders' equity (deficit)	Comprehensive income (loss)
	Shares	Amount					Shares	Amount		
Balance at January 1, 2001	56,823,716	$ 57	$ 490,484	$ (2,076)	$ 46	$ (542,725)	(73,842)	$ (911)	$ (55,125)	
Issuance of common stock	3,341,124	3	38,677	—	—	—	—	—	38,680	
Unrealized gains on available-for-sale securities	—	—	—	—	29	—	—	—	29	$ 29
Foreign currency translation adjustments	—	—	—	—	(61)	—	—	—	(61)	(61)
Stock-based compensation	—	—	213	—	—	—	—	—	213	
Amortization of deferred warrant expense	—	—	—	1,384	—	—	—	—	1,384	
Net loss	—	—	—	—	—	(42,995)	—	—	(42,995)	(42,995)
Balance at December 31, 2001	60,164,840	60	529,374	(692)	14	(585,720)	(73,842)	(911)	(57,875)	$ (43,027)
Issuance of common stock	11,357,316	12	163,839	—	—	—	—	—	163,851	
Unrealized losses on available-for-sale securities	—	—	—	—	(63)	—	—	—	(63)	$ (63)
Foreign currency translation adjustments	—	—	—	—	6	—	—	—	6	6
Amortization of deferred warrant expense	—	—	—	692	—	—	—	—	692	
Net loss	—	—	—	—	—	(32,596)	—	—	(32,596)	(32,596)
Balance at December 31, 2002	71,522,156	72	693,213	—	(43)	(618,316)	(73,842)	(911)	74,015	$ (32,653)
Issuance of common stock	3,964,851	3	49,657	—	—	—	—	—	49,660	
Repurchase of common stock	(2,222,222)	(2)	(15,865)	—	—	—	—	—	(15,867)	
Unrealized losses on available-for-sale securities	—	—	—	—	(62)	—	—	—	(62)	$ (62)
Stock-based compensation	—	—	405	—	—	—	—	—	405	
Foreign currency translation adjustments	—	—	—	—	39	—	—	—	39	39
Net loss	—	—	—	—	—	(37,462)	—	—	(37,462)	(37,462)
Balance at December 31, 2003	72,264,785	$ 73	$ 727,410	$ —	$ (66)	$ (655,778)	(73,842)	$ (911)	$ 70,728	$ (37,485)

See accompanying notes.

LIGAND PHARMACEUTICALS INCORPORATED

CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year ended December 31,		
	2003	**2002**	**2001**
Operating activities			
Net loss	$ (37,462)	$ (32,596)	$ (42,995)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Cumulative effect of change in accounting principle (Note 2)	2,005	—	—
Amortization of acquired technology, royalty, and product rights	10,961	4,042	3,317
Depreciation and amortization of property and equipment	2,451	3,191	3,256
Amortization of debt discount and issuance costs	868	3,239	8,988
Write-off of X-Ceptor purchase right	5,000	—	—
Equity in loss of affiliate	974	1,183	930
Debt conversion expense	—	2,015	5,043
Other	614	627	1,597
Changes in operating assets and liabilities:			
Accounts receivable, net (Note 5)	(6,875)	2,442	(6,974)
Inventories	(3,421)	(1,085)	1,895
Other current assets	3,498	(4,976)	178
Accounts payable and accrued liabilities	24,519	2,002	6,128
Deferred revenue	(2,858)	(5,196)	(1,269)
Net cash provided by (used in) operating activities	274	(25,112)	(19,906)
Investing activities			
Purchases of short-term investments	(28,026)	(13,934)	(18,263)
Proceeds from sale of short-term investments	10,053	18,054	15,784
Purchases of property and equipment	(2,783)	(3,161)	(1,974)
Payment for AVINZA® royalty rights	(4,133)	(101,304)	—
Payment to extend X-Ceptor purchase right	—	(5,000)	—
Other	270	100	281
Net cash used in investing activities	(24,619)	(105,245)	(4,172)
Financing activities			
Principal payments on equipment financing obligations	(2,468)	(2,923)	(3,597)
Proceeds from equipment financing arrangements	1,114	2,884	1,552
(Increase) decrease in restricted investments	8,784	(17,274)	(936)
Net proceeds from issuance of common stock and warrants	49,490	70,760	28,576
Repurchase of common stock	(15,867)	—	—
Increase (decrease) in other long-term liabilities	(101)	1,000	—
Repayment of long-term debt	—	(52,500)	—
Net proceeds from issuance of convertible notes	—	150,092	10,000
Net cash provided by financing activities	40,952	152,039	35,595
Net increase in cash and cash equivalents	16,607	21,682	11,517
Cash and cash equivalents at beginning of year	42,423	20,741	9,224
Cash and cash equivalents at end of year	$ 59,030	$ 42,423	$ 20,741
Supplemental disclosure of cash flow information			
Interest paid	$ 9,801	$ 4,118	$ 4,595
Supplemental schedule of non-cash investing and financing activities			
Conversion of zero coupon convertible senior notes to common stock	$ —	$ 86,135	$ —
Issuance of common stock and notes for acquired technology and license rights	—	5,000	5,000
Accrual of obligations for acquired technology and product rights	—	4,133	—
Issuance of common stock for debt conversion incentive	—	2,015	5,043

See accompanying notes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. The Company and its Business

Ligand Pharmaceuticals Incorporated, a Delaware corporation (the "Company" or "Ligand"), discovers, develops and markets new drugs that address critical unmet medical needs of patients in the areas of cancer, pain, men's and women's health or hormone related health issues, skin diseases, osteoporosis, and metabolic, cardiovascular and inflammatory diseases. Ligand's drug discovery and development programs are based on proprietary gene transcription technology, primarily related to Intracellular Receptors and Signal Transducers and Activators of Transcription. The financial statements include the variable interest entity Nexus Equity VI LLC ("Nexus") and the Company's wholly owned subsidiaries, Ligand Pharmaceuticals International, Inc., Glycomed Incorporated ("Glycomed"), Ligand Pharmaceuticals (Canada) Incorporated, and Seragen, Inc. ("Seragen").

The Company markets five products in the United States: AVINZA®, for the relief of chronic, moderate to severe pain; ONTAK®, for the treatment of patients with persistent or recurrent cutaneous T-cell lymphoma ("CTCL"); Targretin® capsules for the treatment of CTCL in patients who are refractory to at least one prior systemic therapy; Targretin® gel, for the topical treatment of cutaneous lesions in patients with early stage CTCL; and Panretin® gel, for the treatment of Kaposi's sarcoma in AIDS patients. Targretin® capsules and Panretin® gel are also marketed in Europe.

The Company's other potential products are in various stages of development. Potential products that are promising at early stages of development may not reach the market for a number of reasons. A significant portion of the Company's revenues to date have been derived from research and development agreements with major pharmaceutical collaborators. Prior to generating revenues from these products, the Company or its collaborators must complete the development of the products in the human health care market. No assurance can be given that: (1) product development efforts will be successful, (2) required regulatory approvals for any indication will be obtained, (3) any products, if introduced, will be capable of being produced in commercial quantities at reasonable costs or, (4) patient and physician acceptance of these products will be achieved. There can be no assurance that Ligand will ever achieve or sustain annual profitability.

The Company faces risks common to companies whose products are in various stages of development. These risks include, among others, the Company's need for additional financing to complete its research and development programs and commercialize its technologies. The Company expects to incur substantial additional research and development expenses, including continued increases in personnel and costs related to preclinical testing and clinical trials. The Company also expects that sales and marketing expenses related to product sales will continue to increase as product revenues continue to grow.

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 technical 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, its wholly owned subsidiaries and Nexus. Nexus is a variable interest entity in which Ligand is the primary beneficiary pursuant to Financial Accounting Standards Board ("FASB") Interpretation No. 46, as revised ("FIN-46R") "*Consolidation of Variable Interest Entities, an interpretation of Accounting Research Bulletin No. 51*". Intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

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

Cash, Cash Equivalents and Short-term Investments

Cash and cash equivalents consist of cash and highly liquid securities with original maturities at the date of acquisition of three months or less. Non-restricted investments with an original maturity of more than three months are considered short-term investments and have been classified by management as available-for-sale. Such investments are carried at fair value, with unrealized gains and losses included as a separate component of stockholders' equity.

Restricted Investments

Restricted investments consist of U.S. government securities required to be held with a trustee to pay semi-annual interest payments due in 2004 on the 6% convertible subordinated notes issued in November 2002 and certificates of deposit held with a financial institution as collateral under equipment financing and third-party service provider arrangements. Restricted investments have been classified by management as held-to-maturity and are accounted for at amortized cost.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash equivalents investments and accounts receivable.

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. The Company has not experienced any significant losses on its cash equivalents, short-term investments or restricted investments.

As more fully discussed in Note 5, the Company sells certain of its accounts receivable under a non-recourse factoring arrangement with a finance company. The Company can transfer funds in any amount up to 75% of the net amount due from the company's trade customers at the time of the sale to the finance company, with the remaining funds available upon collection or write-off of the trade receivable. Receivables due from the finance company represent the Company's most significant concentration of credit risk. As of December 31, 2003, the gross amount due from the finance company was $14.1 million, all of which had been collected as of January 31, 2004.

Inventories

Inventories are stated at the lower of cost or market value. Cost is determined using the first-in-first-out method. Inventories consist of the following (in thousands):

	December 31,	
	2003	**2002**
Raw materials	$ 101	$ 65
Work-in-process	4,261	2,914
Finished goods	3,900	1,862
	$ 8,262	$ 4,841

Property and Equipment

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

	December 31,	
	2003	2002
Land	$ 5,124	$ 2,649
Equipment, building, and leashold improvements	56,563	38,941
Less accumulated depreciation and amortization	(38,186)	(31,918)
	$ 23,501	$ 9,672

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

Land, building, and leasehold improvements at December 31, 2003 included assets of $2.5 million, $6.3 million and $4.7 million, respectively, as a result of the Company's consolidation of Nexus Equity VI LLC as of December 31, 2003 in connection with the Company's adoption of FIN 46(R) (see "Cumulative Effect of Accounting Change" below).

Acquired Technology and Product Rights

Acquired technology and product rights represent payments related to the Company's acquisition of ONTAK® (see Note 8) and license and royalty rights for AVINZA® (see Note 6). Acquired technology and product rights are amortized on a straight-line basis over 15 years, the period estimated to be benefited, and consist of the following (in thousands):

	December 31,	
	2003	2002
AVINZA®	$ 114,437	$ 114,437
ONTAK®	45,312	45,312
Less accumulated amortization	(21,892)	(11,203)
	$ 137,857	$ 148,546

Amortization of acquired technology and product rights for the years ended December 31, 2003, 2002 and 2001 was $10.7 million, $3.8 million and $3.0 million, respectively. Estimated annual amortization for these assets for each of the years in the period from 2004 to 2008 is $10.7 million.

Impairment of Long-Lived Assets

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured as the amount by which the carrying amount of the assets exceeds the fair value of the assets. Fair value for the Company's long-lived assets is determined using the expected cash flows discounted at a rate commensurate with the risk involved. The Company believes the future cash flows to be received from its long-lived assets will exceed the assets' carrying value, and accordingly has not recognized any impairment losses through December 31, 2003.

Fair Value of Financial Instruments

The carrying amount of cash, cash equivalents, short-term investments, accounts receivable, restricted investments, accounts payable and accrued liabilities at December 31, 2003 and 2002 are considered to be a reasonable estimate of their fair values due to the short-term nature of those instruments. As of December 31, 2003 and 2002, the carrying amount of equipment financing obligations represents a reasonable estimate of their fair value due to their interest rates approximating current market rates.

The carrying value and estimated fair value of the Company's long-term debt at December 31, 2003 is as follows (in thousands):

	Carrying Value	Estimated Fair Value
6% Convertible Subordinated Notes (Note 9)	$ 155,250	$ 387,931
Note payable to bank	12,453	13,261

At December 31, 2002, the carrying amount of the 6% Convertible Subordinated Notes represents a reasonable estimate of their fair value based on current market rates.

Estimated fair value amounts have been determined using available market information.

Revenue Recognition

The Company generates revenue from product sales, collaborative research and development arrangements, and other activities such as distribution agreements, royalties, and sales of technology rights. The Company's collaborative arrangements and distribution agreements may include multiple elements within a single contract. Each element of the contract is separately negotiated. Payments received may include non-refundable fees at the inception of the contract for technology rights under collaborative arrangements or product rights under distribution agreements, fully burdened funding for services performed during the research phase of collaborative arrangements, milestone payments for specific achievements designated in the collaborative or distribution agreements, royalties on sales of products resulting from collaborative arrangements, and payments for the supply of products under distribution agreements.

Revenues from product sales are recognized upon delivery, net of allowances for returns, rebates, discounts and chargebacks. The Company is obligated to accept from customers the return of pharmaceuticals that have reached their expiration date. Revenue associated with the launch of retail products sold with promotional terms that are more favorable to the customer than the Company's standard terms (for example, to facilitate broad retail pharmacy distribution of the product) is deferred. The amount of deferred revenue recognized in subsequent periods is determined based on an estimate, using available market information, of the level of product at wholesalers that will sell through to retail outlets.

Collaborative research and development and other revenues are recognized as services are performed consistent with the performance requirements of the contract. Non-refundable contract fees for which no further performance obligation exists and where the Company has no continuing involvement are recognized upon the earlier of when payment is received or collection is assured. Revenue from non-refundable contract fees where Ligand has continuing involvement through research and development collaborations or other contractual obligations is recognized ratably over the development period or the period for which Ligand continues to have a performance obligation. Revenue from performance milestones is recognized upon the achievement of the milestones as specified in the respective agreement provided payment is proportionate to the effort expended. Payments received in advance of performance or delivery are recorded as deferred revenue and subsequently recognized over the period of performance or upon delivery.

The composition of product sales by product is as follows (in thousands):

	Year ended December 31,		
	2003	2002	2001
AVINZA®	$ 66,200	$ 12,174	$ —
ONTAK®	34,343	26,642	24,298
Targretin® capsules	10,077	12,188	14,571
Other	4,012	3,518	6,754
	$ 114,632	$ 54,522	$ 45,623

The composition of collaborative research and development and other revenues is as follows (in thousands):

	Year ended December 31,		
	2003	2002	2001
Collaborative research and development	$ 13,694	$ 23,328	$ 25,725
Royalty sale	12,500	18,275	—
Distribution agreements	311	311	4,787
Other	3	204	206
	$ 26,508	$ 42,118	$ 30,718

For the year ended December 31, 2003, revenues from sales to three wholesale distributors each accounted for more than 10% of total revenues and in the aggregate, represented 67% of total revenues. For the years ended December 31, 2002 and 2001, there were five and three customers, respectively, that individually accounted for 10% or more of total revenues and in the aggregate represented 85% and 39% of total revenues, respectively.

Cumulative Effect of Accounting Change

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), *Consolidation of Variable Interest Entities, an interpretation of ARB No. 51*, which was subsequently revised in December 2003 ("FIN 46(R)"). FIN 46(R) requires the consolidation of certain variable interest entities ("VIEs") by the primary beneficiary of the entity if the equity investment at risk is not sufficient to permit the entity to finance its activities without additional subordinated financial support from other parties, or if the equity investors lack the characteristics of a controlling financial interest.

Ligand implemented FIN 46(R) effective December 31, 2003, and consolidated the entity from which it leases one of its two corporate headquarter buildings as of that date, as it determined that the entity is a VIE, as defined by FIN 46(R), and that the Company would absorb a majority of its expected losses, if any, as defined by the Interpretation. Accordingly, Ligand consolidated assets, which consist of land, the building, and related tenant improvements, with a total carrying value of $13.5 million, net of accumulated depreciation. Additionally, the Company consolidated the entity's debt of $12.5 million and non-controlling interest of $0.6 million. All such assets and liabilities are included in the accompanying consolidated balance sheet at December 31, 2003. In connection with the implementation of FIN 46(R), the Company also recorded a $2.0 million charge ($0.03 per share) as a cumulative effect of the accounting change on December 31, 2003. Due to the structure of the operating agreement for the entity, the entity's depreciation and interest expense are not allocated to the non-controlling interest. See also Note 11, "Commitments and Contingencies," for a discussion of all the Company's leases.

Costs and Expenses

Cost of products sold includes manufacturing costs, amortization of acquired technology, and royalty expenses associated with the Company's commercial products. Research and development costs are expensed as incurred. Research and development expenses were $67.7 million, $58.8 million and $51.1 million in 2003, 2002 and 2001 respectively, of which approximately 86%, 75% and 70% were sponsored by Ligand, and the remainder of which was funded pursuant to collaborative research and development arrangements.

Loss Per Share

Net loss per share is computed using the weighted average number of common shares outstanding. Basic and diluted net loss per share amounts are equivalent for the periods presented as the inclusion of potential common shares in the number of shares used for the diluted computation would be anti-dilutive. Potential common shares, the shares that would be issued upon the conversion of convertible notes and the exercise of outstanding warrants and stock options, were 32.3 million, 31.9 million and 14.8 million at December 31, 2003, 2002 and 2001, respectively.

Accounting for Stock-Based Compensation

The Company accounts for stock-based compensation in accordance with Accounting Principles Board Opinion ("APB") No. 25, *Accounting for Stock Issued to Employees*, and FASB Interpretation No. 44, *Accounting for Certain Transactions Involving Stock Compensation*.

Pro forma information regarding net loss and loss per share is required by SFAS No. 123, *Accounting for Stock-based Compensation*, and has been determined as if the Company had accounted for its employee stock options under the fair value method of that Statement. The estimated weighted average fair value at grant date for the options granted during 2003, 2002 and 2001 was $6.41, $7.92 and $7.48 per option, respectively. The fair value for these options was estimated at the dates of grant using the Black-Scholes option valuation model with the following weighted-average assumptions for 2003, 2002 and 2001:

	2003	2002	2001
Risk free interest rates	3.25%	2.80%	4.30%
Dividend yields	—	—	—
Volatility	74%	77%	70%
Weighted average expected life	5 years	5 years	5 years

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions including the expected stock price volatility. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the options' vesting period. The Company's pro forma information is as follows (in thousands, except for net loss per share information):

	Year ended December 31,		
	2003	2002	2001
Net loss as reported	$ (37,462)	$ (32,596)	$ (42,995)
Stock-based employee compensation expense included in reported net loss	405	—	—
Less total stock-based compensation expense determined under fair value based method for all awards	(6,797)	(6,434)	(5,571)
Net loss pro forma	$ (43,854)	$ (39,030)	$ (48,566)
Net loss per share pro forma	$ (0.62)	$ (0.56)	$ (0.82)

Foreign Currency Translation

Gains and losses resulting from foreign currency translation are accumulated as a separate component of stockholders' equity as accumulated other comprehensive income (loss). Gains and losses resulting from foreign currency transactions are included in the consolidated statements of operations.

Segment Reporting

The Company currently operates in a single operating segment. The Company generates revenue from various sources that result primarily from its underlying research and development activities. In addition, financial results are prepared and reviewed by management as a single operating segment. The Company continually evaluates the benefits of operating in distinct segments and will report accordingly when such distinction is made.

Recent Accounting Pronouncements

In January 2003, the FASB issued FASB Interpretation No. 46 ("FIN 46"), *Consolidation of Variable Interest Entities, an interpretation of ARB No. 51*, which was subsequently revised prior to implementation in December 2003. The revised Interpretation, known as "FIN 46(R)", requires the consolidation of certain variable interest entities by the primary beneficiary of the entity if the equity investment at risk is not sufficient to permit the entity to finance its activities without additional subordinated financial support from other parties, or if the equity investors lack the characteristics of a controlling financial interest. Ligand adopted FIN 46(R) effective December 31, 2003. See "Cumulative Effect of Accounting Change" above.

In May 2003, the FASB issued SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*. SFAS 150 establishes standards for how an issuer classifies and measures certain financial instruments with the characteristics of both liability and equity, and requires that such financial instruments be reported as liabilities. The provisions of SFAS 150 are effective for instruments entered into or modified after May 31, 2003, and pre-existing instruments after June 15, 2003. The Company does not have any financial instruments covered by the Statement.

Reclassifications

Certain reclassifications have been made to amounts included in the prior years' financial statements to conform to the presentation for the year ended December 31, 2003.

3. Investments

The following table summarizes the various investment categories at December 31, 2003 and 2002 (in thousands):

	Cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value
December 31, 2003				
U.S. government securities	$ 14,265	$ 8	$ (1)	$ 14,272
Corporate obligations	16,518	11	(1)	16,528
	30,783	19	(2)	30,800
U.S. government securities - restricted	9,204	—	—	9,204
Certificates of deposit - restricted	1,656	—	—	1,656
	$ 41,643	$ 19	$ (2)	$ 41,660
December 31, 2002				
U.S. government securities	$ 4,547	$ 25	$ (2)	$ 4,570
Corporate obligations	8,202	55	—	8,257
	12,749	80	(2)	12,827
U.S. government securities - restricted	18,014	—	—	18,014
Certificates of deposit - restricted	1,630	—	—	1,630
	$ 32,393	$ 80	$ (2)	$ 32,471

There were no material realized gains or losses on sales of available-for-sale securities for the years ended December 31, 2003, 2002 and 2001.

The amortized cost and estimated fair value of investments at December 31, 2003, by contractual maturity, are shown below (in thousands). Expected maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations without prepayment penalties.

	December 31, 2003	
	Cost	Estimated fair value
Due in one year or less	$ 37,647	$ 37,653
Due after one year through three years	3,996	4,007
	$ 41,643	$ 41,660

4. Other Balance Sheet Details

Accounts receivable consist of the following (in thousands):

	December 31,	
	2003	2002
Due from finance company	$ 14,106	$ —
Trade accounts receivable	6,060	12,582
Less allowances	(1,115)	(406)
	$ 19,051	$ 12,176

Other assets consist of the following (in thousands):

	December 31,	
	2003	2002
Debt issue costs, net	$ 4,205	$ 5,073
Prepaid royalty buyout, net	2,856	3,128
Payment to extend X-Ceptor purchase right (Note 14)	—	5,000
Deferred rent (Note 11)	—	2,966
Equity investment in X-Ceptor	—	1,265
Other	1,023	560
	$ 8,084	$ 17,992

Accrued liabilities consist of the following (in thousands):

	December 31,	
	2003	2002
Allowances for product returns, sales incentives, rebates and chargebacks (1)	$ 10,347	$ 4,820
Amount due co-promote partner (Note 7)	9,360	—
Compensation	3,888	2,338
Royalties	3,833	2,505
Interest	1,138	880
AVINZA® royalty rights	—	4,133
Other	1,749	1,930
	$ 30,315	$ 16,606

(1) Prior to 2003, "Allowances for product returns, sales incentives, rebates and chargebacks" was netted against "Accounts receivable" in the Company's consolidated balance sheets. The 2002 balances have been reclassified to conform with the

current year presentation.

5. Accounts Receivable Factoring Arrangement

During the second quarter of 2003, the Company entered into a one-year accounts receivable factoring arrangement under which eligible accounts receivable are sold without recourse to a finance company. Commissions on factored receivables are paid to the finance company based on the gross receivables sold, subject to a minimum annual commission. Additionally, the Company pays interest on the net outstanding balance of the uncollected factored accounts receivable at an interest rate equal to the JPMorgan Chase Bank prime rate. The Company continues to service the factored receivables. The expenses relating to the Company's servicing of the receivables are not material to the consolidated financial statements. The Company accounts for the sale of receivables under this arrangement in accordance with SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishment of Liabilities*.

As of December 31, 2003, the Company had received cash of $27.5 million under the factoring arrangement for the sale of trade receivables that were outstanding as of that date. The gross amount due from the finance company at December 31, 2003 was $14.1 million.

6. Strategic Alliance with Elan Corporation

The Company and Elan Corporation, plc ("Elan") have been parties to a number of agreements that provided financing to the Company and a license to Elan's product AVINZA®. Significant provisions are as follows:

Financing Arrangement

In 1998, Elan purchased approximately $20.0 million of the Company's common stock and $40.0 million in issue price of zero coupon convertible senior notes, due 2008, (the "Notes"), convertible into the Company's common stock at $14.00 per share. In 1999, the Company issued $40.0 million of Notes to Elan, convertible at $14.00 per share, and $20.0 million of Notes, convertible at $9.15 per share. In 1999, Elan subsequently converted Notes of $20.0 million plus accrued interest into 2,244,460 shares of the Company's common stock. In 2000, Elan converted an additional $20.0 million in Notes plus accrued interest into 1,501,543 shares of the Company's common stock. On December 29, 2000, the Company issued the final $10.0 million of Notes to Elan provided for under the terms of the agreement, convertible at $14.16 per share.

In December 2001, Elan agreed to convert Notes of $50.0 million plus accrued interest of $11.8 million into 4,406,010 shares of Ligand common stock. The conversion occurred in February 2002 subsequent to regulatory approval. In connection with the conversion, Ligand provided Elan with a $5.0 million conversion incentive through the issuance in December 2001 of 274,843 shares of the Company's common stock.

In March 2002, Elan agreed to convert the remaining $20.0 million in issue price zero coupon convertible senior notes and $4.7 million of accrued interest into 1,766,916 shares of Ligand common stock. In connection with the conversion, Ligand provided Elan with a $2.0 million conversion incentive through the issuance of 102,151 shares of common stock.

The financing arrangement with Elan contained certain rights of first refusal upon the subsequent issuance of securities. In accordance with such rights and as a result of other equity issuances by the Company, the Company issued 91,406 warrants to Elan in 1999 and sold 416,667 shares of common stock to Elan in 2001 for $5.0 million. Elan subsequently exercised the warrants in connection with the March 2002 conversion of zero coupon convertible senior notes.

License Agreement

In 1998, Elan also agreed to exclusively license to the Company in the United States and Canada its proprietary product AVINZA®, a form of morphine for chronic, moderate-to-severe pain. For the rights to AVINZA® and for reaching certain milestones, the Company paid Elan a total of $19.0 million through the issuance of 1,597,365 shares of the Company's common stock and $10.0 million from the issuance of Notes.

In November 2002, the Company and Elan agreed to amend the terms of the AVINZA® license and supply agreement. Under the terms of the amendment, Ligand paid Elan $100.0 million in return for a reduction in Elan's product supply price on sales of AVINZA® by Ligand, rights to sublicense and obtain a co-promotion partner in its territories, and rights to qualify and purchase AVINZA® from a second manufacturing source. Elan's adjusted royalty and supply price of AVINZA® is approximately 10% of the product's net sales, compared to approximately 30-35% in the prior agreement. Ligand also committed to purchase an annual minimum number of batches of AVINZA® from Elan through 2005 estimated at approximately $9.2 million per year. In addition, Elan agreed to forego its option to co-promote AVINZA® in the United States and Canada. The amount paid to Elan and related transaction costs were capitalized as acquired product rights.

The total amount paid to Elan for AVINZA® purchases and royalties in 2003 and 2002 was $6.3 and $5.4 million, respectively.

Repurchase of Elan Shares

In connection with the November 2002 restructuring of the AVINZA® license agreement, the Company also agreed to repurchase approximately 2.2 million Ligand common shares held by an affiliate of Elan for $9.00 a share. The difference between the $9.00 purchase price and the public price of the shares at the time the agreement was signed, approximately $4.1 million, was treated as an additional component of the price paid for the reduced AVINZA® royalty rate under the restructured license and supply agreement. The shares were purchased and retired in February 2003.

In addition, Elan agreed to a 6-month lock-up period on 11.8 million of its remaining 12.2 million Ligand shares. Ligand agreed to changes to Elan's registration rights to facilitate an orderly distribution of its shares after the lock-up period. In May and July 2003, Elan disclosed that it had sold the remaining 12.2 million Ligand shares to unrelated third parties. In July 2003, Ligand filed a resale registration statement on behalf of the unrelated third parties, registering the resale of the shares they had acquired from Elan.

Distribution Agreement

In February 2001, the Company and Elan entered into a distribution agreement providing for the distribution of certain of the Company's products in various European and other international territories for a term of ten years. The Company received a $1.5 million up-front fee at contract inception, and $4.5 million in milestone payments upon the subsequent submission of European Union ("EU") applications for Marketing Authorization Approval ("MAA") and grants of MAAs for certain of the products subject to the distribution agreement. The Company may receive additional payments as products are submitted and approved in the territories. In February 2004, Elan and Medeus Pharma Limited ("Medeus") announced that Medeus had acquired Elan's European sales and marketing business, and that the acquisition included the marketing and distribution rights to certain of the Company's products in Europe.

7. AVINZA®

Approval and Product Launch

In March 2002, the FDA approved AVINZA® for the relief of chronic, moderate to severe pain. In connection with the subsequent launch of AVINZA® in June 2002, the Company shipped $11.5 million of product to wholesaler customers. The product was sold under certain promotional launch programs that provided customers with discounts off wholesale price and 90-day payment terms instead of the Company's standard 30-day terms. The promotions were implemented to ensure the availability of a sufficient retail supply of AVINZA® in those territories where Ligand sales representatives were initially promoting the product. Of the amount shipped, $4.1 million was recognized as revenue based on the Company's policy of deferring recognition of revenue associated with promotional product terms for a new product launch requiring broad retail pharmacy distribution. As of December 31, 2002, $750,000 remained deferred which was subsequently recognized as revenue in 2003.

Co-promotion

In February 2003, Ligand and Organon Pharmaceuticals USA Inc. ("Organon") announced that they had entered into an agreement for the co-promotion of AVINZA®. Under the terms of the agreement, Organon committed to a specified minimum number of primary and secondary product calls delivered to certain high prescribing physicians and hospitals beginning in March 2003. In exchange, Ligand pays Organon a percentage of AVINZA® net sales based on the following schedule:

Annual Net Sales of AVINZA®	% of Incremental Net Sales Paid to Organon by Ligand
$0-35 million (2003 only)	0% (2003 only)
$0-150 million	30%
$150-300 million	40%
$300-425 million	50%
>$425 million	45%

In the fourth quarter of 2003, annual net sales of AVINZA® exceeded $35.0 million. Consequently, Ligand recognized selling, general, and administrative expense of $9.4 million.

Additionally, Ligand and Organon agreed to equally share all costs for AVINZA® advertising and promotion, medical affairs and clinical trials. Each company is responsible for its own sales force costs and other expenses. The initial term of the co-promotion agreement is ten years. Organon has the option any time prior to the end of year five to extend the agreement to 2017 by making a $75.0 million payment to Ligand.

8. Seragen

In 1998, the Company completed a merger with Seragen. Under the terms of the merger agreement, Ligand paid merger consideration of $31.7 million at closing and $34.1 million in 1999 subsequent to final FDA approval of ONTAK®. Pending resolution of final contingencies and in accordance with the terms of the merger agreement, the Company has withheld $2.7 million from payments made to certain Seragen stakeholders.

In connection with the Seragen merger, the Company acquired substantially all the assets of Marathon Biopharmaceuticals, LLC ("Marathon"), which provided manufacturing services to Seragen. In 2000, Ligand sold the contract manufacturing assets of Marathon and in connection with the sale, entered into a three-year supply and development agreement with the acquirer for the manufacture of ONTAK®. Purchases under the agreement amounted to $4.6 million, $1.8 million and $2.1 million in 2003, 2002 and 2001, respectively. In 2003, the Company entered into a new five-year agreement with Cambrex Bio Science Hopkinton, Inc., the successor of Marathon, for the continued manufacturing of ONTAK®.

9. Long-term Debt

Long-term debt consists of the following (in thousands):

	December 31,	
	2003	2002
6% Convertible Subordinated Notes	$ 155,250	$ 155,250
Note payable to bank	12,453	—
	167,703	155,250
Less current portion	(295)	—
Long-term debt	$ 167,408	$ 155,250

6% Convertible Subordinated Notes

In November 2002, the Company completed a private offering of Convertible Subordinated Notes in the aggregate principal amount of $155.3 million, receiving net proceeds of $150.1 million. The notes pay interest semi-annually at a rate of 6% and mature on November 16, 2007. Holders may convert the notes into shares of common stock at any time prior to maturity at a conversion rate of 161.9905 shares per $1,000 principal amount of notes. Of the net proceeds, $18.0 million was invested in U.S. government securities and placed with a trustee to pay the first four scheduled interest payments. The first two of these interest payments were made in 2003 for $9.1 million. On or after November 22, 2005, the Company has the option to redeem the notes, in whole or in part, at specified redemption prices ranging from 102.4% to 101.2% of the outstanding principal amount plus accrued and unpaid interest. Upon a change in control, holders of the notes can require the Company to repurchase the notes.

Note Payable to Bank

In December 2003, the Company implemented the provisions of FIN 46(R), *Consolidation of Variable Interest Entities, an interpretation of ARB No. 51* (see Note 2, "Significant Accounting Policies – Cumulative Effect of Accounting Change"). As a result of implementing FIN 46(R), the Company's consolidated balance sheet as of December 31, 2003 reflects additional debt of $12.5 million. This debt represents a note payable to a financial institution, carrying an interest rate of 7.15%, and requiring periodic payments of principal and interest through July 2008. The note is secured by a lien on one of the Company's buildings (including the land and tenant improvements associated with that building) with a net book value of $13.5 million at December 31, 2003.

10. Royalty Agreements

The Company has royalty obligations under various technology license agreements. During 2003, royalties to individual licensors were accrued ranging from 0.5% to 20% of net sales. Royalty expense for the years ended December 31, 2003, 2002 and 2001 was $13.1 million, $8.8 million and $7.8 million, respectively.

In March 2002, Ligand entered into an agreement with Royalty Pharma AG ("Royalty Pharma"), to sell a portion of the Company's rights to future royalties from certain collaborative partners' net sales of three selective estrogen receptor modulator (SERM) products now in Phase III clinical development. The agreement provided for the initial sale of rights to 0.25% of such product net sales for $6.0 million and options to acquire up to an additional 1.00% of net sales for $50.0 million. The $6.0 million was recognized as revenue in the first quarter of 2002. In July and December of 2002, the agreement was amended to replace the existing options with new options providing for the rights to acquire an additional 1.3125% of net sales for $63.8 million. Royalty Pharma exercised each of the three available 2002 options, as amended, acquiring rights to 0.4375% of net sales for $12.3 million. The Company recognizes revenue for options under the agreement when the option is exercised.

In October 2003, the Company and Royalty Pharma amended their existing royalty agreement, and Royalty Pharma exercised an option for $12.5 million in exchange for 0.7% of potential future sales of three selective estrogen receptor modulator (SERM) products for 10 years. Under the revised agreement, Royalty Pharma has three additional options to purchase up to 1.3% of such product net sales for $39.0 million. Additionally, Royalty Pharma agreed to pay cumulative milestones of up to $2.5 million upon the launches of the SERM products (provided they are approved by September 30, 2005). The first option, structured to expire in the fourth quarter of 2003, expired unexercised. The second and third options become exercisable upon NDA acceptance and approval milestones or as specified dates are reached in 2004 and 2005. For the options that expire in 2004 and 2005, the royalty rates owed to Royalty Pharma will be reduced if certain events occur and if sales of SERM products exceed certain thresholds. In addition, if Phase III data for at least one of the SERM products have not been published by March 31, 2004, these options will have no fixed expiration date. Instead, they must be exercised within 30 days of the applicable development milestone. As of December 31, 2003, Royalty Pharma had acquired cumulative rights to 1.3875% of such products' royalties and holds options to acquire an additional 0.8%.

In December 2002, Ligand also entered into an agreement to sell Royalty Pharma a 1% interest in net sales of Targretin® capsules for $1.0 million starting in January 2003. The $1.0 million is being accounted for as a financing arrangement in accordance with Emerging Issues Task Force ("EITF") Issue No. 88-18, Sales of Future Revenues.

10. Commitments and Contingencies

Equipment Financing

The Company has entered into capital lease and equipment note payable agreements that require monthly payments through December 2007 including interest ranging from 4.73% to 10.66%. The carrying value of equipment under these agreements at December 31, 2003 and 2002 was $6.5 million and $7.9 million, respectively. At December 31, 2003 and 2002, related accumulated amortization was $3.3 million and $4.1 million, respectively. The underlying equipment is used as collateral under the equipment notes payable.

Certain of the equipment financing agreements contain provisions that require the Company to fund standby letters of credit equal to the balance financed under the arrangement in the event unrestricted cash levels fall below specified amounts.

Property Leases

The Company leases one of its corporate headquarter buildings from a limited liability company (the "LLC") in which Ligand holds a 1% ownership interest. No Ligand officer or employee has any financial interest with regard to this lease arrangement or with the LLC used in this arrangement. The lease agreement provides for increases in annual rent of 4% and terminates in 2014. In addition, Ligand has the option to either purchase the portion of the LLC that it does not currently own, purchase the property from the lessor at a purchase price equal to the outstanding debt on the property plus a calculated return on the investment made by the LLC's other shareholder, sell the property to a third party, or renew the lease arrangement.

This specific type of operating lease is commonly referred to as a "synthetic lease". Prior to the issuance of FIN 46(R), synthetic leases represented a form of off-balance sheet financing under which they were treated as an operating lease for financial reporting purposes and as a financing lease for tax purposes. Under FIN 46(R), a synthetic lease is evaluated to determine i) if it qualifies as a VIE and if so, ii) the primary beneficiary required to consolidate the VIE.

Under FIN 46(R), Ligand determined that the LLC qualified as a VIE, and that Ligand is the primary beneficiary of the VIE, as the Company would absorb the majority of the entity's expected losses, if any, as defined by the Interpretation. In accordance with FIN 46(R), the Company has consolidated the LLC as of December 31, 2003. See Note 2, "Significant Accounting Policies – Cumulative Effect of Accounting Change" section for information on the impact of the Company's adoption of FIN 46(R).

The maximum exposure to loss on the synthetic lease is indemnification for various losses, costs and expenses incurred by the LLC as a result of Ligand's use of the premises or the environmental condition of the property to the extent it exceeds the limit of insurance held by the Company. Any such additional losses, costs or expenses are contingent upon the existence of certain conditions, and therefore, not quantifiable at this time. In December 2003, the Company informed the other shareholder of the LLC that it was exercising its right to acquire the portion of the LLC that it does not currently own. The transaction, as presently structured, calls for Ligand's assumption of the existing mortgage against the property and a payment to the LLC's other shareholder of approximately $0.6 million. The purchase is expected to close in the first quarter of 2004.

The Company leases its other office and research facilities under operating lease arrangements with varying terms through July 2015. The agreements provide for increases in annual rents based on changes in the Consumer Price Index or fixed percentage increases ranging from 3% to 7%.

Total rent expense under all office leases for 2003, 2002 and 2001 was $3.4 million, $3.3 million and $3.4 million, respectively.

At December 31, 2003 annual minimum payments due under the Company's office and equipment lease obligations are as follows (in thousands):

	Obligations under capital leases and equipment notes payable	Operating leases
2004	$ 2,416	$ 1,795
2005	1,706	1,844
2006	889	1,873
2007	222	1,707
2008	—	1,708
Thereafter	—	11,242
Total minimum lease payments	5,233	$ 20,169
Less amounts representing interest	(405)	
Present value of minimum lease payments	4,828	
Less current portion	(2,184)	
	$ 2,644	

Litigation

On December 11, 2001, a lawsuit was filed in the United States District Court for the District of Massachusetts against Ligand by the Trustees of Boston University and other former stakeholders of Seragen. The suit was subsequently transferred to federal district court in Delaware. The complaint alleges breach of contract, breach of the implied covenants of good faith and fair dealing and unfair and deceptive trade practices based on, among other things, allegations that Ligand wrongfully withheld approximately $2.1 million in consideration due the plaintiffs under the Seragen acquisition agreement. This amount had been previously accrued for in the Company's financial statements. The complaint seeks payment of the withheld consideration and treble damages. Ligand filed a motion to dismiss the unfair and deceptive trade practices claim. The court subsequently granted Ligand's motion to dismiss the unfair and deceptive trade practices claim (i.e. the treble damages claim), granted Boston University's motion for summary judgment, and in November 2003 entered judgment for Boston University. In January 2004, the district court issued an amended judgment awarding interest of approximately $739,000 to the plaintiffs in addition to the $2.1 million withheld. We have appealed the judgment in this case as well as the award of interest and the calculation of damages.

In addition, the Company is subject to various lawsuits and claims with respect to matters arising out of the normal course of business. Due to the uncertainty of the ultimate outcome of these matters, the impact on future financial results is not subject to reasonable estimates.

12. Stockholders' Equity

Stock Issuance

In September 2003, the Company raised net proceeds of $45.0 million in a private placement of 3,483,593 shares of its common stock.

In April 2002, the Company raised net proceeds of $65.9 million in a private placement of 4,252,500 shares of its common stock.

Repurchase of Elan Shares

As more fully described in Note 6, in February 2003, Ligand purchased and retired approximately 2.2 million Ligand common shares held by an affiliate of Elan.

Warrants

At December 31, 2003, there were outstanding warrants to purchase 950,000 shares of the Company's common stock. The warrants have an exercise price of $10.00 per share and expire on October 6, 2006.

Stock Plans

In May 2002, the Company's stockholders approved the 2002 Stock Option/Stock Issuance Plan (the "2002 Option Plan") which is the successor to the Company's 1992 Stock Option/Stock Issuance Plan (the "1992 Plan"). The 2002 Option Plan provides for the issuance of options to purchase 1,305,000 shares of the Company's common stock including options for approximately 550,000 shares of common stock that remained available for issuance under the 1992 Plan. At the time the 2002 Option Plan became effective, there were approximately 6,855,000 shares reserved for issuance including shares that had been reserved for and were subject to outstanding options under the 1992 Plan. The options granted generally have 10-year terms and vest over four years of continued employment. The Company also has an employee stock purchase plan (the 2002 Employee Stock Purchase Plan) that provides for the sale of up to 540,000 shares of the Company's common stock to employees.

In June 2003, the Company's stockholders approved an amendment to the 2002 Option Plan increasing the authorized number of shares of common stock available for issuance by 750,000 shares. Additionally, the Company's stockholders approved an amendment to the 2002 Employee Stock Purchase Plan increasing the authorized number of shares of common stock available for purchase by 400,000 shares.

Following is a summary of the Company's stock option plan activity and related information:

	Shares	Weighted average exercise price
Balance at January 1, 2001	5,664,549	$ 11.11
Granted	1,010,299	12.14
Exercised	(573,531)	10.11
Canceled	(702,951)	12.22
Balance at December 31, 2001	5,398,366	11.27
Granted	1,345,072	12.34
Exercised	(346,187)	9.20
Canceled	(737,006)	11.34
Balance at December 31, 2002	5,660,245	11.64
Granted	1,414,228	10.20
Exercised	(345,374)	10.31
Canceled	(565,577)	12.88
Balance at December 31, 2003	6,163,522	$ 11.27

Following is a further breakdown of the options outstanding as of December 31, 2003:

	Options outstanding			Options exercisable	
Range of exercise prices	Options outstanding	Weighted average remaining life in years	Weighted average exercise price	Number exercisable	Weighted average exercise price
$ 1.82 - $ 9.25.....	1,813,550	7.12	$ 7.62	831,877	$ 7.36
9.31 - 11.25.....	1,293,071	5.59	10.23	1,075,386	10.19
11.26 - 13.01.....	1,267,231	5.03	12.18	1,065,302	12.13
13.02 - 16.38.....	1,314,089	6.64	14.48	793,292	14.38
16.40 - 16.95.....	475,581	8.25	16.75	248,152	16.71
	6,163,522	6.35	$ 11.27	4,014,009	$ 11.35

At December 31, 2003, 834,883 and 305,850 shares were available under the 2002 Option Plan and the 2002 Employee Stock Purchase Plan, respectively, for future grants of stock options or sale of stock.

Shareholder Rights Plan

The Company has a preferred shareholder 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 Company's 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 become exercisable following the tenth day after a person or group announces an acquisition of 10% 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 10% 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 10% or more of the common stock and September 13, 2006. In February 2004 the Board of Directors approved an amendment to the Plan to remove a carve-out which had allowed Elan to own up to 25% of the Company's common stock without triggering the Rights.

13. Collaborative Research and Development Agreements

The Company is party to various research and development collaborations with large pharmaceutical companies including TAP Pharmaceutical Products Inc., Organon Company, Pfizer, Inc., Eli Lilly and Company, GlaxoSmithKline, Wyeth (formerly American Home Products), and Abbott Laboratories. These arrangements generally provide for the license of certain technologies and a collaborative research period ranging from one to five years. Drugs resulting from these collaborations are then developed, manufactured and marketed by the corporate partners. The arrangements may provide for the Company to receive revenue from the transfer of technology rights at contract inception, collaborative research revenue during the research phase, milestone revenue for compounds moving through clinical development, and royalty revenue from the sale of drugs developed through the collaborative efforts.

The following are details regarding significant collaborative arrangements that were in the research phase during the years ended December 31, 2003, 2002 and 2001.

TAP

In June 2001, the Company entered into a research and development collaboration with TAP Pharmaceutical Products Inc. ("TAP") to focus on the discovery and development of selective androgen receptor modulators ("SARMs"). SARMs contribute to the prevention and treatment of certain diseases, including hypogonadism, male and female sexual dysfunction, male and female osteoporosis, frailty, and male hormone replacement therapy. The initial research term concludes in June 2004. TAP may extend the term for up to three additional years. In December 2003, the companies announced that the collaboration had been extended through June 2005. Collaborative research revenues recognized under the agreement for the years ended December 31, 2003, 2002 and 2001 were $5.2 million, $6.3 million and $4.3 million, respectively.

Bristol-Myers Squibb

In May 2000, the Company entered into a research and development collaboration with Bristol-Myers Squibb to focus on the discovery, design and development of orally active compounds that selectively modulate the mineralocorticoid receptor. In June 2001, Bristol-Myers Squibb terminated this collaboration. Collaborative research revenues recognized under the agreement for the year ended December 31, 2001 were $3.7 million.

Organon

In February 2000, the Company entered into a research and development collaboration with Organon to focus on small molecule compounds with potential effects for the treatment and prevention of gynecological diseases mediated through the progesterone receptor. The research phase was completed in February 2002. Collaborative research revenues recognized under the agreement for the years ended December 31, 2002 and 2001 were $330,000 and $3.1 million, respectively.

Eli Lilly & Company

In November 1997, the Company entered into a research and development collaboration with Lilly for the discovery and development of products based on Ligand's Intracellular Receptor technology. Collaborative research revenues including achieved milestones recognized under the agreement for the years ended December 31, 2003, 2002 and 2001 were $6.8 million, $14.1 million and $13.7 million, respectively. The initial research term concluded in November 2002. In April 2002, Lilly and Ligand announced the companies would extend the collaboration until November of 2003. In May 2003, the companies announced the second extension of the collaboration until November 2004.

GlaxoSmithKline

In February 1995, the Company entered into a research and development collaboration with SmithKline Beecham Corporation (now GlaxoSmithKline) to discover and characterize small molecule drugs to control hematopoiesis for the treatment of a variety of blood cell deficiencies. The research phase was completed in February 2001. Collaborative research revenues including achieved milestones recognized under the agreement for the years ended December 31, 2003, 2002 and 2001 were $750,000, $2.0 million and $52,000, respectively.

14. X-Ceptor Therapeutics, Inc.

In June 1999, Ligand became a minority equity investor in a new private corporation, X-Ceptor Therapeutics, Inc. ("X-Ceptor"), whose mission is to conduct research in and identify therapeutic products from the field of orphan nuclear receptors. Ligand invested $6.0 million in X-Ceptor through the acquisition of convertible preferred stock and owns approximately 17% of X-Ceptor's outstanding capital stock.

Ligand maintained the right to acquire all, but not less than all, of the outstanding X-Ceptor stock at June 30, 2002 or upon the cash balance of X-Ceptor falling below a pre-determined amount, or to extend that right by 12 months by providing additional funding of $5.0 million. In April 2002, Ligand informed X-Ceptor that it was extending its purchase right. The $5.0 million paid to X-Ceptor in July 2002 was carried as an asset until March 2003, when Ligand informed X-Ceptor that it would not exercise the purchase right. The $5.0 million purchase right was written-off in March 2003 and is included in "Other, net" expense in the accompanying consolidated statements of operations.

Ligand granted to X-Ceptor an exclusive license to use the Ligand orphan nuclear receptors technology that is not currently committed to other partnership programs and a nonexclusive license to use Ligand's enabling proprietary process technology as it relates to drug discovery using orphan nuclear receptors. Ligand has not performed any research and development activities on behalf of X-Ceptor.

Ligand also issued warrants to X-Ceptor investors, founders and certain employees to purchase 950,000 shares of Ligand common stock with an exercise price of $10 per share and expiration date of October 6, 2006. The warrants were recorded at their fair value of $4.20 per warrant or $3.9 million as deferred warrant expense within stockholders' deficit and were amortized to operating expense through June 2002. Amortization for the years ended December 31, 2002 and 2001 was $692,000 and $1.4 million, respectively.

Ligand is accounting for its investment in X-Ceptor using the equity method of accounting. Ligand's interest in X-Ceptor losses for the years ended December 31, 2003, 2002 and 2001 was $1.0 million, $1.1 million and $804,000, respectively, which are included in "Other income (expense)" in the consolidated statements of operations. Included in the losses recognized is the amortization of the $1.7 million excess of the Company's investment in X-Ceptor over Ligand's equity in the net assets acquired.

15. Income Taxes

At December 31, 2003, the Company had consolidated federal and combined California income tax net operating loss carryforwards of approximately $541.2 million and $81.8 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 60% limitation on California loss carryforwards. The federal tax loss carryforwards began expiring in 2002. The California tax loss carryforwards began expiring in 1998. At December 31, 2003, the Company also had consolidated federal and combined California research tax credit carryforwards of approximately $24.1 million and $11.9 million, respectively, which began expiring in 2003.

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% that occurred within three periods during 1989, 1992 and 1996. In addition, use of Glycomed's and Seragen's preacquisition tax net operating and credit carryforwards will also be limited because the acquisitions by the Company represent changes in ownership of more than 50%. Such tax net operating loss and credit carryforwards have been reduced, including the related deferred tax assets.

Significant components of the Company's deferred tax assets and liabilities as of December 31, 2003 and 2002 are shown below. A valuation allowance has been recognized to fully offset the net deferred tax assets as of December 31, 2003 and 2002 as realization of such assets is uncertain.

	December 31,	
	2003	2002
	(in thousands)	
Deferred tax liabilities:		
Purchased intangible assets	$ 9,835	$ 10,725
Total deferred tax liabilities	9,835	10,725
Deferred tax assets:		
Net operating loss carryforwards	188,917	178,005
Research and development credits	31,961	31,170
Capitalized research and development	12,365	10,632
Fixed assets and intangibles	6,282	7,661
Accrued expenses	9,471	4,560
Deferred revenue	730	3,066
Other, net	390	255
Total deferred tax assets	250,116	235,349
Net deferred tax assets	240,281	224,624
Valuation allowance for deferred tax assets	(240,281)	(224,624)
	$ —	$ —

As of December 31, 2003, approximately $5.4 million of the valuation allowance for deferred tax assets related to benefits of stock option deductions which, when recognized, will be allocated directly to paid-in capital.

16. Summary of Unaudited Quarterly Financial Information

The following is a summary of the unaudited quarterly results of operations for the years ended December 31, 2003 and 2002 (in thousands, except per share amounts).

	Quarter Ended			
	March 31	June 30	September 30	December 31
2003				
Total revenues	$ 23,123	$ 29,126	$ 31,283	$ 57,608
Cost of products sold	6,620	7,766	8,565	8,667
Research and development costs	16,640	16,859	17,696	16,484
Selling, general and administrative	12,426	13,571	13,216	12,448
Co-promotion	—	—	—	9,360
Total operating costs and expenses	35,686	38,196	39,477	46,659
Cumulative effect of accounting change	—	—	—	(2,005)
Net income/(loss)	$ (20,320)	$(11,997)	$ (11,087)	$ 5,942
Basic and diluted net income/(loss) per share	$ (0.29)	$ (0.17)	$ (0.16)	$ 0.08
Weighted average number of common shares for basic net income/(loss) per share	70,238	69,275	70,100	73,098
Weighted average number of common shares for diluted net income/(loss) per share	70,238	69,275	70,100	99,684
Pro forma retroactive application of FIN 46(R):				
Net income/(loss)	$ (20,330)	$(12,009)	$ (11,098)	$ 7,880
Basic net income/(loss) per share	$ (0.29)	$ (0.17)	$ (0.16)	$ 0.11
Diluted net income/(loss) per share	$ (0.29)	$ (0.17)	$ (0.16)	$ 0.10
2002				
Total revenues	$ 24,886	$ 19,166	$ 25,266	$ 27,322
Cost of products sold	4,460	4,681	5,646	5,519
Research and development costs	13,115	13,681	15,641	16,370
Selling, general and administrative	9,658	10,279	10,766	10,975
Total operating costs and expenses	27,233	28,641	32,053	32,864
Net loss	$ (6,575)	$(12,246)	$ (7,047)	$ (6,728)
Basic and diluted net loss per share	$ (0.10)	$ (0.17)	$ (0.10)	$ (0.09)
Weighted average number of common shares for basic and diluted net loss per share	63,123	70,413	71,358	71,410
Pro forma retroactive application of FIN 46(R):				
Net loss	$ (6,638)	$(12,304)	$ (7,096)	$ (6,757)
Basic and diluted net loss per share	$ (0.11)	$ (0.17)	$ (0.10)	$ (0.09)

17. Subsequent Events

In March 2004, Ligand entered into a five year manufacturing and packaging agreement with Cardinal Health PTS, LLC (“Cardinal”) under which Cardinal will manufacture AVINZA® at its Winchester, Kentucky facility. Under the terms of the agreement, Ligand committed to certain minimum annual purchases ranging from approximately $1.6 million to $2.3 million. In addition, if regulatory approval for the manufacture of AVINZA® at the Kentucky facility has not been obtained within 30 months of the agreement’s effective date, Ligand will pay Cardinal $50,000 per month until such approval is obtained or through the initial term of the contract. The technology transfer and regulatory approval is expected to be complete in 2005 after which commercial product manufacturing will commence.

In March 2004, Ligand paid the Salk Institute $1.12 million to exercise an option to buy out milestone payments, other payment-sharing obligations and royalty payments due on future sales of lasofoxifene, a product under development by Pfizer.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

(a) *Evaluation of disclosure controls and procedures.* An evaluation was performed under the supervision and with the participation of the Company's management, including the Chief Executive Officer (CEO) and Chief Financial Officer (CFO), of the effectiveness of the design and operation of the Company's disclosure controls and procedures within 90 days before the filing date of this Form 10-K. Based on their evaluation, the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-14(c) and 15d-14(c) under the Securities Exchange Act of 1934 (the "Exchange Act")) are effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and is accumulated and communicated to Ligand's management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

(b) *Changes in internal controls.* There have not been any changes in the Company's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fiscal quarter ended December 31, 2003 that have materially affected or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART III

Item 10. Directors and Executive Officers of the Registrant

The sections labeled “Election of Directors”, “Executive Officers” and “Section 16(a) Beneficial Ownership Reporting Compliance” appearing in the Company’s Proxy Statement to be delivered to stockholders in connection with the 2004 Annual Meeting of Stockholders (the “Proxy Statement”) are incorporated herein by reference.

Code of Conduct and Ethics Policy

Ligand has adopted a code of business conduct and ethics for directors, officers (including Ligand’s chief executive officer and chief financial officer) and employees, known as the Code of Conduct and Ethics Policy. The Code of Conduct and Ethics Policy is filed as Exhibit 14.1 to this Form 10-K. Stockholders may request a free copy of the Code of Conduct and Ethics Policy from:

Investor Relations
Ligand Pharmceuticals Incorporated
10275 Science Center Drive
San Diego, CA 92121

Item 11. Executive Compensation

The section labeled “Executive Compensation and Other Information” appearing in the Proxy Statement is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Security Ownership of Certain Beneficial Owners and Management

The section labeled "Stock Ownership" appearing in the Proxy Statement is incorporated herein by reference.

Securities Authorized for Issuance under Equity Compensation Plans

We have two compensation plans approved by stockholders under which our equity securities are authorized for issuance to employees or directors in exchange for goods or services: The 2002 Stock Option/Stock Issuance Plan (effective May 16, 2002) which is the successor plan to the 1992 Stock Option/Stock Issuance Plan; and The 2002 Employee Stock Purchase Plan (effective May 16, 2002) which is the successor plan to the 1992 Employee Stock Purchase Plan.

The following table summarizes information about our equity compensation plans at December 31, 2003:

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	6,163,522	$ 11.2718	1,140,733 (1)
Equity compensation plans not approved by security holders (2)	—	—	—
	6,163,522	$ 11.2718	1,140,733

(1) At December 31, 2003, 834,883 and 305,850 shares were available under the 2002 Option Plan and the 2002 Employee Stock Purchase Plan, respectively, for future grants of stock options or sale of stock.

(2) There are no equity compensation plans (including individual compensation arrangements) not approved by the Company's security holders.

Item 13. Certain Relationships and Related Transactions

The sections labeled “Executive Compensation and Other Information” and “Certain Relationships and Related Transactions” appearing in the Proxy Statement are incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

The section labeled “Principal Auditor Fees and Services” appearing in the Proxy Statement are incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

(a) The following documents are included as part of this Annual Report on Form 10-K.

Index to Financial Statements
Independent Auditors' Report
Consolidated Balance Sheets
Consolidated Statements of Operations
Consolidated Statements of Stockholders' Equity (Deficit)
Consolidated Statements of Cash Flows
Notes to Consolidated Financial Statements

(b) Reports on Form 8-K.

We filed or furnished the following reports on Form 8-K during the fourth quarter of 2003.

1. Ligand filed a Current Report on Form 8-K on October 3, 2003, reporting under Item 5 the issuance of a press release announcing the amendment to the Royalty Pharma SERM royalty agreement.
2. Ligand furnished a Current Report on Form 8-K on October 31, 2003, reporting under Item 12 the issuance of a press release announcing Ligand's third quarter earnings results.
3. Ligand filed a Current Report on Form 8-K on December 4, 2003, reporting under Item 5 the implementation of a stock selling plan for Michael A. Rocca.

(c) Exhibits

Exhibit Number	Description
2.1 (1)	Agreement and Plan of Reorganization dated May 11, 1998, by and among the Company, Knight Acquisition Corp. and Seragen, Inc. (Filed as Exhibit 2.1).
2.2 (1)	Option and Asset Purchase Agreement, dated May 11, 1998, by and among the Company, Marathon Biopharmaceuticals, LLC, 520 Commonwealth Avenue Real Estate Corp. and 660 Corporation. (Filed as Exhibit 10.3).
2.3 (19)	Asset Purchase Agreement among CoPharma, Inc., Marathon Biopharmaceuticals, Inc., Seragen, Inc. and the Company dated January 7, 2000. (The schedules referenced in this agreement have not been included because they are either disclosed in such agreement or do not contain information which is material to an investment decision (with certain confidential portions omitted). The Company agrees to furnish a copy of such schedules to the Commission upon request.)
2.4 (3)	Agreement of Merger, dated February 7, 1995 by and among the Company, LG Acquisition Corp. and Glycomed Incorporated (other Exhibits omitted, but will be filed by the Company with the Commission upon request). (Filed as Exhibit 2.1).
2.5 (1)	Form of Certificate of Merger for acquisition of Seragen, Inc. (Filed as Exhibit 2.2).
3.1 (1)	Amended and Restated Certificate of Incorporation of the Company. (Filed as Exhibit 3.2).
3.2 (1)	Bylaws of the Company, as amended. (Filed as Exhibit 3.3).
3.3 (2)	Amended Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of the Company.
3.5 (31)	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company dated June 14, 2000.

Exhibit Number	Description
4.1 (4)	Specimen stock certificate for shares of Common Stock of the Company.
4.2 (16)	Preferred Shares Rights Agreement, dated as of September 13, 1996, by and between the Company and Wells Fargo Bank, N.A. (Filed as Exhibit 10.1).
4.3 (13)	Amendment to Preferred Shares Rights Agreement, dated as of November 9, 1998, between the Company and ChaseMellon Shareholder Services, L.L.C., as Rights Agent. (Filed as Exhibit 99.1).
4.4 (17)	Second Amendment to the Preferred Shares Rights Agreement, dated as of December 23, 1998, between the Company and ChaseMellon Shareholder Services, L.L.C., as Rights Agent (Filed as Exhibit 1).
4.5 (22)	Indenture, dated as of December 23, 1992 by and between Glycomed Incorporated and Chemical Trust Company of California. (Filed as Exhibit 4.3).
4.6 (3)	First Supplement Indenture, dated as of May 18, 1995 by and among the Company, Glycomed Incorporated and Chemical Trust Company of California. (Filed as Exhibit 10.133).
4.7 (37)	Fourth Amendment to the Preferred Shares Rights Agreement and Certification of Compliance with Section 27 Thereof, dated as of October 3, 2002, between the Company and Mellon Investor Services LLC, as Rights Agent.
4.8 (38)	Registration Rights Agreement dated November 26, 2002 between Ligand Pharmaceuticals Incorporated and UBS Warburg LLC. (Filed as Exhibit 4.2).
4.9 (38)	Indenture dated November 26, 2002, between Ligand Pharmaceuticals Incorporated and J.P. Morgan Trust Company, National Association, as trustee, with respect to the 6% convertible subordinated notes due 2007. (Filed as Exhibit 4.3).
4.10 (38)	Form of 6% Convertible Subordinated Note due 2007. (Filed as Exhibit 4.4).
4.11 (38)	Pledge Agreement dated November 26, 2002, between Ligand Pharmaceuticals Incorporated and J.P. Morgan Trust Company, National Association. (Filed as Exhibit 4.5).
4.12 (38)	Control Agreement dated November 26, 2002, among Ligand Pharmaceuticals Incorporated, J.P. Morgan Trust Company, National Association and JP Morgan Chase Bank. (Filed as Exhibit 4.6).
10.3 (4)	Form of Stock Issuance Agreement.
10.29 (4)	Consulting Agreement, dated October 20, 1988, between the Company and Dr. Ronald M. Evans, as amended by Amendment to Consulting Agreement, dated August 1, 1991, and Second Amendment to Consulting Agreement, dated March 6, 1992.
10.30 (4)	Form of Proprietary Information and Inventions Agreement.
10.31 (4)	Agreement, dated March 9, 1992, between the Company and Baylor College of Medicine (with certain confidential portions omitted).
10.33 (4)	License Agreement, dated November 14, 1991, between the Company and Rockefeller University (with certain confidential portions omitted).
10.34 (4)	License Agreement and Bailment, dated July 22, 1991, between the Company and the Regents of the University of California (with certain confidential portions omitted).

Exhibit Number	Description
10.35 (4)	Agreement, dated May 1, 1991, between the Company and Pfizer Inc (with certain confidential portions omitted).
10.36 (4)	License Agreement, dated July 3, 1990, between the Company and the Brigham and Woman's Hospital, Inc. (with certain confidential portions omitted).
10.38 (4)	License Agreement, dated January 5, 1990, between the Company and the University of North Carolina at Chapel Hill (with certain confidential portions omitted).
10.41 (4)	License Agreement, dated October 1, 1989, between the Company and Institute Pasteur (with certain confidential portions omitted).
10.42 (4)	Sublicense Agreement, dated September 13, 1989, between the Company and AndroBio Corporation (with certain confidential portions omitted).
10.43 (4)	License Agreement, dated June 23, 1989, between the Company and La Jolla Cancer Research Foundation (with certain confidential portions omitted).
10.44 (4)	License Agreement, dated October 20, 1988, between the Company and the Salk Institute for Biological Studies, as amended by Amendment to License Agreement dated September 15, 1989, Second Amendment to License Agreement, dated December 1, 1989 and Third Amendment to License Agreement dated October 20, 1990 (with certain confidential portions omitted).
10.46 (4)	Form of Indemnification Agreement between the Company and each of its directors.
10.47 (4)	Form of Indemnification Agreement between the Company and each of its officers.
10.50 (4)	Consulting Agreement, dated October 1, 1991, between the Company and Dr. Bert W. O'Malley.
10.58 (4)	Stock Purchase Agreement, dated September 9, 1992, between the Company and Glaxo, Inc.
10.59 (4)	Research and Development Agreement, dated September 9, 1992, between the Company and Glaxo, Inc. (with certain confidential portions omitted).
10.60 (4)	Stock Transfer Agreement, dated September 30, 1992, between the Company and the Rockefeller University.
10.61 (4)	Stock Transfer Agreement, dated September 30, 1992, between the Company and New York University.
10.62 (4)	License Agreement, dated September 30, 1992, between the Company and the Rockefeller University (with certain confidential portions omitted).
10.63 (4)	Professional Services Agreement, dated September 30, 1992, between the Company and Dr. James E. Darnell.
10.67 (4)	Letter Agreement, dated September 11, 1992, between the Company and Mr. Paul Maier.
10.73 (21)	Supplementary Agreement, dated October 1, 1993, between the Company and Pfizer, Inc. to Agreement, dated May 1, 1991.
10.78 (23)	Research, Development and License Agreement, dated July 6, 1994, between the Company and Abbott Laboratories (with certain confidential portions omitted). (Filed as Exhibit 10.75).
10.82 (23)	Research, Development and License Agreement, dated September 2, 1994, between the Company and American Home Products Corporation, as represented by its Wyeth-Ayerst Research Division (with certain confidential portions omitted). (Filed as Exhibit 10.77).
10.83 (23)	Option Agreement, dated September 2, 1994, between the Company and American Home Products Corporation, as represented by its Wyeth-Ayerst Research Division (with certain confidential portions omitted). (Filed as Exhibit 10.80).

Exhibit Number	Description
10.84 (23)	Distribution and Marketing Agreement, dated September 16, 1994, between the Company and Cetus Oncology Corporation, a wholly owned subsidiary of the Chiron Corporation (with certain confidential portions omitted). (Filed as Exhibit 10.82).
10.93 (6)	Indemnity Agreement, dated June 3, 1995, between the Company, Allergan, Inc. and Allergan Ligand Retinoid Therapeutics, Inc.
10.94 (6)	Tax Allocation Agreement, dated June 3, 1995, between the Company, Allergan, Inc. and Allergan Ligand Retinoid Therapeutics, Inc.
10.97 (6)	Research, Development and License Agreement, dated December 29, 1994, between SmithKline Beecham Corporation and the Company (with certain confidential portions omitted).
10.98 (6)	Stock and Note Purchase Agreement, dated February 2, 1995, between SmithKline Beecham Corporation, S.R. One, Limited and the Company (with certain confidential portions omitted).
10.140 (28)	Promissory Notes, General Security Agreements and a Credit Terms and Conditions letter dated March 31, 1995, between the Company and Imperial Bank (Filed as Exhibit 10.101).
10.146 (24)	Amendment to Research and Development Agreement, dated January 16, 1996, between the Company and American Home Products Corporation, as amended.
10.148 (24)	Lease, dated July 6, 1994, between the Company and Chevron/Nexus partnership, First Amendment to lease dated July 6, 1994.
10.149 (25)	Successor Employment Agreement, signed May 1, 1996, between the Company and David E. Robinson.
10.150 (7)	Master Lease Agreement, signed May 30, 1996, between the Company and USL Capital Corporation.
10.151 (25)	Settlement Agreement and Mutual Release of all Claims, signed April 20, 1996, between the Company and Pfizer, Inc. (with certain confidential portions omitted).
10.152 (25)	Letter Amendment to Abbott Agreement, dated March 14, 1996, between the Company and Abbott Laboratories (with certain confidential portions omitted).
10.153 (26)	Letter Agreement, dated August 8, 1996, between the Company and Dr. Andres Negro-Vilar.
10.155 (7)	Letter Agreement, dated November 4, 1996, between the Company and William Pettit.
10.157 (7)	Master Lease Agreement, signed February 13, 1997, between the Company and Lease Management Services.
10.158 (7)	Lease, dated March 7, 1997, between the Company and Nexus Equity VI LLC.
10.161 (29)	Settlement Agreement, License and Mutual General Release between Ligand Pharmaceuticals and SRI/LJCRF, dated August 23, 1995 (with certain confidential portions omitted).
10.163 (30)	Extension of Master Lease Agreement between Lease Management Services and Ligand Pharmaceuticals dated July 29, 1997.
10.164 (27)	Third Amendment to Agreement, dated September 2, 1997, between the Company and American Home Products Corporation.
10.165 (8)	Amended and Restated Technology Cross License Agreement, dated September 24, 1997, among the Company, Allergan, Inc. and Allergan Ligand Retinoid Therapeutics, Inc.
10.167 (8)	Development and License Agreement, dated November 25, 1997, between the Company and Eli Lilly and Company (with certain confidential portions omitted).

Exhibit Number	Description
10.168 (8)	Collaboration Agreement, dated November 25, 1997, among the Company, Eli Lilly and Company, and Allergan Ligand Retinoid Therapeutics, Inc. (with certain confidential portions omitted).
10.169 (8)	Option and Wholesale Purchase Agreement, dated November 25, 1997, between the Company and Eli Lilly and Company (with certain confidential portions omitted).
10.170 (8)	Stock Purchase Agreement, dated November 25, 1997, between the Company and Eli Lilly and Company.
10.171 (8)	First Amendment to Option and Wholesale Purchase Agreement dated February 23, 1998, between the Company and Eli Lilly and Company (with certain confidential portions omitted).
10.172 (8)	Second Amendment to Option and Wholesale Purchase Agreement, dated March 16, 1998, between the Company and Eli Lilly and Company (with certain confidential portions omitted).
10.174 (9)	Leptin Research, Development and License Agreement, dated March 17, 1998, between the Company and SmithKline Beecham, plc (with certain confidential portions omitted).
10.175 (9)	Stock and Warrant Purchase Agreement, dated March 17, 1998, among the Company, SmithKline Beecham, plc. and SmithKline Beecham Corporation (with certain confidential portions omitted).
10.176 (10)	Secured Promissory Note, dated March 7, 1997, in the face amount of $3,650,000, payable to the Company by Nexus Equity VI LLC. (Filed as Exhibit 10.1).
10.177 (10)	Amended memorandum of Lease effective March 7, 1997, between the Company and Nexus Equity VI LLC. (Filed as Exhibit 10.2).
10.178 (10)	First Amendment to Lease, dated March 7, 1997, between the Company and Nexus Equity VI LLC. (Filed as Exhibit 10.3).
10.179 (10)	First Amendment to Secured Promissory Note, date March 7, 1997, payable to the Nexus Equity VI LLC. (Filed as Exhibit 10.4).
10.184 (11)	Letter agreement, dated May 11, 1998, by and among the Company, Eli Lilly and Company and Seragen, Inc. (Filed as Exhibit 99.6).
10.185 (1)	Amendment No. 3 to Option and Wholesale Purchase Agreement, dated May 11, 1998, by and between Eli Lilly and Company and the Company. (Filed as Exhibit 10.6).
10.186 (1)	Agreement, dated May 11, 1998, by and among Eli Lilly and Company, the Company and Seragen, Inc. (Filed as Exhibit 10.7).
10.188 (11)	Settlement Agreement, dated May 1, 1998, by and among Seragen, Inc., Seragen Biopharmaceuticals Ltd./Seragen Biopharmaceutique Ltee, Sofinov Societe Financiere D'Innovation Inc., Societe Innovatech Du Grand Montreal, MDS Health Ventures Inc., Canadian Medical Discoveries Fund Inc., Royal Bank Capital Corporation and Health Care and Biotechnology Venture Fund (Filed as Exhibit 99.2).
10.189 (11)	Accord and Satisfaction Agreement, dated May 11, 1998, by and among Seragen, Inc., Seragen Technology, Inc., Trustees of Boston University, Seragen LLC, Marathon Biopharmaceuticals, LLC, United States Surgical Corporation, Leon C. Hirsch, Turi Josefsen, Gerald S.J. and Loretta P. Cassidy, Reed R. Prior, Jean C. Nichols, Elizabeth C. Chen, Robert W. Crane, Shoreline Pacific Institutional Finance, Lehman Brothers Inc., 520 Commonwealth Avenue Real Estate Corp. and 660 Corporation (Filed as Exhibit 99.4).
10.191 (10)	Letter of Agreement dated September 28, 1998 among the Company, Elan Corporation, plc and Elan International Services, Ltd. (with certain confidential portions omitted), (Filed as Exhibit 10.5).

Exhibit Number	Description
10.192 (10)	Stock Purchase Agreement dated September 30, 1998 between the Company and Elan International Services, Ltd. (with certain confidential portions omitted), (Filed as Exhibit 10.6).
10.196 (12)	Zero Coupon Convertible Senior Note Due 2008 dated November 9, 1998 between the Company and Elan International Services, Ltd., No. R-2.
10.198 (14)	Stock Purchase Agreement by and between the Company and Warner-Lambert Company dated September 1, 1999 (with certain confidential portions omitted). (Filed as Exhibit 10.2).
10.200 (14)	Nonexclusive Sublicense Agreement, effective September 8, 1999, by and among Seragen, Inc., Hoffmann-La Roche Inc. and F. Hoffmann-La Roche Ltd. (with certain confidential portions omitted). (Filed as Exhibit 10.4).
10.201 (14)	Amendment to Development, Licence and Supply Agreement between the Company and Elan Corporation, plc dated August 20, 1999 (with certain confidential portions omitted). (Filed as Exhibit 10.5).
10.202 (14)	Ligand Purchase Option (to acquire outstanding capital stock of X-Ceptor Therapeutics, Inc.), contained in Schedule I to the Certificate of Incorporation of X-Ceptor Therapeutics, Inc., as amended. (Filed as Exhibit 10.6).
10.203 (14)	License Agreement effective June 30, 1999 by and between the Company and X-Ceptor Therapeutics, Inc. (with certain confidential portions omitted). (Filed as Exhibit 10.7).
10.206 (14)	Stock Purchase Agreement dated September 30, 1999 by and between the Company and Elan International Services, Ltd. (with certain confidential portions omitted). (Filed as Exhibit 10.13).
10.209 (14)	Series X Warrant dated August 4, 1999 between the Company and Elan International Services, Ltd. (Filed as Exhibit 10.15).
10.210 (15)	Securities Purchase Agreement dated November 6, 1998 among Elan Corporation, plc, Elan International Services, Ltd. and the Company (Filed as Exhibit 1). (Filed as Exhibit 10.8).
10.211 (15)	Development, Licence and Supply Agreement dated November 6, 1998 between Elan Corporation, plc and the Company (Filed as Exhibit 2). (Filed as Exhibit 10.9).
10.212 (15)	Letter Agreement dated August 13, 1999 among the Company, Elan International Services, Ltd. and Elan Corporation, plc (Filed as Exhibit 3). (Filed as Exhibit 10.12).
10.213 (18)	Incentive Agreement dated December 31, 1999 among the Company, Elan International Services, Ltd. and Monksland Holdings, BV. (The schedules referenced in this agreement have not been included because they are either disclosed in such agreement or do not contain information which is material to an investment decision. The Company agrees to furnish a copy of such schedules to the Commission upon request.)
10.216 (18)	Amendment to Ligand Purchase Option (to acquire outstanding capital stock of X-Ceptor Therapeutics, Inc.), contained in Schedule I to the Certificate of Incorporation of X-Ceptor Therapeutics, Inc., as amended October 1, 1999.
10.217 (18)	Amended and Restated Series X Warrant dated November 22, 1999 between the Company and Elan International Services, Ltd.
10.218 (18)	Royalty Stream Purchase Agreement dated as of December 31, 1999 among Seragen, Inc., the Company, Pharmaceutical Partners, L.L.C., Bioventure Investments, Kft, and Pharmaceutical Royalties, LLC. (with certain confidential portions omitted).
10.220 (19)	Research, Development and License Agreement by and between Organon Company and Ligand Pharmaceuticals Incorporated dated February 11, 2000 (with certain confidential portions omitted).

Exhibit Number	Description
10.222 (19)	Incentive Agreement dated March 1, 2000 among Ligand Pharmaceuticals Incorporated, Elan International Services, Ltd. and Monksland Holdings, BV. (The schedules referenced in this agreement have not been included because they are either disclosed in such agreement or do not contain information which is material to an investment decision. The Company agrees to furnish a copy of such schedules to the Commission upon request.)
10.224 (20)	Research, Development and License Agreement by and between Bristol Myers Squibb Company and Ligand Pharmaceuticals Incorporated dated May 19, 2000 (with certain confidential portions omitted).
10.225 (31)	Zero Coupon Convertible Senior Note Due 2008 dated December 29, 2000 between Ligand Pharmaceuticals Incorporated and Monksland Holdings, BV, No. R-5.
10.227 (31)	Letter Agreement, dated August 23, 1999, between the Company and Eric S. Groves.
10.229 (31)	Letter Agreement, dated January 17, 2000, between the Company and Thomas H. Silberg.
10.230 (31)	Amended and Restated Registration Rights Agreement, dated as of June 29, 2000 among the Company and certain of its investors.
10.231 (2)	Marketing and Distribution Agreement with Ferrer Internacional S.A. to market and distribute Ligand Pharmaceuticals Incorporated products in Spain, Portugal and Greece. (Filed as Exhibit 10.3).
10.232 (2)	Marketing and Distribution Agreement with Ferrer Internacional S.A. to market and distribute Ligand Pharmaceuticals Incorporated products in Central and South America. (Filed as Exhibit 10.4).
10.233 (32)	Second Amendment to the Research, Development and License Agreement, dated as of September 2, 1994, between the Company and American Home Products Corporation (with certain confidential portions omitted).
10.234 (32)	Fourth Amendment to the Research, Development and License Agreement, dated as of September 2, 1994, between the Company and American Home Products Corporation (with certain confidential portions omitted).
10.235 (32)	Distributorship Agreement, dated February 29, 2001, between the Company and Elan Pharma International Limited (with certain confidential portions omitted).
10.236 (32)	Second Amendment to the Development, Licence and Supply Agreement dated November 9, 1998, between the Company and Elan Corporation, plc.
10.237 (33)	Form of Stock Purchase Agreement dated as of January 5, 2001, between the investors listed on Exhibit A and the Company.
10.238 (33)	Letter Agreement, dated May 17, 2001, between the Company and Gian Aliprandi.
10.239 (33)	Research, Development and License Agreement by and between the Company and TAP Pharmaceutical Products Inc. dated June 22, 2001 (with certain confidential portions omitted).
10.240 (34)	Letter Agreement, dated December 13, 2001, between the Company and Warner R. Broaddus, Esq.
10.241 (34)	Incentive Agreement dated December 20, 2001 among the Company, Elan International Services, Ltd. and Monksland Holdings, BV.
10.242 (34)	First Addendum to Amended and Restated Registration Rights Agreement dated June 29, 2000, effective as of December 20, 2001.
10.243 (35)	Incentive Agreement dated March 28, 2002 among the Company, Elan International Services, Ltd. and Monksland Holdings, BV.
10.244 (35)	Second Addendum to Amended and Restated Registration Rights Agreement dated June 29, 2000, effective as of March 28, 2002.

Exhibit Number	Description
10.245 (35)	Purchase Agreement, dated March 6, 2002, between the Company and Pharmaceutical Royalties International (Cayman) Ltd.
10.246 (36)	Amended and Restated License Agreement Between The Salk Institute for Biological Studies and the Company (with certain confidential portions omitted).
10.247 (37)	Amendment Number 1 to Purchase Agreement, dated July 29, 2002, between the Company and Pharmaceutical Royalties International (Cayman) Ltd.
10.250 (40)	Amended and Restated License and Supply Agreement, dated December 6, 2002, between the Company, Elan Corporation, plc and Elan Management Limited (with certain confidential portions omitted).
10.251 (40)	Securities Purchase Agreement, dated November 12, 2002, between the Company, Elan International Services, Ltd. and Elan Corporation PLC.
10.252 (40)	Amendment Number 1 to Amended and Restated Registration Rights Agreement, dated November 12, 2002, between the Company and Elan Corporation plc and Elan International Services, Ltd.
10.253 (40)	Second Amendment to Purchase Agreement, dated December 19, 2002, between the Company and Pharmaceuticals Royalties International (Cayman) Ltd.
10.254 (40)	Amendment Number 3 to Purchase Agreement, dated December 30, 2002, between the Company and Pharmaceuticals Royalties International (Cayman) Ltd. (with certain confidential portions omitted).
10.255 (40)	Purchase Agreement, dated December 30, 2002, between the Company and Pharmaceuticals Royalties International (Cayman) Ltd. (with certain confidential portions omitted).
10.256 (41)	Co-Promotion Agreement, dated January 1, 2003, by and between the Company and Organon Pharmaceuticals USA Inc. (with certain confidential portions omitted).
10.257 (42)	Letter Agreement, dated June 26, 2002, between the Company and James J. L´Italien, Ph.D.
10.258 (42)	Letter Agreement, dated May 20, 2003, between the Company and Tod G. Mertes.
10.259 (42)	Amendment No. 2 to Amended and Restated Registration Rights Agreement, dated June 25, 2003.
10.260 (42)	2002 Employee Stock Purchase Plan, dated July 1, 2002, as amended through June 30, 2003.
10.261 (43)	Letter Agreement, dated July 1, 2003, between the Company and Paul V. Maier.
10.262 (43)	Letter Agreement, dated July 1, 2003, between the Company and Ronald C. Eld.
10.263 (43)	Separation Agreement and General Release, effective July 10, 2003, between the Company and Thomas H. Silberg (with certain confidential portions omitted).
10.264	Option Agreement Between Investors Trust & Custodial Services (Ireland) Ltd., as Trustee for Royalty Pharma, Royalty Pharma Finance Trust and the Company, dated October 1, 2003 (with certain confidential portions omitted).
10.265	Amendment to Purchase Agreement Between Royalty Pharma Finance Trust and the Company, dated October 1, 2003 (with certain confidential portions omitted).
10.266	Manufacture and Supply Agreement between Seragen and Cambrex Bio Science Hopkinton, Inc., dated October 11, 2003 (with certain confidential portions omitted).
10.267	2002 Stock Incentive Plan, dated May 16, 2002 (as amended through June 20, 2003).
10.268	2002 Employee Stock Purchase Plan, dated July 1, 2002 (as amended through June 30, 2003).

Exhibit Number	Description
10.269	Form of Stock Option Agreement.
10.270	Form of Employee Stock Purchase Plan Stock Purchase Agreement.
10.271	Form of Automatic Stock Option Agreement.
10.272	Form of Director Fee Stock Option Agreement.
14.1	Code of Business Conduct and Ethics
21.1	Subsidiaries of Registrant.
23.1	Consent of Deloitte & Touche LLP.
24.1	Power of Attorney (See Page 87).
31.1	Certification by Principal Executive Officer, Pursuant to Rules 13a - 14(a) and 15d - 14(a), as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by Principal Financial Officer, Pursuant to Rules 13a - 14(a) and 15d - 14(a), as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by Principal Executive Officer, Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification by Principal Financial Officer, Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

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(1) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Registration Statement on Form S-4 (No. 333-58823) filed on July 9, 1998.

(2) This exhibit was previously filed as part of and is hereby incorporated by reference to same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended March 31, 1999.

(3) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Registration Statement on Form S-4 (No. 33-90160) filed on March 9, 1995, as amended.

(4) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Registration Statement on Form S-1 (No. 33-47257) filed on April 16, 1992 as amended.

(5) This exhibit was previously filed as part of, and is hereby incorporated by reference to Exhibit 99.1 filed with the Company's Form S-8 (No. 33-85366), filed on October 17, 1994.

(6) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Registration Statement on Form S-1/S-3 (No. 33-87598 and 33-87600) filed on December 20, 1994, as amended.

(7) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Annual Report on Form 10-K for the period ended December 31, 1996.

(8) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Annual Report on Form 10-K for the period ended December 31, 1997.

(9) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended March 31, 1998.

(10) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended September 30, 1998.

(11) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Current Report on Form 8-K of Seragen, Inc. filed on May 15, 1998.

(12) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Annual Report on Form 10-K for the period ended December 31, 1998.

(13) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Registration Statement on Form 8-A/A Amendment No. 1 (No. 0-20720) filed on November 10, 1998.

(14) This exhibit was previously filed as part of and is hereby incorporated by reference to the numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended September 30, 1999.

(15) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Schedule 13D of Elan Corporation, plc, filed on January 6, 1999, as amended.

(16) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Registration Statement on Form S-3 (No. 333-12603) filed on September 25, 1996, as amended.

(17) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Registration Statement on Form 8-A/A Amendment No. 2 (No. 0-20720) filed on December 24, 1998.

(18) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Annual Report on Form 10-K for the period ended December 31, 1999.

(19) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2000.

(20) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2000.

(21) This exhibit was previously filed as part of, and are hereby incorporated by reference to the same numbered exhibit filed with the Company's Annual Report on Form 10-K for the year ended December 31, 1993.

(22) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Registration Statement on Form S-3 of Glycomed Incorporated (Reg. No. 33-55042) filed on November 25, 1992, as amended.

(23) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended September 30, 1994.

(24) This exhibit was previously filed, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Annual Report on Form 10-K for the year ended December 31, 1995.

(25) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly report on Form 10-Q for the period ended June 30, 1996.

(26) This exhibit was previously filed as part of, and is hereby incorporated by reference at the same numbered exhibit filed with the Company's Quarterly report on Form 10-Q for the period ended September 30, 1996.

(27) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended September 30, 1997.

(28) This exhibit was previously filed as part of, and are hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly report on Form 10-Q for the period ended September 30, 1995.

(29) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended March 31, 1997.

(30) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended June 30, 1997.

(31) This exhibit was previously filed as part of, and are hereby incorporated by reference to the same numbered exhibit filed with the Company’s Annual Report on Form 10-K for the year ended December 31, 2000.

(32) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company’s Quarterly Report on Form 10-Q for the period ended March 31, 2001.

(33) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company’s Quarterly Report on Form 10-Q for the period ended June 30, 2001.

(34) This exhibit was previously filed as part of, and are hereby incorporated by reference to the same numbered exhibit filed with the Company's Annual Report on Form 10-K for the year ended December 31, 2001.

(35) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2002.

(36) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2002.

(37) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2002.

(38) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Registration Statement on Form S-3 (No. 333-102483) filed on January 13, 2003, as amended.

(39) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with the Company's Form S-8 (No. 333-91414) filed on June 28, 2002.

(40) This exhibit was previously filed as part of, and are hereby incorporated by reference to the same numbered exhibit filed with the Company's Annual Report on Form 10-K for the year ended December 31, 2002.

(41) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2003.

(42) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2003.

(43) This exhibit was previously filed as part of, and is hereby incorporated by reference to the same numbered exhibit filed with the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2003.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

LIGAND PHARMACEUTICALS INCORPORATED

Date: March 12, 2004

By: /s/ DAVID E. ROBINSON
David E. Robinson
President and Chief Executive Officer

POWER OF ATTORNEY

Know all men by these presents, that each person whose signature appears below constitutes and appoints David E. Robinson or Paul V. Maier, his or her attorney-in-fact, with power of substitution in any and all capacities, to sign any amendments to this Annual Report on Form 10-K, and to file the same with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that the attorney-in-fact or his or her substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ DAVID E.ROBINSON David E. Robinson	Chairman of the Board, President, Chief Executive Officer and Director (Principal Executive Officer)	March 12, 2004
/s/ PAUL V. MAIER Paul V. Maier	Senior Vice President, Chief Financial Officer (Principal Financial and Accounting Officer)	March 12, 2004
/s/ HENRY F. BLISSENBACH Henry F. Blissenbach	Director	March 11, 2004
/s/ ALEXANDER D. CROSS Alexander D. Cross	Director	March 10, 2004
/s/ JOHN GROOM John Groom	Director	March 12, 2004
/s/ IRVING S. JOHNSON Irving S. Johnson	Director	March 10, 2004
/s/ JOHN W. KOZARICH John W. Kozarich	Director	March 10, 2004
_____ Carl C. Peck	Director	
/s/ MICHAEL A. ROCCA Michael A. Rocca	Director	March 10, 2004

EXHIBIT 10.264

OPTION AGREEMENT
BETWEEN
INVESTORS TRUST & CUSTODIAL SERVICES (IRELAND) LTD.,
AS TRUSTEE FOR ROYALTY PHARMA,
ROYALTY PHARMA FINANCE TRUST
AND
LIGAND PHARMACEUTICALS INCORPORATED

THIS OPTION AGREEMENT (this "AGREEMENT") is made and entered into on this 1st day of October, 2003, among Ligand Pharmaceuticals Incorporated ("SELLER"), Royalty Pharma Finance Trust, a Delaware Statutory Trust ("BUYER"), and Investors Trust & Custodial Services (Ireland) Ltd., in its capacity as Trustee of Royalty Pharma, a unit trust organized under the laws of the Republic of Ireland ("ROYALTY PHARMA").

Whereas, Seller and Buyer (as the assignee of Pharmaceutical Royalties International (Cayman) Ltd.) are parties to that certain Purchase Agreement dated as of March 6, 2002, as amended (the "PURCHASE AGREEMENT"), pursuant to which Seller agreed, subject to the terms thereof, to sell, transfer, assign and deliver to Buyer the right to receive from Seller the Applicable Percentage of the AHP Net Sales and the Applicable Percentage of the Pfizer Net Sales;

Whereas, pursuant to the Purchase Agreement, Buyer had the option to acquire an Additional Percentage of both AHP Net Sales and Pfizer Net Sales if Buyer gave notice in respect of and exercised such option by September 30, 2003 (the "SEPTEMBER 2003 OPTION");

Whereas, Buyer did not exercise the September 2003 Option and therefore the September 2003 Option expired unexercised;

Whereas, Seller desires to sell to Royalty Pharma the October 2003 Option (as defined below) and Royalty Pharma desires to acquire the October 2003 Option;

Whereas, on the date hereof Seller has amended the Purchase Agreement so as to amend the remaining options available to Buyer as set forth in the Purchase Agreement; and

Whereas, Buyer desires that Royalty Pharma acquire the October 2003 Option from Seller provided that Buyer has the right to acquire such option from Royalty Pharma in the future;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained in this Agreement, the parties hereto hereby agree as follows:

1. Seller hereby grants to Royalty Pharma the following option (the "OCTOBER 2003 OPTION") to acquire rights to receive the following percentage of both AHP Net

Sales and Pfizer Net Sales on the same terms as described in Section 2.01(a) of the Purchase Agreement (other than the last sentence thereof). Payment of the Option Exercise Price specified below represents payment for the percentage of both the AHP Net Sales and the Pfizer Net Sales.

<TABLE>
<CAPTION>

NOTICE DATE	EXERCISE DATE	OPTION EXERCISE PRICE	PERCENTAGE OF BOTH AHP NET SALES AND PFIZER NET SALES
October 1, 2003	October 1, 2003	$12,500,000	0.700%

</TABLE>

2. Royalty Pharma hereby exercises the October 2003 Option.

3. Payment of the Exercise Price for the October 2003 Option shall be as follows: no later than October 31, 2003, Royalty Pharma shall pay or shall cause to be paid to Seller the Option Exercise Price of $12,500,000 in U.S. dollars by wire transfer to an account in the United States designated by Seller in writing.

4. Within ten Business Days after the first commercial sale of: (a) any lasofoxifene product in the U.S., Royalty Pharma shall pay to Seller an additional ***; (b) any Product (as defined in the AHP Agreement) containing bazedoxifene in the U.S. (but not including any such Product described in subsection (c) of this paragraph), Royalty Pharma shall pay to Seller an additional ***; and (c) any Product (as defined in the AHP Agreement) containing both bazedoxifene and Premarin in the U.S., Royalty Pharma shall pay to Seller an additional ***; provided, however, that no additional payment described in any of subsections (a)-(c) of this paragraph shall be due and payable to the extent that the product or Product, as applicable, described in such subsection is not approved for commercial sale in the U.S. by the U.S. Food and Drug Administration (the "FDA") on or prior to October 1, 2005.

5. (a) The rights granted to Royalty Pharma upon the exercise of the October 2003 Option shall expire in accordance with the provisions of Section 2.03 of the Purchase Agreement.

(b) Each of the following provisions contained in the Agreement shall be incorporated herein by reference, with each reference to Buyer in such provisions deemed to be amended to be a reference to Royalty Pharma: 2.04 and 2.05 (except that the phrase "except to the extent of the security interest granted by Seller to Buyer pursuant to Section 2.01(a)" shall be deemed to be stricken from the first sentence thereof).

6. Royalty Pharma hereby grants to Buyer the right to acquire from Royalty Pharma, exercisable by notice to Royalty Pharma no later than December 31, 2003, the right to receive from Seller the percentage of AHP Net Sales and Pfizer Net Sales acquired pursuant to the October 2003 Option if Buyer either (i) pays the Option Exercise Price to Seller no later than the date due or (ii) reimburses Royalty Pharma for payment

***Portions of this page have been omitted pursuant to a request for Confidential Treatment and filed separately with the Commission.

of the Option Exercise Price. Royalty Pharma agrees that Buyer has no obligation to exercise such right.

7. REPRESENTATIONS AND WARRANTIES. Seller hereby makes to Royalty Pharma the representations and warranties made to Buyer in Sections 3.01, 3.02, 3.03 and 3.04 of the Purchase Agreement with respect to this Agreement to the same extent made in the Purchase Agreement with respect to such Purchase Agreement; Royalty Pharma, with respect to itself, hereby makes to Seller the same representations and warranties made by Buyer to Seller in Sections 4.01, 4.02, 4.03 and 4.04 of the Purchase Agreement with respect to this Agreement as Buyer made in the Purchase Agreement with respect to the Purchase Agreement.

8. COVENANTS. Seller covenants to and agrees with Royalty Pharma to the same extent as Seller covenanted to and agreed with Buyer as set forth in Sections 5.01, 5.04, 5.05, 5.06, 5.07 and 5.08 of the Purchase Agreement, provided that each reference in any of such Sections to "Section 2.01" or the Purchase Agreement shall be deemed to be a reference to this Agreement.

9. INDEMNIFICATION. Seller agrees to indemnify Royalty Pharma to the same extent as Seller has agreed to indemnify Buyer as set forth in Article VI of the Purchase Agreement, and Royalty Pharma agrees to indemnify Seller to the same extent as Buyer has agreed to indemnify Seller as set forth in Article VI of the Purchase Agreement (provided that (a) any reference in such Article VI to "Article IV", "Section 2.02(b)" or the Purchase Agreement shall be deemed to be a reference to this Agreement, (b) the reference to the "Exercise Date" in subsection (iii) of Section 6.01(b) shall be deemed to be a reference to October 31, 2003 and (iii) the proviso at the end of Section 6.01(b) shall be deemed to be stricken from such Section).

10. DEFINITIONS. All capitalized terms used but not defined herein shall have the respective meanings ascribed to them in the Purchase Agreement.

11. GOVERNING LAW. This Agreement shall be governed construed in accordance with and governed by the law of the State of New York.

12. ENTIRE AGREEMENT. This Agreement, together with any provisions referenced and/or incorporated by reference herein, constitutes the full and entire understanding between the parties regarding the subject matter herein. Except as otherwise expressly provided herein, the provisions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Without limiting the generality of the foregoing, nothing herein shall prohibit Royalty Pharma from assigning all or any of its rights or obligations hereunder to Buyer.

13. COUNTERPARTS. This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Agreement shall become

effective when each party hereto shall have received a counterpart hereof signed by the other party hereto.

14. CAPTIONS. The titles and captions herein are included for convenience of reference only and shall be ignored in the construction or interpretation hereof.

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IN WITNESS WHEREOF, the parties hereof have caused this Option Agreement to be duly executed and delivered as a deed by their respective authorized officers of the day and year first written above.

SELLER
- ------
LIGAND PHARMACEUTICALS INCORPORATED

By: /S/ WARNER BROADDUS

Name: WARNER BROADDUS

Title: VP & GENERAL COUNSEL

ROYALTY PHARMA
- ----------
INVESTORS TRUST & CUSTODIAL SERVICES (IRELAND) LTD.,
AS TRUSTEE FOR ROYALTY PHARMA

By: /S/ FRAN CORBETT

Name: FRAN CORBETT

Title: DIRECTOR

BUYER
- -----
ROYALTY PHARMA FINANCE TRUST

By: RP Management LLC, as Administrator

/S/ PABLO LEGORRETA
- ----------
Pablo Legorreta, Member
Signing only with respect to Section 6

EXHIBIT 10.265

AMENDMENT TO PURCHASE AGREEMENT
BETWEEN
ROYALTY PHARMA FINANCE TRUST AND
AND
LIGAND PHARMACEUTICALS INCORPORATED

THIS AMENDMENT TO PURCHASE AGREEMENT (the "AMENDMENT") is made and entered into on this 1st day of October, 2003 by and between Royalty Pharma Finance Trust ("BUYER") and Ligand Pharmaceuticals Incorporated ("SELLER").

WHEREAS, Seller and Buyer (as the assignee of Pharmaceutical Royalties International (Cayman) Ltd.) are parties to that certain Purchase Agreement dated as of March 6, 2002, as amended (the "PURCHASE AGREEMENT"), pursuant to which Seller agreed, subject to the terms thereof, to sell, transfer, assign and deliver to Buyer the right to receive from Seller the Applicable Percentage of the AHP Net Sales and the Applicable Percentage of the Pfizer Net Sales;

WHEREAS, Seller and Buyer wish to further amend the Purchase Agreement as set forth herein;

WHEREAS, on the date hereof Seller, Buyer and Investors, Trust & Custodial Services (Ireland) Limited, as Trustee for Royalty Pharma ("ROYALTY PHARMA"), have entered into an Option Agreement pursuant to which Royalty Pharma acquired the option to acquire rights to receive from Seller a specified percentage of AHP Net Sales and Pfizer Net Sales, and it is acknowledged and contemplated by Seller that the option granted to Royalty Pharma may be assigned to Buyer with the same effect as if the option was exercised by Buyer hereunder;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained in this Amendment and in the Purchase Agreement, and pursuant to Section 8.02(a) of the Purchase Agreement, Seller and Buyer do hereby amend the Purchase Agreement, as follows:

1. Section 2.02(a) is hereby amended by deleting it in its entirety and replacing it with the following:

"2.02 OPTIONS. (a) Seller hereby grants to Buyer the following options, each exercisable at Buyer's sole discretion, to acquire rights to receive additional percentages of both AHP Net Sales and Pfizer Net Sales on the same terms as described above in Section 2.01(a). For clarity, such options may be exercised only for additional percentages of both AHP Net Sales and Pfizer Net Sales. Payment of the Option Exercise Price specified below represents payment for the additional percentages of both the AHP Net Sales and the Pfizer Net Sales.

<TABLE>
<CAPTION>

NOTICE DATE (EACH, A "NOTICE DATE")	EXERCISE DATE (EACH, AN "EXERCISE DATE")	EXERCISE PRICE (EACH, AN "OPTION EXERCISE PRICE")	ADDITIONAL PERCENTAGE OF BOTH AHP NET SALES AND PFIZER NET SALES
<S>	<C>	<C>	<C>
May 1, 2002	May 15, 2002	$3,000,000	0.125%
September 20, 2002	September 30, 2002	$3,500,000	0.125%
December 30, 2002 (1)	December 31, 2002 (1)	$5,775,000	0.1875%

</TABLE>

<TABLE>

<S>	<C>	<C>	<C>
December 15, 2003 (2)	December 31, 2003 (2)	$12,500,000	0.500%
September 20, 2004 (3)	September 30, 2004 (3)	***	*** (3)

March 16, 2005 (4)	March 30, 2005 (4)	***	*** (4)

</TABLE>

(1) With respect to this option only, the following terms shall apply notwithstanding anything to the contrary contained elsewhere in this Agreement:

If Buyer desires to exercise this option, Buyer shall give written notice (the "December 2002 Exercise Notice") to Seller at any time from the date which is 30 days prior to the applicable Notice Date up to and including 7:00 p.m. (New York City time) on such Notice Date. If Buyer delivers such December 2002 Exercise Notice, then:

(i) unless by 9:00 p.m. (New York City time) on such Notice Date Seller delivers to Buyer an Exception Notice, Seller shall be deemed to have represented and warranted to Buyer that, as of the applicable Exercise Date, all of Seller's representations and warranties contained herein are true and correct in all material respects on and as of such Exercise Date as if made on such Exercise Date; and

(ii) on such Exercise Date Buyer shall pay to Seller two-thirds (2/3) of the applicable Option Exercise Price; the remaining one-third (1/3) of such Option Exercise Price will be due and payable on the date that is one hundred twenty (120) days after such Exercise Date.

(2) With respect to this option only, to the extent that the first of either AHP or Pfizer, as applicable, releases Phase III clinical data relating to a lasofoxifene product or any Product (as defined in the AHP Agreement) containing bazedoxifene prior to December 31, 2003, and notwithstanding any Exercise Notice received prior to such date, the Exercise Date shall be the earlier of (a) the date that is thirty days after the date of such release and (b) the date that is the tenth Business Day after December 31, 2003, and the Notice Date shall be any date that is at least ten Business Days prior to the Exercise Date. Seller shall promptly provide Buyer with a written copy of AHP's or Pfizer's release of such Phase III data, unless such release is made public.

(3) With respect to this option only, to the extent that the first of either AHP or Pfizer, as applicable, receives from the U.S. Food and Drug Administration (the "FDA") a notification of acceptance of a New Drug Application relating to a lasofoxifene product or any Product (as defined in the AHP Agreement) containing bazedoxifene prior to September 30, 2004, and notwithstanding any Exercise Notice received prior to such date, the Exercise Date shall be the earlier of (a) the date that is thirty days after the date of such notification and (b) October 30 2004, and the Notice Date shall be any date that is at least ten Business Days prior to the Exercise Date. Seller shall promptly provide Buyer with a written copy of the FDA's notification of acceptance or, in the event a copy of the FDA's official acceptance is not promptly available, Seller may in lieu thereof provide a copy of Pfizer's or AHP's press release or other evidence providing reasonable assurance to Buyer that the relevant event has occurred.

Notwithstanding the foregoing, with respect to this option only, if Phase III clinical data relating to a lasofoxifene product or any Product (as defined in the AHP Agreement) containing bazedoxifene is not released by AHP or Pfizer, as applicable, prior to March 31, 2004, (a) the Exercise Date shall be the date that is thirty calendar days after the first date that either AHP or Pfizer, as applicable, receives from the FDA a notification of acceptance of a New Drug Application relating to a lasofoxifene product or any Product (as defined in the AHP Agreement)

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containing bazedoxifene, and the Notice Date shall be any date that is at least ten Business Days prior to the Exercise Date, and (b) Seller shall reduce payments due hereunder to Buyer to the extent necessary to withhold an amount equal to the higher of (i) *** of any amounts payable to Buyer hereunder in respect of that portion of each of AHP Net Sales and Pfizer Net Sales, as applicable, in excess of $*** per year with respect to each individual

lasofoxifene product or Product (as defined in the AHP Agreement) containing bazedoxifene (for the avoidance of doubt, Seller shall have no right to withhold amounts payable to Buyer hereunder with respect to the initial $*** in AHP Net Sales or Pfizer Net Sales, as applicable, in any year with respect to each individual lasofoxifene product or Product (as defined in the AHP Agreement) containing bazedoxifene), or (ii) *** of any amounts payable to Buyer hereunder in respect of aggregate AHP Net Sales and Pfizer Net Sales in excess of $*** per year with respect to all lasofoxifene products and Products (as defined in the AHP Agreement) containing bazedoxifene (for the avoidance of doubt, Seller shall have no right to withhold amounts payable to Buyer hereunder with respect to the initial $*** in aggregate AHP Net Sales or Pfizer Net Sales, as applicable, in any year with respect to all lasofoxifene products and Products (as defined in the AHP Agreement) containing bazedoxifene). For avoidance of doubt, the reductions by Seller in clauses (i) and (ii) in the preceding sentence shall only apply to this option, and shall not apply to any other options, exercised or unexercised, held by Buyer.

(4) With respect to this option only, to the extent that the first of either AHP or Pfizer, as applicable, receives from the U.S. Food and Drug Administration (the "FDA") a notification of approval of a New Drug Application relating to a lasofoxifene product or any Product (as defined in the AHP Agreement) containing bazedoxifene prior to March 30, 2005, and notwithstanding any Exercise Notice received prior to such date, the Exercise Date shall be the earlier of (a) the date that is thirty days after the date of such notification and (b) April 30 2005, and the Notice Date shall be any date that is at least ten Business Days prior to the Exercise Date. Seller shall promptly provide Buyer with a written copy of the FDA's notification of approval or, in the event a copy of the FDA's official approval is not promptly available, Seller may in lieu thereof provide a copy of Pfizer's or AHP's press release or other evidence providing reasonable assurance to Buyer that the relevant event has occurred.

Notwithstanding the foregoing, with respect to this option only, if Phase III clinical data relating to a lasofoxifene product or any Product (as defined in the AHP Agreement) containing bazedoxifene is not released by AHP or Pfizer, as applicable, prior to March 31, 2004, (a) the Exercise Date shall be the date that is thirty calendar days after the first date that either AHP or Pfizer, as applicable, receives from the FDA a notification of approval of a New Drug Application relating to a lasofoxifene product or any Product (as defined in the AHP Agreement) containing bazedoxifene, and the Notice Date shall be any date that is at least ten Business Days prior to the Exercise Date, and (b) Seller shall reduce payments due hereunder to Buyer to the extent necessary to withhold an amount equal to the higher of (i) *** of any amounts payable to Buyer hereunder in respect of that portion of each of AHP Net Sales and Pfizer Net Sales, as applicable, in excess of $*** per year with respect to each individual lasofoxifene product or Product (as defined in the AHP Agreement) containing bazedoxifene (for the avoidance of doubt, Seller shall have no right to withhold amounts payable to Buyer hereunder with respect to the initial $*** in AHP Net Sales or Pfizer Net Sales, as applicable, in any year with respect to each individual lasofoxifene product or Product (as defined in the AHP Agreement) containing bazedoxifene), or (ii) *** of any amounts payable to Buyer hereunder in respect of that portion of each of aggregate AHP Net Sales and Pfizer Net Sales in excess of $*** per year with respect to all lasofoxifene products and Products (as defined in the AHP Agreement) containing bazedoxifene (for the

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avoidance of doubt, Seller shall have no right to withhold amounts payable to Buyer hereunder with respect to the initial $*** in aggregate AHP Net Sales or Pfizer Net Sales, as applicable, in any year with respect to all lasofoxifene products and Products (as defined in the AHP Agreement) containing bazedoxifene). For avoidance of doubt, the reductions by Seller in clauses (i) and (ii) in the preceding sentence shall only apply to the this option, and shall not apply to any other options, exercised or unexercised, held by Buyer."

2. REPRESENTATIONS AND WARRANTIES. Seller hereby makes the representations and warranties made to Buyer in Sections 3.01, 3.02, 3.03 and 3.04 of the Purchase Agreement with respect to this Amendment to the same extent made in the Purchase Agreement with respect to such Purchase Agreement; Buyer hereby makes the representations and warranties made to Seller in Sections 4.01, 4.02, 4.03 and 4.04 of the Purchase Agreement with respect to this Amendment to the same extent

made in the Purchase Agreement with respect to such Purchase Agreement.

3. DEFINITIONS. All capitalized terms used but not defined herein shall have the respective meanings ascribed to them in the Purchase Agreement.

4. GOVERNING LAW. This Amendment shall be governed construed in accordance with and governed by the law of the State of New York.

5. ENTIRE AGREEMENT. The Purchase Agreement, as amended hereby, constitutes the full and entire understanding between the parties regarding the subject matter herein. Except as otherwise expressly provided herein, the provisions hereof shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

6. FULL FORCE AND EFFECT. Except as amended hereby, the Purchase Agreement shall remain in full force and effect.

7. COUNTERPARTS. This Amendment may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Amendment shall become effective when each party hereto shall have received a counterpart hereof signed by the other party hereto.

8. CAPTIONS. The titles and captions herein are included for convenience of reference only and shall be ignored in the construction or interpretation hereof.

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***Portions of this page have been omitted pursuant to a request for Confidential Treatment and filed separately with the Commission.

IN WITNESS WHEREOF, the parties hereof have caused this Amendment to be duly executed and delivered as a deed by their respective authorized officers of the day and year first written above.

LIGAND PHARMACEUTICALS INCORPORATED

By: /S/ WARNER BROADDUS

Name: WARNER R. BROADDUS

Title: VP & GENERAL COUNSEL

ROYALTY PHARMA FINANCE TRUST

By: RP Management LLC, as Administrator

/S/ PABLO LEGORRETA
- ---
Pablo Legorreta, Member

EXHIBIT 10.266

MANUFACTURE AND SUPPLY AGREEMENT

This Manufacture and Supply Agreement (hereinafter called "Agreement") is made and entered into as of the date of last signature below and is effective as of the 1st day of January, 2004 (the "Effective Date"), by and among

SERAGEN, INC., a corporation organized and existing under the laws of Delaware and having its principal place of business at 10275 Science Center Drive, San Diego, California 92121 (hereinafter called "SERAGEN") and

CAMBREX BIO SCIENCE HOPKINTON, INC., a corporation organized and existing under the laws of Delaware and having a principal place of business at 97 South Street, Hopkinton, MA 01748 (hereinafter called "CBSH").

WHEREAS, SERAGEN has developed a biological entity designated as DAB389IL-2, prepared as a purified drug substance; and

WHEREAS, SERAGEN desires to have CBSH (a) manufacture, store, test and supply Fermentation Pellets, First Gen PDS and Second Gen PDS (each as defined below), (b) test First Gen FDP and Second Gen FDP (each as defined below), and (c) perform stability testing on Fermentation Pellets, First Gen PDS, Second Gen PDS, First Gen FDP and Second Gen FDP, and (d) perform any and all services as described in Article II of this Agreement, all in accordance with cGMP; and

WHEREAS, SERAGEN may, from time to time, desire to purchase from CBSH additional services such as, but not limited to, cell line stock storage, supplemental Fermentation Pellets, First Gen PDS and Second Gen PDS storage and regulatory/CMC consulting, all in accordance with cGMP; and

WHEREAS, CBSH is willing to (a) undertake the manufacture, storage, testing and supply of Fermentation Pellets, First Gen PDS and Second Gen PDS, (b) test First Gen FDP and Second Gen FDP, (c) perform stability testing on Fermentation Pellets, First Gen PDS, Second Gen PDS, First Gen FDP and Second Gen FDP, and (d) perform services as described above according to the terms, conditions and covenants hereinafter set forth.

NOW, THEREFORE, the parties hereto, in consideration of the promises and the mutual covenants and agreements contained herein, the sufficiency of which are hereby acknowledged, agree as follows:

ARTICLE I

DEFINITIONS

1.0 DEFINED TERMS. In addition to terms otherwise defined in this Agreement, the following terms have the specified meanings for purposes of this Agreement:

1.01 "Affiliate" shall mean any corporation, firm, partnership, individual or other form of business organization which is now or hereafter owned or controlled by a Party or, any corporation in which a Party owns at least fifty percent (50%) of the stock entitled to vote for directors or otherwise controls the election of directors, and any corporation, firm, partnership, individual or other form of business organization in which a Party has the maximum ownership interest it is permitted to have in the country where such business organization exists.

1.02 "Batch" shall mean:

For First Gen PDS: the total amount of PDS from the purification of a single Fermentation Pellet resulting in not less than *** of DAB389IL-2; and

For Second Gen PDS: the total amount of PDS from the purification of *** Fermentation Pellets resulting in not less than the minimum validated yield for DAB389IL-2 as shall be set forth on two (2) schedules to be proposed by SERAGEN and mutually agreed upon by the Parties and thereafter attached to this Agreement (and made a part thereof); a separate schedule shall be proposed,

agreed and attached for each of (i) clinical and commercial Batches of Second Gen PDS and (ii) development and validation Batches of Second Gen PDS; and

For Fermentation Pellets: A minimum of *** pellets resulting in not less than *** grams of total protein per pellet according to validated procedures then in effect.

1.03 "Batch Acceptance Date" shall mean the later of (a) the date set forth on the applicable purchase order or (b) thirty (30) days after SERAGEN's receipt of all MRR Documentation, subject to the acceptance and rejection procedures set forth in Sections 2.14(a) and 2.14(c).

1.04 "Certificate of Analysis" means the form listing: the name and CBSH part number of the applicable Product, SERAGEN's name, all tests performed on such Product as specified in the current Specifications for such Product, each test method, each test specification and the reported assay result for each test.

1.05 "cGMP" shall mean as of the Effective Date of this Agreement, the current good manufacturing practices standards required by the FDA, as set forth in Title 21 C.F.R., Parts 210, 211 and 600 as applicable, in the United States Food and Drug Act, as amended, the good manufacturing practices required by the EMEA, as set forth in the European Rules and Guidances for Pharmaceutical Manufacturers and Distributors and/or the European Good Manufacturing Guidances, Rules and Directives, or the applicable FDA and EMEA regulations, policies or guidelines in effect, at the time of manufacture, for the manufacture and testing of pharmaceutical materials as applied to bulk pharmaceuticals and/or biologics.

1.06 "DAB389IL-2" shall mean a fusion protein developed by SERAGEN and sold in the United States under the trademark ONTAK(R) comprising the first 389 amino acids of the A and B fragments of the diphtheria toxin combined with interleukin-2.

1.07 "EMEA" shall mean the European Agency for the Evaluation of Medicinal Products.

***Portions of this page have been omitted pursuant to a request for Confidential Treatment and filed separately with the Commission.

1.08 "Facility" shall mean the testing and manufacturing facility at 97 South Street, Hopkinton, Massachusetts 01748 and the warehouse facility located at 99 South Street, Hopkinton, Massachusetts 01748.

1.09 "FDA" shall mean the United States Food and Drug Administration.

1.10 "Fermentation Pellet" shall mean the inclusion body preparation of unpurified DAB389IL-2 protein produced from the growth and induction of the DAB389IL-2 working cell bank.

1.11 "First Gen FDP" shall mean the final drug product processed and/or packaged in its final dosage form resulting from formulation and fill of First Gen PDS and whose samples are received by CBSH under CBSH part #90-204-02.

1.12 "First Gen PDS" shall mean DAB389IL-2 prepared as a purified drug substance and ready for fill/finish by SERAGEN, manufactured by CBSH pursuant to the applicable Manufacturing and Release Requirements set forth in the Production Record and in CBSH part #60-104.

1.13 "Food and Drug Act" shall mean the Food, Drug and Cosmetic Act, as set forth in 21 U.S.C. 301-391.

1.14 "Intellectual Property" shall mean all know-how, copyrights, designs, databases, mask works, patents, trademarks, trade names and other proprietary data and rights, and all registrations and applications therefor.

1.15 "Lot" shall mean, as applicable, (i) the total number of vials of First Gen FDP and Second Gen FDP resulting from a single fill and finishing process or (ii) the total number of vials qualified as part of a reference standard

qualification or re-qualification.

1.16 "Manufacturing and Release Requirements" shall mean any and all Specifications and release requirements mutually agreed on between the Parties for Fermentation Pellets, First Gen PDS, or Second Gen PDS as the case may be, and as to each, its manufacture, including, without limitation, all raw materials, solvents, reagents, processing, storage, shipping and packaging specifications and necessary test protocols, release specifications, Certificates of Analysis and other documentation required to describe, control and assure the quality manufacture and testing of each in compliance with the applicable Regulatory Requirements, all as contained in the Production Record or the MRR Documentation and any SOPs which govern the manufacture, storage, handling and testing of each.

1.17 "MRR Documentation" means all production and release documentation as described in Exhibit "A".

1.18 "Party" or "party" shall mean either SERAGEN or CBSH, and the terms "Parties" or "parties" shall, as appropriate, mean SERAGEN and CBSH.

1.19 "Process Improvements" shall mean any improvement made to the method of manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS.

1.20 "Product" shall mean Fermentation Pellets, First Gen PDS, Second Gen PDS, First Gen FDP and/or Second Gen FDP.

1.21 "Product Intellectual Property" shall mean all Intellectual Property which is specifically related to the Product and its method of manufacture, including Process Improvements which are specifically related to the Product. Product Intellectual Property shall not include Intellectual Property (including Process Improvements) that relates generally to the development and manufacture of biopharmaceuticals and that has application to and or value for developing and manufacturing biopharmaceuticals other than the Product.

1.22 "Production Record" means the documentation that contains a detailed description of the manufacturing process for Fermentation Pellets, First Gen PDS or Second Gen PDS, as the case may be, and any other instructions to be followed by CBSH in the production of Fermentation Pellets, First Gen PDS and/or Second Gen PDS.

1.23 "Regulatory Agency" shall mean, as of the Effective Date of this Agreement, the regulatory agencies with authority over the manufacture, testing and/or shipment of Product, and as further defined or supplemented pursuant to Exhibit "D".

1.24 "Regulatory Requirements" means the cGMP in effect at the particular time, issued or required by the Regulatory Agency for the methods to be used in, and the facilities and controls to be used for, the manufacture, processing, packaging and storage of the manufactured Product.

1.25 "Second Gen FDP" shall mean the final drug product processed and/or packaged in its final dosage form resulting from formulation and fill of Second Gen PDS and whose samples are received by CBSH under CBSH part #90-304-02.

1.26 "Second Gen PDS" shall mean DAB389IL-2 prepared as a purified drug substance and ready for formulation, fill and finish by SERAGEN, manufactured by CBSH pursuant to the applicable Manufacturing and Release Requirements set forth in the Production Record and in CBSH part #60-304.

1.27 "SERAGEN Authorized Personnel" shall mean SERAGEN or Ligand Pharmaceuticals Incorporated personnel set forth on attached Exhibit "F."

1.28 "Shipment Date" shall mean the date designated by SERAGEN in writing upon which Fermentation Pellets, First Gen PDS and/or Second Gen PDS will be delivered by CBSH to SERAGEN's designated carrier.

1.29 "SOPs" shall mean standard operating procedures related to the Product and the process of manufacturing the Product, as approved by both SERAGEN and CBSH.

1.30 "Specifications" shall mean any and all specifications mutually agreed on between the Parties for the manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS, including, without limitation, all raw materials, solvents, reagents and processing specifications contained within the MRR Documentation and part of the Manufacturing and Release Requirements.

1.31 "Summary of Testing" shall mean the form that is used to report the results of testing for which there are no corresponding Specifications or for First Gen FDP and/or Second Gen FDP which is not released by CBSH; the responsibility for release of such First Gen FDP and/or Second Gen FDP rests with SERAGEN.

ARTICLE II

MANUFACTURE AND SUPPLY OF FERMENTATION PELLETS, FIRST GEN PDS, AND SECOND GEN PDS AND RELATED SERVICES

2.01 MANUFACTURE AND SUPPLY OF FERMENTATION PELLETS, FIRST GEN PDS AND/OR SECOND GEN PDS. CBSH shall, from time to time, as requested by SERAGEN, manufacture and supply to SERAGEN Fermentation Pellets, First Gen PDS and/or Second Gen PDS produced, tested and packaged according to the Manufacturing and Release Requirements under the terms and conditions of this Agreement, and in accordance with all Regulatory Requirements.

2.02 VALIDATION REQUIREMENTS.

(a) SECOND GENERATION VALIDATION. CBSH shall provide validation for all equipment, manufacturing processes and procedures, cleaning processes and procedures, and analytical test methodologies (together "Equipment and Procedures") which are used in the manufacture and testing of Second Gen PDS and testing of Second Gen FDP, in accordance with a mutually agreed-upon validation plan according to the rates set forth in Exhibit "C".

(b) MAINTENANCE OF CURRENT & FUTURE VALIDATIONS. CBSH shall use commercially reasonable efforts to maintain the current and all future validations for all Equipment and Procedures which are used in the manufacture and testing of Fermentation Pellets, First Gen PDS and/or Second Gen PDS and testing of First Gen FDP and/or Second Gen FDP. CBSH shall use commercially reasonable efforts to maintain such validations in accordance with cGMP.

(c) ADDITIONAL VALIDATIONS. Additional validations that may be requested by SERAGEN (i) in connection with the manufacture and testing of Fermentation Pellets, First Gen PDS, Second Gen PDS, First Gen FDP and/or Second Gen FDP or (ii) to comply with the Regulatory Requirements of a Regulatory Agency, will be executed as described in the terms and conditions of this Agreement. All such additional validations will be performed in accordance with the Additional Services rates set forth in Exhibit "B". Any other additional validations not covered by this Section 2.02(c) shall be at CBSH's cost and expense.

2.03 REGULATORY INSPECTIONS. CBSH shall prepare for, submit to and endeavor to pass all inspections deemed necessary by the Regulatory Agencies, and both Parties shall cooperate to allow CBSH to promptly correct all deficiencies, and both Parties shall cooperate, such that CBSH is able to timely manufacture and supply Fermentation Pellets, First Gen PDS and/or Second Gen PDS for SERAGEN. Cost for such preparations, inspections and corrective actions

for Fermentation Pellets, First Gen PDS, and/or Second Gen PDS-related inspections will be in accordance with the Additional Services rates set forth in Exhibit "B".

2.04 DEVIATIONS & INVESTIGATIONS. SERAGEN shall be notified in writing of all process deviations, manufacturing failures, errors/accidents and out-of-specification results, which are significant in each case, within one (1) working day of CBSH's knowledge of such. For purposes of this Section 2.04, all such notifications must be made by facsimile transmission to the current "Director, Quality Assurance & Compliance" for Ligand Pharmaceuticals Incorporated ("LIGAND") and LIGAND quality assurance (quality assurance hereinafter referred to as "QA"), which shall be deemed received upon confirmation of facsimile transmission, and those notice provisions set forth in Section 10.01 shall not be applicable. SERAGEN and CBSH shall agree on the scope and timing of resulting investigations as well as process changes for any subsequent Batches, all as consistent with cGMP and/or Regulatory Requirements.

2.05 RELEASE TESTING. CBSH shall, from time to time as requested by SERAGEN, perform analytical release testing using validated procedures for First Gen FDP and Second Gen FDP according to SOPs. CBSH shall perform the work detailed in all SOPs under cGMP conditions, and shall perform the work as detailed in the SOPs within the time defined in the SOP, including laboratory testing, QA review of data and final report. In the event that SERAGEN requests a repeat of a test, and the request is in accordance with CBSH's retest policy, CBSH shall begin the work within one (1) week of the request, and complete the work within the time specified in the SOPs. In the event that analytical results fail to meet Specifications or acceptance criteria as defined in the SOPs or Manufacturing and Release Requirements, CBSH will undertake any resulting investigations and other action required as per cGMP and CBSH internal standard operating procedures or protocols. Any investigations other than those required by cGMP and/or CBSH internal standard operating procedures or protocols and if requested by SERAGEN will be performed in accordance with the Additional Services rates set forth in "Exhibit B." Although CBSH will be performing First Gen FDP and Second Gen FDP release testing, SERAGEN is, and at all times will remain, responsible for final release of the First Gen FDP and Second Gen FDP for sale and/or use. CBSH assumes no responsibility or liability whatsoever related to final release of First Gen FDP and Second Gen FDP for sale and/or use.

2.06 STABILITY TESTING. CBSH shall, from time to time, as requested by SERAGEN, perform stability testing using validated procedures for First Gen FDP, Second Gen FDP, Fermentation Pellets, First Gen PDS and/or Second Gen PDS, according to SOPs. CBSH shall perform the work detailed in all SOPs or protocols under cGMP conditions, and shall perform the work as detailed in the SOPs or protocols within the time defined in the SOP or protocol, including laboratory testing, QA review of data and final report. In the event that SERAGEN requests a repeat of a test/SOP or protocol, CBSH shall begin the work within one (1) week of the request, and complete the work within the time specified in the SOPs or protocols. In the event that stability test results fail to meet Specifications or acceptance criteria as defined in the SOPs, protocols, or Manufacturing and Release Requirements, CBSH will undertake any resulting investigations and other action required as per cGMP and CBSH internal standard operating procedures or protocols. Any stability testing or investigations other than those required by cGMP and/or CBSH internal standard operating procedures or protocols and if requested by

SERAGEN will be performed in accordance with the Additional Services rates set forth in "Exhibit B."

2.07 FORECASTS. SERAGEN will provide CBSH with an initial preliminary non-binding forecast for production of Fermentation Pellets, First Gen PDS and/or Second Gen PDS, covering the calendar year 2004, no later than ten (10) business days following the date of last signature below. Thereafter, on or before each December 31st (as to July through December of the following calendar year) and June 30th (as to January through June of the following calendar year) during the Term of the Agreement, SERAGEN will provide CBSH with a twelve (12) month preliminary non-binding forecast for production of Fermentation Pellets, First Gen PDS and/or Second Gen PDS. CBSH shall notify SERAGEN within ten (10) business days of receipt of each forecast if it anticipates that it will be unable to meet any or all of the last six (6) months of the forecasted requirements, provided however, that failure to make such notification will not obligate CBSH to supply amounts of Fermentation Pellets, First Gen PDS and/or Second Gen PDS beyond the limitations set forth below in Section 2.08.

2.08 PURCHASE ORDERS. SERAGEN will provide CBSH with the initial binding purchase order for production of Fermentation Pellets, First Gen PDS and/or Second Gen PDS requirements, covering the first six (6) months of calendar year 2004 and providing CBSH with no less than six (6) months lead time on the first proposed Batch Acceptance Date, no later than ten (10) business days following the date of last signature below. Thereafter, on or before each December 31st (as to July through December of the following calendar year) and June 30th (as to January through June of the following calendar year) during the Term of the Agreement, SERAGEN will provide CBSH with a six (6)-month binding purchase order for production of Fermentation Pellets, First Gen PDS and/or Second Gen PDS requirements. All binding purchase orders submitted by SERAGEN for manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS must contain Batch Acceptance Date(s) for such Fermentation Pellets, First Gen PDS and/or Second Gen PDS within the relevant time period covered by such purchase order. If CBSH is unable to meet a Batch Acceptance Date, CBSH shall notify SERAGEN within ten (10) business days of receipt of a purchase order and CBSH and SERAGEN shall work together, in good faith, to set an amended Batch Acceptance Date which is acceptable to both Parties. SERAGEN shall provide CBSH with a binding purchase order for First Gen FDP and/or Second Gen FDP release/stability testing and/or Fermentation Pellets, First Gen PDS and/or Second Gen PDS stability testing at least one (1) month prior to the scheduled initiation of the testing.

If SERAGEN requires additional manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS before or during any period that is over and above the quantity specified in the binding purchase order for such period, SERAGEN shall submit additional purchase order(s) for such additional Fermentation Pellets, First Gen PDS and/or Second Gen PDS. Such additional purchase orders shall be submitted to CBSH as soon as SERAGEN becomes aware of such additional quantity needs, but no later than ninety (90) days prior to the Batch Acceptance Date set forth in a binding purchase order for that additional quantity. CBSH will use commercially reasonable efforts to fulfill such additional purchase orders, but, subject to the foregoing, CBSH is under no obligation to accept and/or to fulfill any additional purchase order(s) for Fermentation Pellets, First Gen PDS and/or Second Gen PDS to the extent such purchase order(s), (i) when aggregated with previously received purchase orders for such period, exceeds

by more than *** the amounts set forth in the binding portion of the forecast related to such period and submitted in accordance with Section 2.07, or (ii) cannot be filled due to circumstances arising under Section 10.10. CBSH shall notify Seragen in writing within ten (10) business days of receipt of any such additional purchase order(s) which CBSH rejects and/or will be unable to fulfill. If such notice is not received by SERAGEN within ten (10) business days of CBSH's receipt of such additional purchase order(s), the additional purchase order(s) shall be deemed accepted by CBSH.

CBSH shall notify SERAGEN, within ten (10) business days of receipt of a purchase order, of the scheduled commencement date for manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS.

Purchase orders shall be submitted by LIGAND on behalf of SERAGEN in substantially the form shown on Exhibit "E" hereto. In the event of a conflict between the terms and conditions listed on the reverse side of the purchase order and this Agreement, this Agreement shall govern. Unless otherwise noted on the face of such form, the Batch Acceptance Date shall appear under the title "Delivery Date".

2.09 SUPPLY AND STORAGE OF MATERIALS. CBSH shall be responsible for planning, ordering and maintaining an adequate supply of components, supplies, raw materials and reagents meeting the Specifications that are necessary to manufacture Fermentation Pellets, First Gen PDS and/or Second Gen PDS and to provide the services as described in this Agreement. Reference standard and controls qualification, maintenance and storage will be provided by CBSH in accordance with cGMP and all other Regulatory Requirements. Reference standard and controls qualifications shall be provided in accordance the applicable rates set forth in Exhibit "B." Further, CBSH shall provide facilities to adequately store and maintain all raw materials, reagents, and intermediates in accordance with Specifications. CBSH shall ensure that appropriate diligence, caution and management are taken in CBSH's storage and control of key cell lines and other reagents owned by SERAGEN which are directly related to the testing of First Gen

FDP and/or Second Gen FDP and Fermentation Pellets, First Gen PDS and/or Second Gen PDS, such as, but not limited to, applicable cell lines and antibodies.

2.10 STORAGE OF FERMENTATION PELLETS, FIRST GEN PDS AND/OR SECOND GEN PDS. CBSH will store Fermentation Pellets if manufactured by CBSH under a purchase order in accordance with Section 2.08 and up to an amount necessary to manufacture a twelve (12)-months' supply of First Gen PDS and Second Gen PDS, as determined by the forecast submitted for such period, plus a *** safety stock. In addition, CBSH will store First Gen PDS and Second Gen PDS for up to twelve (12) months following the applicable Batch Acceptance Date. CBSH may store quantities of Fermentation Pellets, First Gen PDS or Second Gen PDS in excess of those set forth above and/or may store such for periods of time in excess of those set forth above at the storage rates set forth in Exhibit "B."

2.11 MANUFACTURING PROCESS CHANGES. Manufacturing and Release Requirements cannot be changed unless agreed to in a dated, written document signed by the Parties and incorporated into the Production Record. In addition, if any Regulatory Agency having jurisdiction in any country where SERAGEN is selling First Gen FDP and/or Second Gen FDP requires any changes to the Fermentation Pellets, First Gen PDS and/or Second Gen PDS Specifications,

***Portions of this page have been omitted pursuant to a request for Confidential Treatment and filed separately with the Commission.

CBSH shall make reasonable efforts to make the required changes per section 3.02, so long as such changes do not conflict with cGMP. In the event amendments or supplements are required to the Specifications for the purpose of complying with current Regulatory Requirements, the Parties shall mutually agree on appropriate amendments or supplements and shall incorporate or include such amendment or supplement in or as part of the Production Record. Such activities shall be additional services if they are requested by SERAGEN (i) in connection with the manufacture and testing of Fermentation Pellets, First Gen PDS, Second Gen PDS, First Gen FDP and/or Second Gen FDP or (ii) to comply with the Regulatory Requirements of a Regulatory Agency, and will be performed in accordance with the Additional Services rates set forth in Exhibit "B".

2.12 PROCESS IMPROVEMENTS. Each of CBSH and SERAGEN shall have the right to request changes to implement Process Improvements or to reduce the cost of manufacturing at the Facility, by written notice delivered to the other party. CBSH and SERAGEN shall meet as soon as possible after such notification to discuss such changes, the cost impact of such changes and the continued provision of Fermentation Pellets, First Gen PDS and/or Second Gen PDS under this Agreement. No change shall be implemented by CBSH or SERAGEN, whether requested by either of the parties or requested or required by a Regulatory Agency and/or a governmental agency, until the Parties have agreed in writing to such change. Under no circumstances shall this section be construed to require either Party to agree to changes that do not comply with cGMP. Such activities shall be additional services if they are requested by SERAGEN (i) in connection with the manufacture and testing of Fermentation Pellets, First Gen PDS, Second Gen PDS, First Gen FDP and/or Second Gen FDP or (ii) to comply with the Regulatory Requirements of a Regulatory Agency, and will be performed in accordance with the Additional Services rates set forth in Exhibit "B".

2.13 QUALITY CONTROL AND QUALITY ASSURANCE. CBSH shall conduct quality control testing and release of Fermentation Pellets, First Gen PDS and/or Second Gen PDS (hereafter referred to as "CBSH QA Release") to SERAGEN or SERAGEN's designated carrier for further processing by SERAGEN in accordance with (a) the methods and procedures described in the Manufacturing and Release Requirements, and (b) current Regulatory Requirements. Shipment by SERAGEN's designated carrier of Fermentation Pellets, First Gen PDS and/or Second Gen PDS shall not occur unless and until (i) CBSH QA Release of the Fermentation Pellets, First Gen PDS and/or Second Gen PDS has occurred, (ii) Batch acceptance of such Fermentation Pellets, First Gen PDS and/or Second Gen PDS has occurred in accordance with Section 2.14(a) and (iii) the occurrence of the designated Shipment Date. Batch acceptance by SERAGEN will be based solely upon SERAGEN's review of the complete MRR Documentation supplied by CBSH and SERAGEN's internal standard operating procedures related to the manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS or otherwise in accordance with Section 2.14(a). CBSH

shall retain all records pertaining to testing as required by cGMP.

2.14 NON-CONFORMING MANUFACTURED PRODUCT.

(a) REJECTION BY SERAGEN. CBSH shall provide SERAGEN's QA and Compliance department with copies of completed MRR Documentation listed in Exhibit "A", and shall endeavor to do so within ten (10) business days of CBSH QA Release of Fermentation Pellets, First Gen PDS and/or Second Gen PDS.

Within thirty (30) days after SERAGEN's receipt of all MRR Documentation, SERAGEN shall determine by review of the MRR Documentation whether or not, in SERAGEN's sole opinion, the given Batch of Fermentation Pellets, First Gen PDS and/or Second Gen PDS conforms to the Manufacturing and Release Requirements, and was manufactured in accordance with cGMP; provided that CBSH provides timely answers to information requests and resolution of issues arising from SERAGEN's review of MRR Documentation. If within the thirty (30) day period, SERAGEN QA makes a determination that SERAGEN believes the Batch to be nonconforming, SERAGEN shall have the right to reject the Batch in its entirety and shall notify CBSH in writing within the thirty (30) day period. If SERAGEN does not submit written notice of rejection within such thirty (30) day period, the Batch will be deemed accepted by SERAGEN. In the event that SERAGEN desires to accept the Batch prior to the end of the thirty (30) day period, SERAGEN will fax a signed Batch acceptance form specifying the new Batch Acceptance Date(s) to CBSH's Director of QA. Any dispute between CBSH and SERAGEN as to whether or not a Batch that has been rejected by SERAGEN is nonconforming will be resolved in accordance with the procedures set forth in Section 2.14(c). Replacement of a non-conforming Batch shall be in accordance with Section 2.14(d).

(b) REJECTION BY CBSH. CBSH shall notify SERAGEN promptly of rejection of a Batch by CBSH QA or any delay or irregularity encountered during manufacture which could lead to a rejection per SOPs. Any dispute between CBSH and SERAGEN as to whether or not a Batch that been rejected by CBSH is nonconforming will be resolved in accordance with the procedures set forth in Section 2.14(c). Replacement of a non-conforming Batch shall be in accordance with Section 2.14(d).

(c) RESOLUTION OF DISPUTES. In the event of a dispute between the Parties over the validity of a Batch rejection for non-conformance of Fermentation Pellets, First Gen PDS and/or Second Gen PDS pursuant to Section 2.14(a), the Parties agree to submit a representative sample of the rejected Batch to a qualified independent cGMP test facility to be agreed upon by the Parties, and to accept the results of the testing performed by that facility as binding with regard to that Batch. The testing procedures utilized must be formally transferred and qualified and/or validated at the independent test facility prior to the independent testing facilities commencement of the testing. In the event that the independent test facility confirms that a Batch was improperly rejected, all expenses related to such testing shall be borne by SERAGEN. In the event that the independent testing facility confirms that a Batch was properly rejected, all expenses related to such testing shall be borne by the Party deemed responsible for such non-conformance per Section 2.14(d). The Parties agree to make good faith efforts to resolve disputes regarding non-conformance of Fermentation Pellets, First Gen PDS and/or Second Gen PDS, including disputes regarding the source of or cause of any non-conformance, within sixty (60) days of initiation of the dispute.

In the event that the Parties cannot resolve a dispute regarding (i) the cause of a

Batch's non-conformance with Fermentation Pellet, First Gen PDS

and/or Second Gen PDS Specifications and/or failure to meet the Manufacturing and Release Requirements, (ii) conformance of a Batch with cGMP, or (iii) conformance of a Batch with the required MRR Documentation, the Parties shall submit the issue to a mutually agreed upon arbitrator. Such arbitrator, employing the Commercial Arbitration rules of the American Arbitration Association, will determine whether the Batch was produced in conformity with cGMP and/or whether CBSH personnel followed and executed the Production Record and required MRR Documentation as written and approved by both Parties. The findings of the arbitrator shall be binding on the Parties. CBSH shall bear such expenses of the arbitration proceeding if and only if the findings of the arbitrator confirm the Fermentation Pellets' First Gen PDS's and/or Second Gen PDS's nonconformity with cGMP and/or a failure of CBSH personnel to follow and execute the Production Record and required MRR Documentation as written and approved by both Parties, and SERAGEN shall bear such expenses if the findings of the arbitrator confirm that the Fermentation Pellets, First Gen PDS and/or Second Gen PDS were manufactured in accordance with cGMP and/or that CBSH personnel followed and executed the Production Record and required MRR Documentation as written and approved by both Parties.

(d) REPLACEMENT OF NONCONFORMING PRODUCT. Fermentation Pellets, First Gen PDS and/or Second Gen PDS. In the event that SERAGEN and CBSH mutually agree or an arbitrator determines, pursuant to Section 2.14(c), that a Batch of Fermentation Pellets, First Gen PDS and/or Second Gen PDS is non-conforming due to (i) the failure of CBSH personnel or subcontractors to follow cGMP, (ii) the failure of CBSH personnel or subcontractors to follow and execute the Production Record and required MRR documentation as written and approved by both Parties, (iii) the failure of the Facility equipment or utilities, (iv) the failure or non-conformance of the raw materials with SOPs or Specifications, (v) the breach of CBSH's obligations, representations or warranties hereunder or (vi) the acts or omissions of CBSH's subcontractors, CBSH shall replace all such Batches at its expense, reimburse SERAGEN for the cost of the Fermentation Pellets used in the manufacture of the nonconforming First Gen PDS and/or Second Gen PDS at the cost paid by SERAGEN for such pellets, and shall reimburse SERAGEN for any reasonable charges incurred by SERAGEN for shipping or storage, if applicable, of the nonconforming Batch. SERAGEN and CBSH shall promptly and mutually agree upon new dates for the initiation and completion, by CBSH, of the manufacture of a replacement Batch of Fermentation Pellets, First Gen PDS and/or Second Gen PDS, if required to meet any outstanding purchase order(s). Notwithstanding the foregoing, CBSH shall have no obligation to manufacture a replacement Batch, and shall have no liability to SERAGEN whatsoever, unless it is determined in accordance with the procedures set forth in Section 2.14(c) that any one of any combination of events set forth in subsections (i) through (vi) of this Section 2.14(d) have resulted in the Batch of Fermentation Pellets, First Gen PDS and/or Second PDS being non-conforming. SERAGEN acknowledges and agrees that, except for the indemnifications provided in Article VII hereunder, its sole remedy with respect to nonconforming Fermentation Pellets, First Gen PDS

and/or Second Gen PDS is as set forth in this Section 2.14, and in furtherance thereof, SERAGEN hereby waives all other remedies at law or in equity regarding the foregoing claims.

In the event that a replacement Batch is commenced prior to a final determination, in accordance with Section 2.14(c), as to the cause of a non-conforming Batch, and the Parties subsequently determine that the replacement Batch is not required, SERAGEN will bear the costs associated with the manufacture of the replacement, up to the time of such determination. SERAGEN and CBSH will negotiate in good faith, terms for the continuance or discontinuation of the manufacture of any such replacement Batch.

(e) DESTRUCTION OF NONCONFORMING PRODUCT. Fermentation Pellets, First Gen

PDS and/or Second Gen PDS. CBSH shall destroy, after thorough investigation and upon determination that no further action can be taken, all Fermentation Pellets, First Gen PDS and/or Second Gen PDS in CBSH's possession, which is deemed to be nonconforming in accordance with Section 2.14(c) and upon written authorization from SERAGEN Destruction shall be in accordance with all applicable laws and regulations (including without limitation, environmental laws and regulations) and in a manner to which SERAGEN has given its prior written approval. Such Fermentation Pellets, First Gen PDS and/or Second Gen PDS shall not be sold, reprocessed, salvaged, reclaimed or otherwise reused in any manner by CBSH. SERAGEN, or its designees, shall return all non-conforming Batches to CBSH, whose non-conformance is attributable to CBSH in accordance with Sections 2.14 (c & d), for destruction at CBSH's expense. The cost and expense of the destruction of Batches determined to be nonconforming in accordance with Sections 2.14 (c & d), whose nonconformance is not attributable to CBSH, shall be the sole responsibility of SERAGEN. Representatives of SERAGEN shall be permitted to witness the destruction of nonconforming Fermentation Pellets, First Gen PDS and/or Second Gen PDS under this section, and shall receive from CBSH proof of such destruction, upon written request.

2.15 ADDITIONAL SERVICES; PROJECT SCOPE CHANGE ORDER PROCESS. Services in addition to those described elsewhere in Article II (such as but not limited to: cell line stock storage and regulatory/CMC consulting) may be requested of CBSH from time to time by SERAGEN. All additional services requested by SERAGEN in accordance with this Agreement will be provided by CBSH in accordance with cGMP and all other Regulatory Requirements as applicable. Requests for such additional services must be submitted in writing by SERAGEN to CBSH, and, specifications, procedures, processes and other related activities must be mutually agreed upon by both Parties prior to commencement of those services by CBSH. Pricing for such services shall be billed at the applicable rates set forth in Exhibit "B". In addition, any project scope change orders or requests for additional services shall be mutually agreed to by the Parties, and implemented pursuant to a Manufacturing Services Agreement: Additional Services Quotation attached to this Agreement as Exhibit "H". In addition, if the project scope change or additional services will cause additional costs to CBSH, LIGAND, on behalf of SERAGEN, will submit a purchase order for such in the form attached to this Agreement as Exhibit "E".

ARTICLE III

PROVISION OF MANUFACTURING SERVICES

3.01 FACILITIES, STAFFING, MATERIALS, EQUIPMENT. CBSH shall perform all manufacturing, storage, handling, packaging and testing of First Gen FDP, Second Gen FDP Fermentation Pellets , First Gen PDS and /or Second Gen PDS at the Facility or other testing facility as agreed to by the Parties. CBSH shall use commercially reasonable efforts to maintain at all times such staffing, supplies, equipment, facilities and expertise as are sufficient to ensure it has the ability to supply Fermentation Pellets, First Gen PDS and/or Second Gen PDS and to perform services in accordance with the terms of this Agreement.

3.02 PRODUCT CHANGE ORDER PROCEDURE. Both parties shall provide one another with thirty (30) days prior written notice, and receive SERAGEN's prior written consent before making any changes in the raw materials, process, procedures, suppliers, facilities, equipment, testing, packaging and labeling Specifications or other significant changes. If the Parties agree that such changes do not have a Regulatory Requirement impact, they may thereafter be implemented. If, however, such changes have a Regulatory Requirement impact, not only must both Parties agree to the proposed change prior to implementation, in addition, all necessary approvals of applicable Regulatory Agencies must be received prior to implementation.

3.03 MAINTENANCE OF SUPPLIER QUALIFICATION. At CBSH's cost and expense, CBSH shall maintain current supplier qualification of raw materials, reagents, solvents, and packaging components used in the manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS according to CBSH's written procedures consistent with cGMPs. A list of current critical suppliers, as of

the Effective Date, has been attached to this Agreement as Exhibit "G1". CBSH shall receive SERAGEN's written consent prior to using any new critical supplier of raw materials, reagents, solvents, or packaging components used in the manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS. Pursuant to cGMPs, only suppliers qualified according to CBSH's supplier qualification program shall be used in the manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS.

3.04 SUBCONTRACTING. CBSH shall receive SERAGEN's written consent prior to entering into any new subcontract with any third party for the provision of services under this Agreement, including the manufacture, storage, handling, packaging and testing of Fermentation Pellets, First Gen PDS , Second Gen PDS , First Gen FDP and Second Gen FDP. A list of subcontractors, as of the Effective Date, has been attached to this Agreement as Exhibit "G2". Any third party or contract laboratory used for the testing of Fermentation Pellets, First Gen PDS, Second Gen PDS, First Gen FDP and/or Second Gen FDP or intermediates must (i) be approved by SERAGEN in advance, (ii) have signed a confidentiality agreement with CBSH, substantially in the form previously approved in writing by SERAGEN, (iii) have completed a successful qualification/validation by CBSH or SERAGEN, or a SERAGEN designated contractor, which qualification/validation by SERAGEN or a SERAGEN designated contractor shall be at SERAGEN's cost and (iv) have agreed to provide access to CBSH such that SERAGEN shall have access to the records of such subcontractor to permit SERAGEN to conduct routine annual cGMP audits. A copy of the qualification/validation and procedures and

results must be submitted by CBSH to SERAGEN for SERAGEN's approval prior to CBSH's use of the contractor for the designated purposes.

3.05 AUDITS, INVESTIGATIONS, ACCESS.

(a) SERAGEN shall be allowed to conduct Audits of CBSH facilities. SERAGEN shall send a request to schedule an Audit with CBSH at least sixty (60) days prior to the proposed Audit date. SERAGEN shall be permitted to conduct one (1) Audit per calendar year at no expense to SERAGEN; any additional Audits shall be in accordance with the Additional Services rates set forth in Exhibit "B." For purposes of this Section 3.05 "Audits" shall mean cGMP audits involving the audit and inspection of all elements and systems of the Product manufacturing processes, starting with material receipt, inspection and CBSH QA Release through and including First Gen PDS and/or Second Gen PDS, as applicable.

(b) In addition, with at least five (5) days advance notice, SERAGEN shall be permitted to investigate/audit CBSH facilities and records in the event of any failure of any Batch to meet Specifications, any major deviation from Specifications, Batch failure(s) or any regulatory actions, violations or complaints relevant to this Agreement.

(c) With at least five (5) days advance notice, SERAGEN's authorized representative(s) shall be allowed during regular business hours to monitor activities and procedures related to the manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS under this Agreement. SERAGEN's authorized representatives shall be allowed, during regular business hours, to examine and inspect that portion of the Facility required for the manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS under this Agreement, including inspections relating to the manufacture, testing, handling, storage, packaging and labeling of Fermentation Pellets, First Gen PDS and/or Second Gen PDS, and to inspect and request copies of all MRR Documentation following CBSH QA audit of such MRR Documentation related to Fermentation Pellets, First Gen PDS and/or Second Gen PDS, including, but not limited to: Batch records, validation documentation, analytical results on raw materials, components, intermediates and final products, deviation reports, in process testing and reports, trend analysis reports, inspection reports generated by Regulatory Agencies and responses to reports and inspections by Regulatory Agencies (both edited to maintain client confidentiality).

(d) CBSH shall provide reasonable cooperation to SERAGEN in connection with Audits, investigations, other audits or access pursuant to this Section 3.05.

3.06 ADDITIONAL SOURCE ASSISTANCE AND COOPERATION. Upon request by SERAGEN, CBSH shall use commercially reasonable efforts to provide all reasonable assistance and cooperation to SERAGEN in qualifying additional source(s) of manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS. Such assistance shall be provided in accordance with the Additional Services rates set forth in Exhibit "B", and shall include assistance and cooperation in

the transfer of manufacturing methods and processes which constitute Product Intellectual Property, including but not limited to the Production Records, solution preparation documents, pertinent QC assay and manufacturing SOPs, equipment specifications, QC assay validation protocols, process validation protocols and such other technology and know-how owned by or licensed to SERAGEN.

3.07 INFORMATION. CBSH shall provide SERAGEN copies of all MRR Documentation relating to the services provided and Fermentation Pellets, First Gen PDS and/or Second Gen PDS supplied under this Agreement. All such MRR Documentation shall be provided within 10 business days of CBSH QA Release.

3.08 TAXES. Subject to the provisions of this Section 3.08, SERAGEN shall reimburse CBSH for any applicable sales tax that may be paid by CBSH with respect to the sales of the Fermentation Pellets, First Gen PDS and/or Second Gen PDS to SERAGEN pursuant to this Agreement. Notwithstanding the foregoing, SERAGEN shall have no reimbursement obligations under this Section 3.08 to the extent that (i) such taxes are based on CBSH's net income, or (ii) such taxes are recoverable or offset by CBSH.

ARTICLE IV

STANDARDS OF CARE AND COMPLIANCE WITH LAW

4.01 GENERAL. CBSH shall manufacture and supply Fermentation Pellets, First Gen PDS and/or Second Gen PDS and services in accordance with current regulatory standards prevailing in the pharmaceutical industry. Without limiting the foregoing, CBSH shall exercise all due and reasonable care with regard to any biological raw materials, work-in-process, clinical products or finished products in its custody relating to the Fermentation Pellets, First Gen PDS and/or Second Gen PDS and their respective manufacture.

4.02 COMPLIANCE WITH APPLICABLE LAW. CBSH shall comply with all applicable laws, requirements, rules, regulations and standards prescribed by public authorities (including the Food and Drug Act) in supplying Fermentation Pellets, First Gen PDS and/or Second Gen PDS and services and shall maintain all necessary records to comply with these applicable laws, requirements, rules, regulations and standards. Without limiting the foregoing, CBSH shall comply with current Regulatory Requirements.

4.03 DOCUMENTS AND REPORT RETENTION. CBSH shall use commercially reasonable efforts to ensure that documents required to be retained according to cGMP are stored in a confidential manner to maintain their integrity and protection from fire and other hazards, for the required length of storage.

4.04 REGULATORY/CMC CONSULTING AND/OR ASSISTANCE. CBSH shall participate and provide information and data, excluding confidential business and proprietary information of CBSH, as are reasonably requested by SERAGEN to support regulatory submissions. These activities may include but are not limited to drug product complaint investigations, annual product reviews, and biologics product deviation reporting. CBSH shall cooperate fully with SERAGEN in promptly filing all documents and reports required or reasonably requested by any Regulatory

Agency in a form reasonably acceptable to SERAGEN, and shall provide SERAGEN

with such information and assistance as SERAGEN may require with regard to those filings, including all reports, authorizations, certificates, methodologies, specifications and other documentation in the possession of or under the control of CBSH, and shall ensure that the content of all submissions is suitable for regulatory filings. SERAGEN shall reimburse CBSH for all such consulting and/or assistance at the Additional Services rates set forth in Exhibit "B".

4.05 DEBARMENT. CBSH represents and warrants to SERAGEN that it has neither been debarred nor is subject to debarment and that it will make commercially reasonable efforts to not use in any capacity, in connection with Fermentation Pellets, First Gen PDS and/or Second Gen PDS or services to be supplied under this Agreement, any person who has been debarred pursuant to subsections 306(a) or 306(b) of the Food and Drug Act or who is the subject of a conviction described in such Food and Drug Act. CBSH agrees to inform SERAGEN immediately in writing if it is, or becomes aware, that any person who is performing services hereunder on behalf of CBSH is debarred or is the subject of a conviction described in subsections 306(a) or 306(b) of the Food and Drug Act or if any action, suit, claim, investigation, or proceeding is pending or, to the knowledge of CBSH threatened, relating to the debarment of CBSH or any person performing services on behalf of CBSH hereunder.

4.06 COMPLAINTS, ANNUAL PRODUCT REVIEWS, ACCIDENT REPORTING; ADVERSE EVENTS; BIOLOGICS PRODUCT DEVIATION REPORTING. CBSH shall participate and provide information and data, excluding confidential business and proprietary information of CBSH, as are reasonably requested by SERAGEN to support First Gen FDP and Second Gen FDP complaint investigations, annual product reviews, and biologics product deviation reporting. In the event that CBSH receives any complaint or report of adverse drug event(s) as defined by 21 CFR 600.80 (an "Adverse Event") regarding the Product, then CBSH shall notify SERAGEN in writing by facsimile on or before the fifth (5th) calendar day following the receipt thereof; provided that CBSH shall notify SERAGEN in writing by facsimile and by telephone within twenty four (24) hours following the receipt thereof, of any fatal or life-threatening Adverse Event. SERAGEN shall have primary responsibility for fielding, investigating and responding to all Product complaints and Adverse Events. CBSH shall ensure that its manufacturing, QA and quality control personnel cooperate fully with SERAGEN, as appropriate and needed, to investigate any Product complaints or Adverse Events and to provide such information or assistance as is reasonably requested by SERAGEN in order to support SERAGEN's compliance with Adverse Events, field alert and other reporting requirements imposed by any Regulatory Agency. SERAGEN, as the product licensee for Regulatory Agency purposes, shall have the right to exercise full functional control over the resolution of complaints and Adverse Events as required by all applicable regulations. The Parties shall each report to the other on the resolution of complaints and Adverse Events. CBSH will undertake any investigations related to complaints, annual product reviews, accident reporting, adverse events, and biologics product deviation report and other action required as per cGMP and CBSH internal standard operating procedures or protocols. Any such investigations shall be additional services if they are requested by SERAGEN (i) in connection with the manufacture and testing of Fermentation Pellets, First Gen PDS, Second Gen PDS, First Gen FDP and/or Second Gen FDP or (ii) to comply with the Regulatory Requirements of a Regulatory Agency, and will be performed in accordance with the Additional Services rates set forth in Exhibit "B".

4.07 NOTIFICATION OF POTENTIAL LIABILITY. Each Party shall notify the other in writing as soon as is reasonably possible following any event, including receipt of any notice, warning, citation, finding, report or service of process or the occurrence of any release, spill, upset or discharge of hazardous wastes or substances, related to the Fermentation Pellets, First Gen PDS, Second Gen PDS and/or First Gen FDP and Second Gen FDP, or to testing or services provided under this Agreement that could reasonably be expected to give rise to liability on the part of the other Party under any law, rule or regulation prescribed by a public authority or otherwise.

4.08 GOVERNMENTAL COMMUNICATIONS AND INSPECTIONS. The Parties will notify each other within twenty-four (24) hours of their receipt of notice of any inspections of the Facility relating to Fermentation Pellets, First Gen PDS and/or Second Gen PDS, whether prescheduled or unannounced, by a Regulatory Agency and if possible shall give the other Party the opportunity to be present

and observe such an inspection. The findings of these inspections shall be provided to the other Party in a manner which protects the confidential information of third parties, to the extent they relate to or impact the manufacture, testing, packaging, storage, or handling of Fermentation Pellets, First Gen PDS and/or Second Gen PDS for SERAGEN or the provision of services to SERAGEN. Both parties shall notify each other within twenty-four (24) hours of receipt of any communications from a Regulatory Agency relating to the Facility or the Product manufactured in the Facility, including any communication or directive from a Regulatory Agency commencing or threatening seizure of any Fermentation Pellets, First Gen PDS and/or Second Gen PDS or other removal of any Fermentation Pellets, First Gen PDS and/or Second Gen PDS. If such communication is a written communication, the notifying Party shall attach a copy of the communication. Otherwise, the notifying Party shall provide a reasonable description to the other Party of the communication. The Parties shall have the right to review in advance any response to the communication or investigation submitted by the other party related to the Product. The Parties shall cooperate fully with each other in providing the information needed for any such communication. The wording and final submission of a response to a communication or investigation shall be the final responsibility of the addressee, provided SERAGEN retains the right to approve in advance the wording and final submission.

4.09 NOTIFICATION AND INVESTIGATION OF ALLEGED DEFECTS. In the event that either Party is notified that Fermentation Pellets, First Gen PDS and/or Second Gen PDS is alleged or proven not to meet Specifications, the Party receiving notice of the failure shall notify the other Party immediately, and both Parties shall cooperate fully regarding the investigation and disposition of the matter.

4.10 ALLOCATION OF BURDEN OF PRODUCT RECALL. In the event (a) any government authority issues a request, directive or order that First Gen FDP and Second Gen FDP prepared from Fermentation Pellets, First Gen PDS and/or Second Gen PDS manufactured by CBSH for SERAGEN be recalled, or (b) a court of competent jurisdiction orders such a recall, or (c) SERAGEN shall reasonably determine that the Product should be recalled, the Parties shall take all appropriate actions to effectuate the recall as determined by SERAGEN and/or by the applicable Regulatory Agency, and shall cooperate in the investigations surrounding the recall. For clarity, as between the Parties, SERAGEN shall have responsibility for and exclusive control of all recall activities. In the event that such recall results from (i) the failure of CBSH personnel or subcontractors to follow cGMP, (ii) the failure of CBSH personnel or subcontractors to follow and execute the Production Record and required MRR documentation as written and approved

by both Parties, (iii) the failure of the Facility equipment or utilities, (iv) the failure or non-conformance of the raw materials with SOPs or Specifications, (v) the breach of CBSH's obligations, representations or warranties hereunder or (vi) the acts or omissions of CBSH's subcontractors, CBSH shall (A) promptly replace such Fermentation Pellets, First Gen PDS and/or Second Gen PDS necessary for SERAGEN to replace the recalled Batches of First Gen FDP and Second Gen FDP, at no additional cost to SERAGEN, consistent with directions received from the appropriate Regulatory Agency and (B) promptly reimburse SERAGEN for its reasonable direct costs and third-party expenses documented and actually incurred in recalling the affected Product and replacing such Product at the wholesaler level. In all other cases, SERAGEN shall be responsible for the costs and expenses of recall, including the cost of replacement material for the Product. For the purposes of this Agreement, the expenses of recall shall include, without limitation, the expenses of notification and destruction or return of the recalled Fermentation Pellets, First Gen PDS and/or Second Gen PDS and all other costs incurred in connection with such recall, but shall not include lost profits of either Party.

4.11 MATERIAL SAFETY. During the Term of this Agreement and for one year thereafter, each Party shall promptly provide the other Party with all new information, excluding confidential business and proprietary information of the disclosing Party, within its possession or control or otherwise available to the disclosing Party from time to time regarding handling precautions, toxicity and hazards associated with the manufactured Fermentation Pellets, First Gen PDS and/or Second Gen PDS.

4.12 WASTE DISPOSAL. CBSH will conduct the manufacture, storage, packaging, and testing of Fermentation Pellets, First Gen PDS and/or Second Gen PDS for SERAGEN and the provision of additional services, including the disposal of all wastes generated thereby, in conformance with CBSH's waste handling procedures and appropriate local, provincial or national environmental laws or regulations. SERAGEN shall provide CBSH with any information required for environmental assessments, such as disposal requirements, etc. CBSH will provide SERAGEN, upon SERAGEN's written request, with information, documents, and permits reasonably requested by SERAGEN for SERAGEN to perform an environmental assessment to be made available to the Regulatory Agencies through SERAGEN's marketing approval from the relevant Regulatory Agency, including any supplements and/or license, and as required by other appropriate regulatory authorities. Such regulatory assistance shall be performed in accordance with the Additional Services rates set forth in Exhibit "B".

ARTICLE V

PRICING, PAYMENT AND DELIVERY

5.01 PRICING. Pricing for manufacture of Fermentation Pellets, First Gen FDP and Second Gen FDP release and stability testing, Fermentation Pellets, First Gen PDS and/or Second Gen PDS stability testing, and any other additional services agreed upon by the Parties shall be as specified in Exhibits "B" and "C" attached hereto.

Pricing for First Gen PDS Batches will be as specified in Exhibit "B"; pricing for Second Gen PDS Batches shall be as set forth in Exhibit "C", and in each case such pricing shall be effective through the first anniversary of the Effective Date and may only be adjusted once as of January

1st of each subsequent calendar year. Pricing for stability testing and additional services will be as specified in Exhibit "B" and such pricing shall be effective through the first anniversary of the Effective Date and may only be adjusted once as of January 1st of each subsequent calendar year. Price adjustments shall include, but are not limited to, changes in: the Consumer Price Index ("CPI"); the cost of reagents, supplies and equipment; or the cost of direct and indirect labor and shall not exceed the lesser of (a) CPI for the prior calendar year or (b) ***. CBSH shall provide SERAGEN written notice of any such price adjustment as promptly as practicable following January 1,which price adjustment shall take effect for purchase orders with Batch Acceptance Dates from and after such January 1.

5.02 PAYMENT TERM. CBSH will aggregate charges and will submit monthly invoices to SERAGEN except as otherwise set forth below,

(a) terms of payment for Fermentation Pellets, First Gen PDS and/or Second Gen PDS shall be payment due net thirty (30) days from the delivery of MRR Documentation, but not due earlier than the Batch Acceptance Date in effect for such Batch of Fermentation Pellets, First Gen PDS and/or Second Gen PDS, provided all other conditions specified on the face of such purchase order have been met, unless a Batch is determined to be non-conforming pursuant to Section 2.14. In such an event, payment shall be net thirty (30) days following resolution of a dispute over nonconforming Fermentation Pellets, First Gen PDS and/or Second Gen PDS in accordance with the dispute resolution procedure in Section 2.14(c). Payment for Fermentation Pellets, First Gen PDS and/or Second Gen PDS, however, does not in any way impact SERAGEN's rights under this Agreement.

(b) terms of payment for First Gen FDP and Second Gen FDP release testing shall be net thirty (30) days from receipt by SERAGEN of a complete Summary of Testing and an invoice submitted by CBSH.

(c) terms of payment for stability testing shall be net thirty (30) days from receipt by SERAGEN of stability data and an invoice submitted by CBSH for scheduled work performed during the preceding month.

(d) terms of payment for Additional Services provided under this Agreement shall be net thirty (30) days from receipt by SERAGEN of an invoice

submitted by CBSH for scheduled work performed during the preceding month.

5.03 MATTERS AFFECTING PRICING OR TESTING. The pricing of Fermentation Pellets, First Gen PDS, Second Gen PDS and/or First Gen FDP and Second Gen FDP as set forth in Exhibits "B" or "C", as applicable, is based upon current Manufacturing and Release Requirements, the current release and stability testing procedures for First Gen FDP and Second Gen FDP, stability testing procedures for Fermentation Pellets, First Gen PDS and/or Second Gen PDS, as well as current Regulatory Requirements. In the event that any Regulatory Requirements change, or the manner of performing release and stability testing for First Gen FDP and Second Gen FDP or stability testing of Fermentation Pellets, First Gen PDS and/or Second Gen PDS changes in such a way to increase or decrease the cost or burden on CBSH to manufacture Fermentation Pellets,

***Portions of this page have been omitted pursuant to a request for Confidential Treatment and filed separately with the Commission.

First Gen PDS and/or Second Gen PDS, or perform such release and stability testing, the Parties agree to negotiate an appropriate price adjustment.

5.04 DELIVERY AND SHIPMENT OF FERMENTATION PELLETS, FIRST GEN PDS AND/OR SECOND GEN PDS. Shipment of Fermentation Pellets, First Gen PDS and/or Second Gen PDS shall be FOB the Facility. Fermentation Pellets, First Gen PDS, and/or Second Gen PDS shall be made available to SERAGEN as of the Batch Acceptance Date and will be physically delivered to SERAGEN's designated carrier on the Shipment Date. Fermentation Pellets, First Gen PDS, and/or Second Gen PDS shall not be physically delivered to SERAGEN's designated carrier before the Shipment Date specified by SERAGEN without SERAGEN's prior written consent. Transfer of title and risk of loss of Fermentation Pellets, First Gen PDS and/or Second Gen PDS shall pass to SERAGEN or its designee on the Batch Acceptance Date. The Shipment Date has no bearing on transfer of title or risk of loss as between CBSH and SERAGEN. SERAGEN shall, at its cost, ensure that adequate insurance coverage, for full replacement cost, exists on Fermentation Pellets, First Gen PDS and/or Second Gen PDS in transit to SERAGEN or its designee, in the event that such Fermentation Pellets, First Gen PDS and/or Second Gen PDS is damaged, destroyed or lost, and shall bear all costs of such insurance.

ARTICLE VI

CONFIDENTIALITY AND INTELLECTUAL PROPERTY

6.01 CONFIDENTIALITY. The Parties recognize that all non-public information including, where appropriate and without limitation, any information, know-how, patent disclosures, patent applications, structures, models, techniques, processes, compositions, compounds, apparatus and other confidential or proprietary data and information relating to one Party disclosed to the other Party pursuant to this Agreement is of proprietary value and is to be considered highly confidential ("Proprietary Information"). The Parties agree not to use (except in accordance with this Agreement), and not to disclose to any third party, any Proprietary Information except with the prior written consent of the other Party. The foregoing obligations shall survive the expiration or termination of the Agreement for a period of ten (10) years. For purposes of this Article VI, all confidential information specifically relating to the Product and its manufacture acquired or generated by CBSH on behalf of SERAGEN as a result of this Agreement shall be considered to be Proprietary Information disclosed by SERAGEN to CBSH, provided, however, that this shall not impact CBSH's rights to file patent applications and prosecute, maintain, enforce and defend such applications and subsequently issued patents pursuant to the terms of Section 6.05 of this Agreement covering such Proprietary Information.

The obligations of non-use and nondisclosure shall not apply to Proprietary Information that:

(a) is known by the receiving Party at the time of its receipt, and not through a prior disclosure by the disclosing Party, as documented by written records or as proven in a court of law by the receiving Party;

(b) is at the time of disclosure or thereafter becomes published or otherwise part of the public domain without breach hereof by the receiving Party;

(c) is subsequently disclosed to the receiving Party by a third party who has no confidentiality obligation to the disclosing Party with respect to the information disclosed;

(d) is developed by the receiving Party independently of Proprietary Information or other information received from the disclosing Party and such independent development can be properly demonstrated by the receiving Party;

(e) is disclosed to governmental or other regulatory authorities in order to obtain patents or to gain approval to conduct clinical trials or to market the Product, but such disclosure may be only to the extent reasonably necessary to obtain such patents or authorizations;

(f) is necessary to be disclosed to sublicensees, agents, consultants, Affiliates, or other third parties for the research and development, manufacturing, or marketing of the Product (or for such parties to determine their interest in performing such activities) in accordance with this Agreement on the condition that such third parties agree to be bound by the confidentiality obligations and use restrictions contained in this Agreement and that the term of such obligations and restrictions for such third parties shall be no less restrictive than the terms of such obligations and restrictions hereunder, but such disclosure may be only to the extent reasonably necessary for such purposes; or

(g) is required to be disclosed by law or court order, provided that notice is promptly delivered to the other Party in order to provide it with an opportunity to seek a protective order or other similar order with respect to such Proprietary Information, but such disclosure may be only to the extent reasonably necessary to comply with the required disclosure, whether or not a protective order or other similar order is obtained by the other Party.

6.02 CBSH LICENSE. SERAGEN represents and warrants to CBSH that SERAGEN owns all necessary rights to manufacture, market, sell and distribute the Product, to allow CBSH to perform the services as described in this Agreement, and to allow CBSH and SERAGEN to perform their obligations under this Agreement. During the Term of this Agreement, SERAGEN hereby grants to CBSH a paid-up, royalty-free, non-exclusive license, without the right to sublicense or transfer, to all rights held by SERAGEN necessary to manufacture Fermentation Pellets, First Gen PDS and/or Second Gen PDS and to perform services for SERAGEN under this Agreement, but only for such purposes and only to the extent necessary for CBSH to perform its obligations under this Agreement. The parties agree that the grant contained in this section is personal to CBSH only and CBSH agrees to make use of SERAGEN's Proprietary Information only in accordance with this license and only by CBSH.

6.03 INTELLECTUAL PROPERTY.

(a) All Intellectual Property worldwide related to ideas, innovations or inventions (whether or not patentable) developed solely by CBSH and its employees during the course of fulfilling its obligations under this Agreement, including any

Process Improvements for manufacture of Fermentation Pellets, First Gen PDS, or Second Gen PDS, shall be solely owned by CBSH.

(b) Intellectual Property worldwide related to ideas, innovations or inventions (whether or not patentable) developed solely by SERAGEN and its employees while this Agreement is in force, including any Process

Improvements, shall be solely owned by SERAGEN.

(c) Intellectual Property worldwide related to ideas innovations or inventions (whether or not patentable) developed jointly by CBSH and SERAGEN and their respective employees, while this Agreement is in force, including any Process Improvements, shall be jointly owned by the Parties.

CBSH agrees to promptly disclose to SERAGEN as they occur any Intellectual Property developed by CBSH employees or agents during the course of fulfilling its obligations under this Agreement. CBSH represents and warrants that all of its employees and such agents as provide services as permitted hereunder are obligated by written agreement to assign to CBSH any of their inventions that arise as a result of the provision of services under this Agreement.

6.04 SERAGEN LICENSE. CBSH hereby grants to SERAGEN (i) an irrevocable, worldwide, royalty free, fully paid-up exclusive license, with the right to sublicense, under Product Intellectual Property, owned in whole or in part by CBSH, and (ii) an irrevocable, worldwide, royalty free, fully paid-up non-exclusive license, with the right to sublicense, under other Intellectual Property, owned in whole or in part by CBSH, and which is necessary or actually used in the manufacture of Product. Such licenses shall be only for SERAGEN or its sublicensee(s) to make, have made, use and sell the Product, and to offer the Product for sale. The Parties agree that this license does not apply to the use of Intellectual Property for purposes other than to make, have made, use and sell the Product or to offer the Product for sale and CBSH retains all other rights to the Intellectual Property, including the right to license such other rights. Upon request by SERAGEN, CBSH agrees to execute any documents necessary for SERAGEN to exercise its rights under the licenses granted under this provision.

6.05 PATENTS. With respect to Intellectual Property owned solely by SERAGEN or jointly by SERAGEN and CBSH under this Agreement, SERAGEN shall decide, at its sole discretion, whether, when and where to file a patent application and if SERAGEN decides to file a patent application, it shall be solely responsible for filing, prosecuting, maintaining, enforcing and defending such application or subsequently issued patent. Upon request by SERAGEN, CBSH shall provide SERAGEN with reasonable assistance in obtaining any copyright, patent or other Intellectual Property protection covering any Intellectual Property created or developed under this Agreement and owned solely or jointly by SERAGEN, provided that CBSH's costs are paid for by SERAGEN.

With respect to Intellectual Property owned solely by CBSH, CBSH shall first decide whether, when or where to file a patent application. If CBSH decides to file a patent application to protect Intellectual Property, it shall be solely responsible for filing, prosecuting, maintaining, enforcing and defending such application or subsequently issued patent. If CBSH decides not to file a patent application to protect Product Intellectual Property, or decides to abandon an existing

patent or patent application covering Product Intellectual Property, it shall promptly notify SERAGEN of its decision and SERAGEN shall have the right to file a patent application to protect Product Intellectual Property, or to maintain the existing patent or patent application. If SERAGEN exercises its rights to assume responsibility for Product Intellectual Property abandoned by CBSH under this provision, CBSH shall assign its rights to the Product Intellectual Property to SERAGEN and shall provide SERAGEN with reasonable assistance in obtaining patent protection, provided that CBSH's costs are paid for by SERAGEN.

6.06 NO PUBLICITY. No Party shall disclose the terms of this Agreement without the prior written consent of the other Party. Nothing in the foregoing, however, shall prohibit a Party from making such disclosures to the extent deemed necessary under applicable federal or state securities laws or any rule or regulation of any nationally recognized securities exchange; in such event, however, the disclosing Party shall use good faith efforts to consult with the other Party prior to such disclosure and where applicable, shall request confidential treatment to the extent available. In addition, CBSH may disclose the identity of SERAGEN as a customer of CBSH to other customers and potential customers.

6.07 TRADEMARKS AND TRADE NAMES. The Parties hereby acknowledge and agree that neither Party has acquired, nor shall it acquire by virtue of the Agreement or the activities contemplated hereby, any interest in any of the other Party's trademarks or trade names.

6.08 INJUNCTIVE RELIEF. The Parties hereto understand and agree that remedies at law may be inadequate to protect against any breach of any of the provisions of this Article VI by any Party or their employees agents, officers or directors or any other person acting in concert with it or on its behalf. Accordingly, each Party shall be entitled to the granting of injunctive relief by a court of competent jurisdiction against any action that constitutes any breach of this Article VI.

6.09 NO OTHER RIGHTS. Except as otherwise expressly set forth in this Agreement, it is understood and agreed by the Parties that this Agreement does not grant any license or other right under any Intellectual Property of the Parties.

ARTICLE VII

INDEMNIFICATION

7.01 INDEMNIFICATION BY SERAGEN. SERAGEN shall indemnify and hold harmless CBSH and its Affiliates, and their respective directors, officers, shareholders, employees, consultants and agents from and against all suits, claims, losses, demands, liabilities, damages, costs and expenses (including court costs, reasonable attorney's fees and reasonable investigative costs) (together "Liabilities") in connection with any suit, demand or action by any third party (a "Third Party Action") arising out of, resulting from or relating to: (a) the further processing, formulation, storage, labeling, promotion, marketing, use or sale of the Product by SERAGEN, as long as (i) the Fermentation Pellets, First Gen PDS and/or Second Gen PDS were manufactured in accordance with cGMP and (ii) CBSH followed and executed the Production Record and the MRR Documentation as written and approved by both Parties, (b) storage, labeling, promotion, marketing, use or sale of the Product by SERAGEN, (c) breach of any representation, warranty, covenant or agreement contained in this Agreement by SERAGEN,

(d) SERAGEN's negligence, recklessness or willful misconduct or the negligence, recklessness or willful misconduct of any employee or agent of SERAGEN, (e) any representation or warranty made by SERAGEN to its customers or users with respect to the Product, other than a representation that the Product conformed to cGMP and the Manufacturing and Release Requirements at the time of CBSH's release to SERAGEN, (f) any Third Party Action alleging that the Product or provision of the services pursuant to the Agreement infringes any patent or other proprietary rights except to the extent such Third Party Action relates to the use of CBSH's patents or other proprietary rights which are not deemed Proprietary Information of SERAGEN, or (g) actions taken based on authorizations in writing from SERAGEN Authorized Personnel; except in each case to the extent that any of the foregoing arises out of or results from (i) the breach by CBSH of the terms of this Agreement or failure of CBSH to follow and execute or to manufacture, handle, test, or store the Product in accordance with the Production Record and the MRR Documentation as written and approved by both Parties and the Manufacturing and Release Requirements if caused by the action or inaction of CBSH or its subcontractors, or (ii) the negligence, recklessness or willful misconduct of CBSH, its employees, subcontractors or agents.

7.02 INDEMNIFICATION BY CBSH. CBSH shall indemnify and hold harmless SERAGEN and its Affiliates, and their respective directors, officers, shareholders, employees, consultants and agents from any and all Liabilities to third parties to the extent that such Liability arises from: (a) CBSH's failure to follow and execute or to manufacture, handle, test, or store the Product in accordance with the Production Record and MRR Documentation as written and approved by both Parties if caused by the action or inaction of CBSH or its subcontractors, (b) the negligence, recklessness or willful misconduct of CBSH, its employees, subcontractors or agents, (c) CBSH's failure to manufacture Fermentation Pellets, First Gen PDS, Second Gen PDS, First Gen FDP, or Second Gen FDP in accordance with cGMPs, (d) CBSH's failure to reasonably comply with all laws, regulatory filings, rules or regulations applicable to its performance under

this Agreement, or (e) breach of any representation, warranty, covenant or agreement contained in the Agreement by CBSH.

7.03 INDEMNIFICATION PROCEDURES. As a condition of the indemnification rights provided in this Article VII, the indemnified Party shall promptly notify the indemnifying party in writing of any claim, action or suit (the "Asserted Liability") potentially giving rise to the indemnification obligation hereunder. The indemnifying party may elect to compromise or defend, and control the defense of, at its own expense and by counsel reasonably satisfactory to the indemnified party, any such Asserted Liability, provided that the indemnified party shall have no liability under any compromise or settlement agreed to by the indemnifying party which it has not approved in writing. The indemnified party shall cooperate upon the request and at the expense of the indemnifying party, in the compromise of, or defense against, such Asserted Liability. If the indemnifying party elects not to compromise or defend the Asserted Liability, or fails to notify the indemnified party of its election to compromise or defend within a reasonable time after receipt of the required notice, the indemnified party may pay, compromise or defend such Asserted Liability and receive full indemnification for its losses as provided in Sections 7.01 or 7.02 hereof, including all costs of defending such suit. In any event, the indemnified party and the indemnifying party may participate, at their own expense, in the defense of such Asserted Liability. If the indemnifying party chooses to defend any claim, the indemnified party shall make available to the indemnifying party any books, records or other documents within its

control that are reasonably requested for such defense and shall otherwise cooperate with the indemnifying party, in which event the indemnified party shall be reimbursed for its out-of-pocket expense.

7.04 SURVIVAL OF REMEDIES. All limitations on either Party's remedies and liabilities under this Article VII shall survive the expiration, termination or cancellation of this Agreement.

7.05 LIMITATION OF LIABILITY.

(a) NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOST PROFITS ARISING OUT OF THE PERFORMANCE OF THIS AGREEMENT.

(b) THE MAXIMUM AGGREGATE LIABILITY OF CBSH FOR ALL CAUSES OF ACTION ARISING OUT OF OR RELATED TO THIS AGREEMENT, EXCLUDING LIABILITY ARISING UNDER SECTION 7.02 (INDEMNIFICATION), BUT INCLUDING LIABILITY ARISING FROM A BREACH OF THIS AGREEMENT OR NONPERFORMANCE UNDER THIS AGREEMENT (INCLUDING LIABILITY ASSOCIATED WITH OR ARISING OUT OF SERAGEN'S ATTEMPT TO FIND ALTERNATE SOURCES OF SUPPLY IN THE EVENT OF CBSH'S NONPERFORMANCE OR BREACH) AND LIABILITY ARISING OUT OF OR RELATED TO THE MANUFACTURE AND/OR STORAGE OF FERMENTATION PELLETS, FIRST GEN PDS, SECOND GEN PDS OR TESTING OF FERMENTATION PELLETS, FIRST GEN PDS, SECOND GEN PDS, OR FIRST GEN FDP AND SECOND GEN FDP, AND THE PROVISION OF ADDITIONAL SERVICES PROVIDED BY CBSH PURSUANT TO THIS AGREEMENT, SHALL NOT EXCEED THE LESSER OF (I) *** TIMES THE AGGREGATE AMOUNTS INVOICED TO SERAGEN BY CBSH DURING THE PRIOR CALENDAR YEAR OR (II) ***. TO THE EXTENT THAT THIS CLAUSE CONFLICTS WITH ANY OTHER CLAUSE, THIS CLAUSE SHALL TAKE PRECEDENCE OVER SUCH CONFLICTING CLAUSE. IF APPLICABLE LAW PREVENTS ENFORCEMENT OF THIS CLAUSE, THEN THIS CLAUSE SHALL BE DEEMED MODIFIED TO PROVIDE THE MAXIMUM PROTECTION FOR THE LIABLE PARTY AS IS ALLOWABLE UNDER APPLICABLE LAW.

7.06 INSURANCE.

(a) Throughout the Term, SERAGEN shall obtain and maintain comprehensive general liability insurance (including broad form general liability, completed operations and products liability, personal injury liability, blanket contractual liability and broad form property damage liability) with limits of not less than *** combined single limit for bodily injury and property damage liability per occurrence and annual aggregate. Without limiting the foregoing, SERAGEN shall obtain and maintain, at its sole expense, product liability insurance relating to the Product that is comparable in type and amount to the insurance it maintains with respect to its most similar other products. With respect to all insurance coverage required under this clause (a): (i) SERAGEN shall, promptly upon CBSH's request, furnish CBSH with certificates of insurance evidencing such insurance; (ii) SERAGEN shall provide a Certificate of Insurance to CBSH showing that the general liability insurance policy has been endorsed to designate CBSH as an additional named insured and (iii) all policies shall include provisions for at least thirty (30) days' prior written notice of any material change or cancellation (whether for non-payment or otherwise). SERAGEN shall use its commercially reasonable efforts to obtain and maintain five (5) year tail coverage for the above-mentioned insurance.

(b) Throughout the Term, CBSH shall obtain and maintain comprehensive general liability insurance (including broad form general liability, completed operations and products liability, blanket contractual liability and broad form property damage liability) with limits of not less than *** combined single limit for bodily injury and property damage liability per occurrence and annual aggregate. During the Term, CBSH shall obtain and maintain worker's compensation insurance as required under Massachusetts law and employer's liability insurance with a limit of not less than ***. With respect to all insurance coverage required under this clause (b): (i) CBSH shall, promptly upon SERAGEN's request, furnish SERAGEN with certificates of insurance evidencing such insurance; and (ii) all policies shall include provisions for at least thirty (30) days' prior written notice of any material change or cancellation (whether for non-payment or otherwise). CBSH shall use its commercially reasonable efforts to obtain and maintain *** year tail coverage for the above mentioned insurance.

ARTICLE VIII

WARRANTIES AND REPRESENTATIONS

8.01 REPRESENTATIONS AND WARRANTIES OF EACH PARTY. Each Party represents and warrants to the other that (a) it is a corporation, duly organized and validly existing under the laws of the State of Delaware; (b) it has all requisite corporate power and authority to own its properties, conduct its business as presently conducted and enter into and perform its obligations under this Agreement; (c) it has taken all necessary corporate action to authorize this Agreement; (d) it has duly executed and delivered this Agreement and this Agreement constitutes its legal and valid

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obligation, enforceable against it in accordance with its terms; (e) the execution and delivery of this Agreement and the performance of its obligations hereunder do not and will not (i) violate any other agreement or instrument of any nature to which it is a party or by which it is bound, (ii) violate any law, rule or regulation to which it is subject or by which it is bound, or (iii) require any filing approval, authorization, permit or license from or with any

governmental authority which has not been made or obtained.

8.02 ADDITIONAL REPRESENTATIONS AND WARRANTIES OF SERAGEN. SERAGEN represents and warrants (i) that it is providing CBSH with a validated process for Fermentation Pellets and First Gen PDS, that it is not aware of any asserted or threatened claim or demand that it believes may be enforced against its patents and other proprietary rights relating to Fermentation Pellets and First Gen PDS, (ii) in entering into this Agreement, to its knowledge it will not infringe on any patent or other proprietary rights of any third party, (iii) that SERAGEN is a wholly owned subsidiary of LIGAND, (iv) that CBSH is authorized to take all direction necessary to perform its obligations under this Agreement from SERAGEN Authorized Personnel and (v) that it is the owner of all right, title and interest in and to, or has a license, sublicense or other permission to make, have made, use or sell, the Product.

8.03 ADDITIONAL REPRESENTATIONS AND WARRANTIES OF CBSH. CBSH represents and warrants that, at the time of CBSH's QA release of the Fermentation Pellets and First Gen PDS and shipment to SERAGEN, the Fermentation Pellets and First Gen PDS (a) will have been manufactured, stored and shipped in accordance with current Regulatory Requirements and cGMPs, (b) was manufactured, stored, handled and tested in accordance with the Production Record and MRR Documentation as written and approved by both Parties and (c) meets or exceeds the Manufacturing and Release Requirements, and (d) not be adulterated or misbranded under the Food and Drug Act or any other applicable law, rule or regulation.

8.04 REMEDIES. In the event that any Fermentation Pellets, First Gen PDS and/or Second Gen PDS provided by CBSH was not manufactured in accordance with cGMPs or the warranties provided herein, as determined in accordance with Section 2.14, SERAGEN's sole remedies (excluding indemnities) with respect to a non-conforming Batch shall be at SERAGEN's option (i) rejection of the Batch without cost to SERAGEN or (ii) re-supply, at CBSH's cost, of said non-conforming Batch of Fermentation Pellets, First Gen PDS and/or Second Gen PDS in conformance with the Manufacturing and Release Requirements and in accordance with Section 2.14(d).

8.05 DISCLAIMER OF WARRANTIES. THE PARTIES ACKNOWLEDGE AND AGREE THAT ALL SERVICES PROVIDED UNDER THIS AGREEMENT WILL BE PERFORMED BY CBSH AT THE DIRECTION OF SERAGEN. CBSH DISCLAIMS ANY AND ALL WARRANTIES EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE OR ANY WARRANTIES OF PATENT VALIDITY OR FREEDOM OF OR FROM PATENT INFRINGEMENT, WITH RESPECT TO ANY PRODUCT OR SERVICES DELIVERED UNDER THIS AGREEMENT (OTHER THAN THOSE WARRANTIES EXPRESSLY SET FORTH IN THIS AGREEMENT).

ARTICLE IX

TERM AND TERMINATION

9.01 TERM. The term (the "Term") of this Agreement shall be for five (5) years, commencing on January 1, 2004. Upon expiration of the Term of this Agreement, the Parties shall have the option to renew this Agreement, for a period of time mutually agreed upon by the Parties.

9.02 TERMINATION FOR BREACH OR DEFAULT. Upon any material breach or default by either Party hereto in the performance of any obligation to be performed by such a Party under this Agreement, the non-breaching Party or Party not in default, shall give notice in writing to the breaching Party or Party in default, specifying the breach or matter in default. Unless such breach or default is cured within sixty (60) days following the giving of such notice, (or if such cure cannot be completed within such sixty (60) day period, if the cure has not been undertaken promptly upon receipt of such notice, and diligently pursued thereafter) the Party giving such notice may give further written notice to breaching Party or Party in default, terminating this Agreement; in such event, this Agreement shall terminate on the date specified in such further notice, which date shall be no earlier than sixty (60) days from the date of such further written notice.

9.03 TERMINATION FOR FORCE MAJEURE. If an event under Section 10.10 causes the

failure of performance of a Party for a period of ninety (90) days or more, any Party to this Agreement, including the Party whose performance has failed pursuant to Section 10.10, shall have the right to terminate this Agreement upon written notice to the other Party or Parties.

9.04 BANKRUPTCY. Either Party shall have the right to terminate this Agreement effective immediately in the event the other Party files a voluntary petition in bankruptcy, is adjudicated as bankrupt, makes a general assignment for the benefit of creditors, admits in writing that it is insolvent or fails to discharge within fifteen (15) days an involuntary petition in bankruptcy filed against it. CBSH shall have the right to terminate this Agreement effective immediately in the event SERAGEN or LIGAND files a voluntary petition in bankruptcy, is adjudicated as bankrupt, makes a general assignment for the benefit of creditors, admits in writing that it is insolvent or fails to discharge within fifteen (15) days an involuntary petition in bankruptcy filed against it.

9.05 TERMINATION OF ADDITIONAL SERVICES. With respect only to additional services provided under Section 2.15, either Party may terminate the provision of such additional services upon six (6) months advance written notice to the other Party. Provided, however, termination of such additional services under this Section 9.05 shall not affect the commercial manufacture and supply and related services provided under Article II or any other provisions of this Agreement, nor shall it relieve either Party of any obligations under this Agreement that have accrued prior to termination of such additional services.

9.06 CONSEQUENCES OF TERMINATION.

(a) In the event of termination of this Agreement by CBSH pursuant to Sections 9.02 or 9.04, CBSH shall complete all work covered by an unfilled binding purchase

order from SERAGEN at the time of termination. In the event of termination of this Agreement by SERAGEN pursuant to Sections 9.02 or 9.04, SERAGEN shall have the option, exercisable in its sole discretion at the time of such termination, to elect to have CBSH complete all work covered by an unfilled binding purchase order from SERAGEN at the time of termination.

(b) Nothing in this Agreement shall be construed to release either Party from any obligation that matured (including, without limitation, the obligation to make payment for Fermentation Pellets, First Gen PDS and/or Second Gen PDS manufactured or other services rendered prior to such termination, or thereafter, if rendered in accordance with this Section 9.06) or any breach of this Agreement that occurred before the effective date of termination; provided, however, that upon any termination of this Agreement CBSH shall, except as set forth in (a) above and (c) below, cease any further provision of services under this Agreement. Upon termination of the Agreement, in addition to payment for the Fermentation Pellets, First Gen PDS and/or Second Gen PDS and other services rendered prior to such termination, SERAGEN shall be responsible for paying to CBSH the amounts of any outstanding commitments to which CBSH has obligated itself in connection with CBSH's performance under this Agreement and which CBSH is unable, using reasonable commercial efforts, to terminate.

(c) In the event of termination of this Agreement for material breach or default by CBSH (or a failure of supply due to matters covered in Section 10.10 of this Agreement), CBSH shall, if CBSH is able and SERAGEN elects for CBSH to do so, (i) manufacture any Fermentation Pellets , First Gen PDS and/or Second Gen PDS and SERAGEN shall take possession of such Fermentation Pellets First Gen PDS and/or Second Gen PDS and shall purchase any raw materials, and components covered by a binding purchase order(s) from SERAGEN at the time of termination, provided that such Fermentation Pellets, First Gen PDS and/or Second Gen PDS are not determined to be non-conforming for reasons attributable to CBSH in accordance with the procedure set forth in Section 2.14 and provided that such Fermentation Pellets, First Gen PDS and/or Second Gen PDS have been manufactured in

accordance with cGMPs (to the extent work continues pursuant to this section following the termination date, the terms of this Agreement shall continue to apply to such work) and (ii) transfer all raw materials used in the manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS which have been paid for by SERAGEN and are in CBSH's possession to an alternate supplier of Fermentation Pellets, First Gen PDS and/or Second Gen PDS designated by SERAGEN, and (iii) have CBSH technical personnel available (at the Additional Services rate listed in Exhibit "B") for reasonable assistance in effecting such transfer of manufacture of Fermentation Pellets, First Gen PDS and/or Second Gen PDS for a period of six (6) months from the effective date of termination. Upon purchase by SERAGEN in accordance with this Agreement, the materials and components specified in (i) of the preceding sentence shall become the exclusive property of SERAGEN.

The obligations under Sections 3.08, Taxes, Section 4.10, Allocation of Burden of

Product Recall, Article VI, Confidentiality and Intellectual Property, Article VII, Indemnification, Article VIII, Warranties and Representations, and this Article IX shall survive expiration or termination of this Agreement or any extensions thereof. With respect to confidential information exchanged under Article VI, upon termination of the Agreement the receiving Party shall return all confidential information to the disclosing Party, except the receiving Party shall be entitled to retain one (1) copy of all confidential information for legal purposes

ARTICLE X

MISCELLANEOUS

10.01 NOTICES. All notices or other communications that are required or permitted under this Agreement shall be in writing and shall be deemed to have been duly given when delivered by registered or certified mail, return receipt requested, postage prepaid, by facsimile transmission, by reputable overnight courier service of national reputation, or by hand, addressed as follows:

If to CBSH:

CAMBREX BIO SCIENCE HOPKINTON, INC.
97 South Street
Hopkinton, Massachusetts 01748
Facsimile: (508) 497-0777

Attention: General Manager

With a copy to:

CAMBREX CORPORATION
5901 E. Lombard St.
Baltimore, MD 21224
Facsimile: (410) 563-9206

Attention: Shelly Upton, Corporate Counsel

If to SERAGEN:

SERAGEN, INC.
10275 Science Center Drive
San Diego, CA 92121
Facsimile: (858) 550-1801

Attention: Manufacturing and Supply Operations

With a copy to LIGAND:

LIGAND PHARMACEUTICALS INCORPORATED
10275 Science Center Drive
San Diego, CA 92121
Facsimile: (858) 550-1825

Attention: General Counsel

or to such other address as either Party may be notice to the other Party have directed.

10.02 FURTHER ASSURANCES. Each Party to this Agreement covenants and agrees that it will promptly, during the Term of the Agreement and on the request of the other Party, execute, acknowledge and deliver or otherwise properly authenticate, as may be required by law, all documents, instruments, applications, assignments, registration, or other legal papers necessary to effectuate the provisions of this Agreement.

10.03 ASSIGNMENT. CBSH and/or SERAGEN shall not assign this Agreement without the prior written consent of the other Party, which consent shall not unreasonably withheld, however, CBSH and/or SERAGEN may, without such written consent, assign this Agreement, and its rights and objections hereunder, in connection with the transfer or sale of all or substantially all of its business, or in the event of its merger or consolidation or change in control or similar transaction. In the event of any assignment, performance shall be guaranteed by the assignor in a form satisfactory to the other Party.

10.04 EFFECTS. This Agreement is binding on, and shall redound to the benefit of, the Parties to this Agreement and their respective successors and permitted assigns. Except as otherwise expressly provided in this Agreement, this Agreement does not create or confer, and is not to be construed as creating or conferring, any right, remedy, claim or benefit on any third party, other than the respective successors and permitted assigns of the Parties to this Agreement.

10.05 WAIVERS AND AMENDMENTS. Any amendment or supplementation of this Agreement or any waiver of any term or condition of this Agreement shall be effective only if in writing and signed by all Parties. A waiver of any breach of any of the terms or conditions of this Agreement is not in any way to be construed as a waiver of any subsequent breach.

10.06 SEVERABILITY. In the event that any one or more of the provisions of this Agreement is determined to be invalid, illegal or unenforceable in any respect for any reason, the validity, legality and enforceability of any such provision in any other respect and the remaining provisions of this Agreement shall not, at the election of the Party for whom the benefit of the provision exists, be in any way impaired.

10.07 COUNTERPARTS. This Agreement may be executed in one or more counterparts, all of which together constitute one and the same instrument.

10.08 GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts, without regard to the conflict-of-laws rules of Massachusetts law.

10.09 ENTIRE AGREEMENT. This Agreement (including all Exhibits) contains the entire agreement among the parties with respect to the manufacture and/or testing of the Product for the Term of the Agreement and supersedes all prior agreements, written or oral, with respect thereto.

10.10 FORCE MAJEURE. Any delays in or failure by either Party in performance of any obligations hereunder shall be excused if and to the extent caused by such occurrences beyond such Party's reasonable control, including, but not limited to, acts of God, strikes, or other labor disturbances, war, whether declared or not, sabotage, product shortages, terrorist acts, acts or omissions of governmental authorities, and other causes, whether similar or dissimilar to those specified, which cannot reasonably be controlled by the Party who failed to perform.

10.11 INDEPENDENT CONTRACTORS. The status of the Parties under this Agreement is that of independent contractors. Neither Party shall have the right to enter into any agreements on behalf of the other Party, nor may either Party represent to any person that it has any such right or authority. Nothing in this Agreement is to be construed as establishing a partnership or joint venture relationship between the Parties.

10.12 HEADINGS. Headings are used in this Agreement for convenience only and shall not affect any construction or interpretation of this Agreement.

[Remainder of Page Intentionally Left Blank]

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

SERAGEN, INC.	CAMBREX BIO SCIENCE HOPKINTON, INC.
By: /S/ GIAN ALIPRANDI	By: /S/ DOMINIC MICALE
Title: VICE PRESIDENT, OPERATIONS	Title: CONTROLLER
Date: 11 OCTOBER 2003	Date: OCTOBER 10, 2003

LIGAND
/S/WRB
LEGAL

EXHIBIT "A"
MRR DOCUMENTATION

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***Portions of this page have been omitted pursuant to a request for Confidential Treatment and filed separately with the Commission.

EXHIBIT "B"
FERMENTATION PELLET, FIRST GEN PDS, SECOND GEN PDS, SECOND GEN FDP AND OTHER SERVICES PRICING

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***Portions of this page have been omitted pursuant to a request for Confidential Treatment and filed separately with the Commission.

EXHIBIT "C"
SECOND GEN PDS AND SECOND GEN FDP PRICING

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***Portions of this page have been omitted pursuant to a request for Confidential Treatment and filed separately with the Commission.

EXHIBIT "D"
REGULATORY AGENCIES

The Regulatory Agencies with authority over the manufacture, testing and/or shipment of the Product covered by this Agreement are as follows:

The United States FDA (or any successor agency)

The EMEA (or any successor agency), but only following filing for regulatory approvals required to market the Product in the EMEA's jurisdiction.

EXHIBIT "E"
SAMPLE PURCHASE ORDER

Purchase Order
PURCHASE ORDER NO. REVISION PAGE
994523 0 1

[LOGO]

LIGAND PHARMACEUTICALS
10275 Science Center Drive
San Diego, CA 92121-1117
858/550-7500

THIS PURCHASE ORDER NUMBER MUST APPEAR ON ALL INVOICES, PACKING LISTS, CARTONS AND CORRESPONDENCE RELATED TO THIS ORDER.

SHIP TO:
NOT APPLICABLE

VENDOR: ATTN: DOTTIE RUMBEL
CAMBREX BIO SCIENCE HOPKINTON, INC.
97 SHOUTH STREET
HOPKINTON, MA 01748
United States

BILL TO:
LIGAND PHARMACEUTICALS INC.
10275 SCIENCE CENTER DRIVE
SAN DIEGO ,CA 92121
United States

Order Confirmation #:

CUSTOMER ACCT NO.	VENDOR NO.	DATE OF ORDER/BUYER	REVISED DATE/BUYER
5203		11-SEP-03 DEAMICIS, S	

PAYMENT TERMS	SHIP VIA	F.O.B.
N30		SHIPPING POINT

FREIGHT TERMS	REQUESTOR/DELIVER TO	CONFIRM TO/TELEPHONE
PREPAY & ADD		

ITEM	PART NUMBER/DESCRIPTION	DELIVERY DATE	QUANTITY	UNIT	UNIT PRICE	EXTENSION	T
							A
							X
						TOTAL	

AUTHORIZED SIGNATURE

EXHIBIT "F"
SERAGEN AUTHORIZED PERSONNEL

LIGAND TITLE*

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*or such other personnel as may be designated in writing by LIGAND or SERAGEN

***Portions of this page have been omitted pursuant to a request for
Confidential Treatment and filed separately with the Commission.

EXHIBIT "G1"
SUPPLIERS AS OF EFFECTIVE DATE

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***Portions of this page have been omitted pursuant to a request for Confidential Treatment and filed separately with the Commission.

EXHIBIT "G2"
SUBCONTRACTORS AS OF EFFECTIVE DATE

SUBCONTRACTOR NAME	SUBCONTRACTOR ADDRESS	SUBCONTRACTED ASSAYS
***	***	***
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***	***	***
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***	***	***

* denotes alternate or proposed laboratory.

***Portions of this page have been omitted pursuant to a request for Confidential Treatment and filed separately with the Commission.

EXHIBIT "H"
SAMPLE
MANUFACTURING SERVICES AGREEMENT:
ADDITIONAL SERVICES QUOTATION
MANUFACTURE AND SUPPLY AGREEMENT:
ADDITIONAL SERVICES QUOTATION

This document (the "Quote"), effective as of the date of last signature (the "Effective Date"), shall constitute a binding agreement for additional services to the Manufacture and Supply Agreement (the "Agreement"), dated _____ by and between SERAGEN Inc. ("SERAGEN") and Cambrex Bio Science Hopkinton, Inc. ("CBSH") This quotation shall be governed by and construed in accordance with the terms and conditions of the Agreement, except as the terms and conditions of the Agreement are modified by this Quote.

1.0 SERVICES: CBSH shall perform the following additional services ("Services") for SERAGEN:

2.0 COST ESTIMATE: CBSH will invoice SERAGEN against purchase orders that will be issued by SERAGEN individually for the Services and associated cost listed below:

3.0 ASSUMPTIONS:

CAMBREX BIO SCIENCE HOPKINTON, INC. - -APPROVED

SERAGEN INC.-APPROVED

By: ----------

(signature of authorized representative)

By: ----------

(signature of authorized representative)

Name: ----------

Name: ----------

Title: ----------

Title: ----------

Date: ----------

Date: ----------

EXHIBIT 10.267

LIGAND PHARMACEUTICALS INCORPORATED

2002 STOCK INCENTIVE PLAN

MAY 16, 2002
(AS AMENDED THROUGH JUNE 20, 2003)

ARTICLE ONE

GENERAL PROVISIONS

I. PURPOSE OF THE PLAN

This 2002 Stock Incentive Plan is intended to promote the interests of Ligand Pharmaceuticals Incorporated, a Delaware corporation, by providing eligible persons in the Corporation's service with the opportunity to acquire a proprietary interest, or otherwise increase their proprietary interest, in the Corporation as an incentive for them to remain in such service.

Capitalized terms shall have the meanings assigned to such terms in the attached Appendix.

II. STRUCTURE OF THE PLAN

A. The Plan shall be divided into four separate equity incentives programs:

- the Discretionary Option Grant Program under which eligible persons may, at the discretion of the Plan Administrator, be granted options to purchase shares of Common Stock,
- the Stock Issuance Program under which eligible persons may, at the discretion of the Plan Administrator, be issued shares of Common Stock directly, either through the immediate purchase of such shares or as a bonus for services rendered the Corporation (or any Parent or Subsidiary),
- the Automatic Option Grant Program under which eligible non-employee Board members shall automatically receive option grants at designated intervals over their period of continued Board service, and
- the Director Fee Option Grant Program under which non-employee Board members may elect to have all or any portion of their annual retainer fee otherwise payable in cash applied to a special stock option grant.

B. The provisions of Articles One and Six shall apply to all equity programs under the Plan and shall govern the interests of all persons under the Plan.

III. ADMINISTRATION OF THE PLAN

A. The Primary Committee shall have sole and exclusive authority to administer the Discretionary Option Grant and Stock Issuance Programs with respect to Section 16 Insiders. Administration of the Discretionary Option Grant and Stock Issuance Programs with respect to all other persons eligible to participate in those programs may, at the Board's discretion, be vested in the Primary Committee or a Secondary Committee, or the Board may retain the power to administer those programs with respect to all such persons. However, any discretionary option grants or stock issuances for members of the Primary Committee must be authorized by a disinterested majority of the Board.

B. Members of the Primary Committee or any Secondary Committee shall serve for such period of time as the Board may determine and may be removed by

the Board at any time. The Board may also at any time terminate the functions of any Secondary Committee and reassume all powers and authority previously delegated to such committee.

C. Each Plan Administrator shall, within the scope of its administrative functions under the Plan, have full power and authority (subject to the provisions of the Plan) to establish such rules and regulations as it may deem appropriate for proper administration of the Discretionary Option Grant and Stock Issuance Programs and to make such determinations under, and issue such interpretations of, the provisions of those programs and any outstanding options or stock issuances thereunder as it may deem necessary or advisable. Decisions of the Plan Administrator within the scope of its administrative functions under the Plan shall be final and binding on all parties who have an interest in the Discretionary Option Grant and Stock Issuance Programs under its jurisdiction or any stock option or stock issuance thereunder.

D. Service on the Primary Committee or the Secondary Committee shall constitute service as a Board member, and members of each such committee shall accordingly be entitled to full indemnification and reimbursement as Board members for their service on such committee. No member of the Primary Committee or the Secondary Committee shall be liable for any act or omission made in good faith with respect to the Plan or any option grants or stock issuances under the Plan.

E. Administration of the Automatic Option Grant and Director Fee Option Grant Programs shall be self-executing in accordance with the terms of those programs, and no Plan Administrator shall exercise any discretionary functions with respect to any option grants or stock issuances made under those programs.

IV. ELIGIBILITY

A. The persons eligible to participate in the Discretionary Option Grant and Stock Issuance Programs are as follows:

(i) Employees,

(ii) non-employee members of the Board or the board of directors of any Parent or Subsidiary, and

(iii) consultants and other independent advisors who provide services to the Corporation (or any Parent or Subsidiary).

B. Each Plan Administrator shall, within the scope of its administrative jurisdiction under the Plan, have full authority to determine, (i) with respect to the option grants under the Discretionary Option Grant Program, which eligible persons are to receive such grants, the time or times when those grants are to be made, the number of shares to be covered by each such grant, the status of the granted option as either an Incentive Option or a Non-Statutory Option, the time or times when each option is to become exercisable, the vesting schedule (if any) applicable to the option shares and the maximum term for which the option is to remain outstanding and (ii) with respect to stock issuances under the Stock Issuance Program, which eligible persons are to receive such issuances, the time or times when the issuances are to be made, the number of shares to be issued to each Participant, the vesting schedule (if any) applicable to the issued shares and the consideration for such shares.

C. The Plan Administrator shall have the absolute discretion either to grant options in accordance with the Discretionary Option Grant Program or to effect stock issuances in accordance with the Stock Issuance Program.

D. The individuals who shall be eligible to participate in the Automatic Option Grant Program shall be limited to (i) those individuals who first become non-employee Board members on or after the Effective Date, whether through appointment by the Board or election by the Corporation's stockholders, and (ii) those individuals who continue to serve as non-employee Board members at one or more Annual Stockholders Meetings

held after the Effective Date. A non-employee Board member who has previously been in the employ of the Corporation (or any Parent or Subsidiary) shall not be eligible to receive an option grant under the Automatic Option Grant Program at the time he or she first becomes a non-employee Board member, but shall be eligible to receive periodic option grants under the Automatic Option Grant Program while he or she continues to serve as a non-employee Board member.

E. All non-employee Board members shall be eligible to participate in the Director Fee Option Grant Program.

V. STOCK SUBJECT TO THE PLAN

A. The stock issuable under the Plan shall be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Corporation on the open market. The number of shares of Common Stock reserved for issuance over the term of the Plan shall be 7,575,529 shares consisting of (i) the 6,075,529 shares that remained available for issuance, as of the Plan Effective Date, under the Predecessor Plan as last approved by the Corporation's stockholders, including the shares subject to outstanding options under the Predecessor Plan, (ii) plus an additional increase of 750,000 shares that was approved by the Corporation's stockholders at the 2002 Annual Meeting, plus (iii) an additional 750,000 shares approved by the Corporation's stockholders subsequent to adoption of the Plan..

B. No one person participating in the Plan may receive stock options, separately exercisable stock appreciation rights and direct stock issuances for more than 1,000,000 shares of Common Stock in the aggregate per calendar year.

C. Shares of Common Stock subject to outstanding options (including options transferred to this Plan from the Predecessor Plan) shall be available for subsequent issuance under the Plan to the extent those options expire or terminate for any reason prior to exercise in full. Unvested shares issued under the Plan and subsequently cancelled or repurchased by the Corporation, at a price per share not greater than the original issue price paid per share, pursuant to the Corporation's repurchase rights under the Plan shall be added back to the number of shares of Common Stock reserved for issuance under the Plan and shall accordingly be available for reissuance through one or more subsequent option grants or direct stock issuances under the Plan. However, should the exercise price of an option under the Plan be paid with shares of Common Stock or should shares of Common Stock otherwise issuable under the Plan be withheld by the Corporation in satisfaction of the withholding taxes incurred in connection with the exercise of an option or the vesting of a stock issuance under the Plan, then the number of shares of Common Stock available for issuance under the Plan shall be reduced by the gross number of shares for which the option is exercised or which vest under the stock issuance, and not by the net number of shares of Common Stock issued to the holder of such option or stock issuance. Shares of Common Stock underlying one or more stock appreciation rights exercised under Section V of Article Two, Section II of Article Four or Section III of Article Five of the Plan shall NOT be available for subsequent issuance under the Plan.

D. If any change is made to the Common Stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration, appropriate adjustments shall be made by the Plan Administrator to (i) the maximum number and/or class of securities issuable under the Plan, (ii) the maximum number and/or class of securities for which any one person may be granted stock options, separately exercisable stock appreciation rights and direct stock issuances under the Plan per calendar year, (iii) the number and/or class of securities for which grants are subsequently to be made under the Automatic Option Grant Program to new and continuing non-employee Board members, (iv) the number and/or class of securities and the exercise price per share in effect under each outstanding option under the Plan and (v) the number and/or class of securities and exercise price per share in effect under each outstanding option transferred to this Plan from the Predecessor Plan. Such adjustments to the outstanding options are to be effected in a manner which shall preclude the enlargement or dilution of rights and benefits under such options. The adjustments determined by the Plan Administrator shall be final, binding and conclusive.

ARTICLE TWO

DISCRETIONARY OPTION GRANT PROGRAM

I. OPTION TERMS

Each option shall be evidenced by one or more documents in the form approved by the Plan Administrator; PROVIDED, however, that each such document shall comply with the terms specified below. Each document evidencing an Incentive Option shall, in addition, be subject to the provisions of the Plan applicable to such options.

A. EXERCISE PRICE.

1. The exercise price per share shall be fixed by the Plan Administrator but shall not be less than one hundred percent (100%) of the Fair Market Value per share of Common Stock on the option grant date.

2. The exercise price shall become immediately due upon exercise of the option and shall, subject to the provisions of Section I of Article Six and the documents evidencing the option, be payable in one or more of the forms specified below:

(i) cash or check made payable to the Corporation,

(ii) shares of Common Stock held for the requisite period necessary to avoid a charge to the Corporation's earnings for financial reporting purposes and valued at Fair Market Value on the Exercise Date, or

(iii) to the extent the option is exercised for vested shares, through a special sale and remittance procedure pursuant to which the Optionee shall concurrently provide irrevocable instructions to (a) a Corporation-designated brokerage firm to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate exercise price payable for the purchased shares plus all applicable income and employment taxes required to be withheld by the Corporation by reason of such exercise and (b) the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm in order to complete the sale.

Except to the extent such sale and remittance procedure is utilized, payment of the exercise price for the purchased shares must be made on the Exercise Date.

B. EXERCISE AND TERM OF OPTIONS. Each option shall be exercisable at such time or times, during such period and for such number of shares as shall be determined by the Plan Administrator and set forth in the documents evidencing the option. However, no option shall have a term in excess of ten (10) years measured from the option grant date.

C. EFFECT OF TERMINATION OF SERVICE.

1. The following provisions shall govern the exercise of any options held by the Optionee at the time of cessation of Service or death:

(i) Any option outstanding at the time of the Optionee's cessation of Service for any reason shall remain exercisable for such period of time thereafter as shall be determined by the Plan Administrator and set forth in the documents evidencing the option, but no such option shall be exercisable after the expiration of the option term.

(ii) Any option held by the Optionee at the time of death and exercisable in whole or in part at that time may be subsequently exercised by the personal representative

of the Optionee's

estate or by the person or persons to whom the option is transferred pursuant to the Optionee's will or the laws of inheritance or by the Optionee's designated beneficiary or beneficiaries of that option.

(iii) During the applicable post-Service exercise period, the option may not be exercised in the aggregate for more than the number of vested shares for which the option is exercisable on the date of the Optionee's cessation of Service. Upon the expiration of the applicable exercise period or (if earlier) upon the expiration of the option term, the option shall terminate and cease to be outstanding for any vested shares for which the option has not been exercised. However, the option shall, immediately upon the Optionee's cessation of Service, terminate and cease to be outstanding to the extent the option is not otherwise at that time exercisable for vested shares.

2. The Plan Administrator shall have complete discretion, exercisable either at the time an option is granted or at any time while the option remains outstanding, to:

(i) extend the period of time for which the option is to remain exercisable following the Optionee's cessation of Service from the limited exercise period otherwise in effect for that option to such greater period of time as the Plan Administrator shall deem appropriate, but in no event beyond the expiration of the option term, and/or

(ii) permit the option to be exercised, during the applicable post-Service exercise period, not only with respect to the number of vested shares of Common Stock for which such option is exercisable at the time of the Optionee's cessation of Service but also with respect to one or more additional installments in which the Optionee would have vested had the Optionee continued in Service.

D. STOCKHOLDER RIGHTS. The holder of an option shall have no stockholder rights with respect to the shares subject to the option until such person shall have exercised the option, paid the exercise price and become a holder of record of the purchased shares.

E. REPURCHASE RIGHTS. The Plan Administrator shall have the discretion to grant options which are exercisable for unvested shares of Common Stock. Should the Optionee cease Service while holding such unvested shares, the Corporation shall have the right to repurchase any or all of those unvested shares at a price per share equal to the LOWER of (i) the exercise price paid per share or (ii) the Fair Market Value per share of Common Stock at the time of repurchase. The terms upon which such repurchase right shall be exercisable (including the period and procedure for exercise and the appropriate vesting schedule for the purchased shares) shall be established by the Plan Administrator and set forth in the document evidencing such repurchase right.

F. LIMITED TRANSFERABILITY OF OPTIONS. During the lifetime of the Optionee, Incentive Options shall be exercisable only by the Optionee and shall not be assignable or transferable other than by will or the laws of inheritance following the Optionee's death. Non-Statutory Options shall be subject to the same restriction, except that a Non-Statutory Option may be assigned in whole or in part during the Optionee's lifetime to one or more members of the Optionee's family or to a trust established exclusively for one or more such family members or to Optionee's former spouse, to the extent such assignment is in connection with the Optionee's estate plan or pursuant to a domestic relations order. The assigned portion may only be exercised by the person or persons who acquire a proprietary interest in the option pursuant to the assignment. The terms

applicable to the assigned portion shall be the same as those in effect for the option immediately prior to such assignment and shall be set forth in such documents issued to the assignee as the Plan Administrator may deem appropriate. Notwithstanding the foregoing, the Optionee may also designate one or more persons as the beneficiary or beneficiaries of his or her outstanding options under this Article Two, and those options shall, in accordance with such designation, automatically be transferred to such beneficiary or beneficiaries upon the Optionee's death while holding those options. Such beneficiary or beneficiaries shall take the transferred options subject to all the terms and conditions of the applicable agreement evidencing each such transferred option, including (without limitation) the limited time period during which the option may be exercised following the Optionee's death.

II. INCENTIVE OPTIONS

The terms specified below shall be applicable to all Incentive Options. Except as modified by the provisions of this Section II, all the provisions of Articles One, Two and Six shall be applicable to Incentive Options. Options which are specifically designated as Non-Statutory Options when issued under the Plan shall NOT be subject to the terms of this Section II.

A. ELIGIBILITY. Incentive Options may only be granted to Employees.

B. DOLLAR LIMITATION. The aggregate Fair Market Value of the shares of Common Stock (determined as of the respective date or dates of grant) for which one or more options granted to any Employee under the Plan (or any other option plan of the Corporation or any Parent or Subsidiary) may for the first time become exercisable as Incentive Options during any one calendar year shall not exceed the sum of One Hundred Thousand Dollars ($100,000). To the extent the Employee holds two (2) or more such options which become exercisable for the first time in the same calendar year, the foregoing limitation on the exercisability of such options as Incentive Options shall be applied on the basis of the order in which such options are granted.

C. 10% STOCKHOLDER. If any Employee to whom an Incentive Option is granted is a 10% Stockholder, then the exercise price per share shall not be less than one hundred ten percent (110%) of the Fair Market Value per share of Common Stock on the option grant date, and the option term shall not exceed five (5) years measured from the option grant date.

III. CHANGE IN CONTROL/HOSTILE TAKE-OVER

A. In the event of a Change in Control, each outstanding option under the Discretionary Option Grant Program shall automatically accelerate so that each such option shall, immediately prior to the effective date of that Change in Control, become exercisable for all the shares of Common Stock at the time subject to such option and may be exercised for any or all of those shares as fully vested shares of Common Stock. However, an outstanding option shall NOT become exercisable on such an accelerated basis if and to the extent: (i) such option is to be assumed by the successor corporation (or parent thereof) or is otherwise to continue in full force and effect pursuant to the terms of the Change in Control transaction or (ii) such option is to be replaced with a cash incentive program of the successor corporation which preserves the spread existing at the time of the Change in Control on any shares for which the option is not otherwise at that time exercisable and provides for subsequent payout of that spread in accordance with the same exercise/vesting schedule applicable to those option shares or (iii) the acceleration of such option is subject to other limitations imposed by the Plan Administrator at the time of the option grant.

B. All outstanding repurchase rights under the Discretionary Option Grant Program shall automatically terminate, and the shares of Common Stock subject to those terminated rights shall immediately vest in full, in the event of a Change in Control, except to the extent: (i) those repurchase rights are to be assigned to the successor corporation (or parent thereof) or are otherwise to continue in full force and effect pursuant to the terms of the Change in Control transaction or (ii) such accelerated vesting is precluded by other limitations imposed by the Plan Administrator at the time the repurchase right is issued.

C. Immediately following the consummation of the Change in Control, all outstanding options under the Discretionary Option Grant Program shall

terminate and cease to be outstanding, except to the extent assumed by the successor corporation (or parent thereof) or otherwise continued in full force and effect pursuant to the terms of the Change in Control transaction.

D. Each option which is assumed in connection with a Change in Control or otherwise continued in effect shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities which would have been issuable to the Optionee in consummation of such Change in Control had the option been exercised immediately prior to such Change in Control. Appropriate adjustments to reflect such Change in Control shall also be made to (i) the exercise price payable per share under each outstanding option, provided the aggregate exercise price payable for such securities shall remain the same, (ii) the maximum number and/or class of

securities available for issuance over the remaining term of the Plan and (iii) the maximum number and/or class of securities for which any one person may be granted stock options, separately exercisable stock appreciation rights and direct stock issuances under the Plan per calendar year and (iv) the maximum number and/or class of securities by which the share reserve is to increase automatically each calendar year. To the extent the actual holders of the Corporation's outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control, the successor corporation may, in connection with the assumption of the outstanding options under the Discretionary Option Grant Program, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control transaction.

E. The Plan Administrator shall have the discretionary authority to structure one or more outstanding options under the Discretionary Option Grant Program so that those options shall, immediately prior to the effective date of a Change in Control, become exercisable for all the shares of Common Stock at the time subject to those options and may be exercised for any or all of those shares as fully vested shares of Common Stock, whether or not those options are to be assumed in the Change in Control transaction or otherwise continued in effect. In addition, the Plan Administrator shall have the discretionary authority to structure one or more of the Corporation's repurchase rights under the Discretionary Option Grant Program so that those rights shall immediately terminate upon the consummation of the Change in Control transaction, and the shares subject to those terminated rights shall thereupon vest in full.

F. The Plan Administrator shall have full power and authority to structure one or more outstanding options under the Discretionary Option Grant Program so that those options shall become exercisable for all the shares of Common Stock at the time subject to those options in the event the Optionee's Service is subsequently terminated by reason of an Involuntary Termination within a designated period (not to exceed eighteen (18) months) following the effective date of any Change in Control transaction in which those options do not otherwise accelerate. In addition, the Plan Administrator may structure one or more of the Corporation's repurchase rights so that those rights shall immediately terminate with respect to any shares held by the Optionee at the time of such Involuntary Termination, and the shares subject to those terminated repurchase rights shall accordingly vest in full at that time.

G. The Plan Administrator shall have the discretionary authority to structure one or more outstanding options under the Discretionary Option Grant Program so that those options shall, immediately prior to the effective date of a Hostile Take-Over, become exercisable for all the shares of Common Stock at the time subject to those options and may be exercised for any or all of those shares as fully vested shares of Common Stock. In addition, the Plan Administrator shall have the discretionary authority to structure one or more of the Corporation's repurchase rights under the Discretionary Option Grant Program so that those rights shall terminate automatically upon the consummation of such Hostile Take-Over, and the shares subject to those terminated rights shall thereupon vest in full. Alternatively, the Plan Administrator may condition the automatic acceleration of one or more outstanding options under the Discretionary Option Grant Program and the termination of one or more of the Corporation's outstanding repurchase rights under such program upon the subsequent termination of the Optionee's Service by reason of an Involuntary Termination within a designated period (not to exceed eighteen (18) months)

following the effective date of such Hostile Take-Over.

H. The portion of any Incentive Option accelerated in connection with a Change in Control or Hostile Take-Over shall remain exercisable as an Incentive Option only to the extent the applicable One Hundred Thousand Dollar ($100,000) limitation is not exceeded. To the extent such dollar limitation is exceeded, the accelerated portion of such option shall be exercisable as a Nonstatutory Option under the Federal tax laws.

I. The outstanding options shall in no way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

IV. CANCELLATION AND REGRANT OF OPTIONS

[omitted]

V. STOCK APPRECIATION RIGHTS

A. The Plan Administrator shall have full power and authority to grant to selected Optionees tandem stock appreciation rights and/or limited stock appreciation rights.

B. The following terms shall govern the grant and exercise of tandem stock appreciation rights:

(i) One or more Optionees may be granted the right, exercisable upon such terms as the Plan Administrator may establish, to elect between the exercise of the underlying option for shares of Common Stock and the surrender of that option in exchange for a distribution from the Corporation in an amount equal to the excess of (a) the Fair Market Value (on the option surrender date) of the number of shares in which the Optionee is at the time vested under the surrendered option (or surrendered portion thereof) over (b) the aggregate exercise price payable for such shares.

(ii) No such option surrender shall be effective unless it is approved by the Plan Administrator, either at the time of the actual option surrender or at any earlier time. If the surrender is so approved, then the distribution to which the Optionee shall be entitled may be made in shares of Common Stock valued at Fair Market Value on the option surrender date, in cash, or partly in shares and partly in cash, as the Plan Administrator shall in its sole discretion deem appropriate.

(iii) If the surrender of an option is not approved by the Plan Administrator, then the Optionee shall retain whatever rights the Optionee had under the surrendered option (or surrendered portion thereof) on the option surrender date and may exercise such rights at any time prior to the LATER of (a) five (5) business days after the receipt of the rejection notice or (b) the last day on which the option is otherwise exercisable in accordance with the terms of the documents evidencing such option, but in no event may such rights be exercised more than ten (10) years after the option grant date.

C. The following terms shall govern the grant and exercise of limited stock appreciation rights:

(i) One or more Section 16 Insiders may be granted limited stock appreciation rights with respect to their outstanding options.

(ii) Upon the occurrence of a Hostile Tender-Offer, each individual holding one or more options with such a limited stock appreciation right shall have the unconditional right (exercisable for a thirty (30)-day period following such Hostile Tender-Offer) to surrender each such option to the Corporation.

In return for the surrendered option, the Optionee shall receive a cash distribution from the Corporation in an amount equal to the excess of (A) the Tender-Offer Price of the shares of Common Stock at the time subject to such option (whether or not the option is otherwise at that time vested and exercisable for those shares) over (B) the aggregate exercise price payable for those shares. Such cash distribution shall be paid within five (5) days following the option surrender date.

(iii) At the time such limited stock appreciation right is granted, the Plan Administrator shall pre-approve any subsequent exercise of that right in accordance with the terms of this Paragraph C. Accordingly, no further approval of the Plan Administrator or the Board shall be required at the time of the actual option surrender and cash distribution.

ARTICLE THREE

STOCK ISSUANCE PROGRAM

I. STOCK ISSUANCE TERMS

Shares of Common Stock may be issued under the Stock Issuance Program through direct and immediate issuances without any intervening option grants. Each such stock issuance shall be evidenced by a Stock Issuance Agreement which complies with the terms specified below. Shares of Common Stock may also be issued under the Stock Issuance Program pursuant to share right awards which entitle the recipients to receive those shares upon the attainment of designated performance goals or the satisfaction of specified Service requirements.

A. PURCHASE PRICE.

1. The purchase price per share shall be fixed by the Plan Administrator, but shall not be less than one hundred percent (100%) of the Fair Market Value per share of Common Stock on the issuance date.

2. Subject to the provisions of Section I of Article Six, shares of Common Stock may be issued under the Stock Issuance Program for any of the following items of consideration which the Plan Administrator may deem appropriate in each individual instance:

(i) cash or check made payable to the Corporation, or

(ii) past services rendered to the Corporation (or any Parent or Subsidiary).

B. VESTING PROVISIONS.

1. Shares of Common Stock issued under the Stock Issuance Program may, in the discretion of the Plan Administrator, be fully and immediately vested upon issuance or may vest in one or more installments over the Participant's period of Service or upon attainment of specified performance objectives. The elements of the vesting schedule applicable to any unvested shares of Common Stock issued under the Stock Issuance Program shall be determined by the Plan Administrator and incorporated into the Stock Issuance Agreement. Shares of Common Stock may also be issued under the Stock Issuance Program pursuant to share right awards which entitle the recipients to receive those shares upon the attainment of designated performance goals or the satisfaction of specified Service requirements.

2. Any new, substituted or additional securities or other property (including money paid other than as a regular cash dividend) which the Participant may have the right to receive with respect to the Participant's unvested shares of Common Stock by reason of any stock dividend, stock split, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration shall be issued subject to (i) the same vesting requirements applicable to the Participant's unvested shares of Common Stock and (ii) such escrow arrangements as the Plan Administrator shall deem appropriate.

3. The Participant shall have full stockholder rights with respect to any shares of Common Stock issued to the Participant under the Stock Issuance Program, whether or not the Participant's interest in those shares is vested. Accordingly, the Participant shall have the right to vote such shares and to receive any regular cash dividends paid on such shares.

4. Should the Participant cease to remain in Service while holding one or more unvested shares of Common Stock issued under the Stock Issuance Program or should the performance objectives not be attained with respect to one or more such unvested shares of Common Stock, then those shares shall be immediately surrendered to the Corporation for cancellation, and the Participant shall have no further stockholder rights with respect to those shares. To the extent the surrendered shares were previously issued to the Participant for

consideration paid in cash or cash equivalent, the Corporation shall repay to the Participant the LOWER of (i) the cash consideration paid for the surrendered shares or (ii) the Fair Market Value of those shares at the time of cancellation.

5. The Plan Administrator may in its discretion waive the surrender and cancellation of one or more unvested shares of Common Stock which would otherwise occur upon the cessation of the Participant's Service or the non-attainment of the performance objectives applicable to those shares. Such waiver shall result in the immediate vesting of the Participant's interest in the shares of Common Stock as to which the waiver applies. Such waiver may be effected at any time, whether before or after the Participant's cessation of Service or the attainment or non-attainment of the applicable performance objectives.

6. Outstanding share right awards under the Stock Issuance Program shall automatically terminate, and no shares of Common Stock shall actually be issued in satisfaction of those awards, if the performance goals or Service requirements established for such awards are not attained or satisfied. The Plan Administrator, however, shall have the discretionary authority to issue shares of Common Stock under one or more outstanding share right awards as to which the designated performance goals or Service requirements have not been attained or satisfied.

II. CHANGE IN CONTROL/HOSTILE TAKE-OVER

A. All of the Corporation's outstanding repurchase rights under the Stock Issuance Program shall terminate automatically, and all the shares of Common Stock subject to those terminated rights shall immediately vest in full, in the event of any Change in Control, except to the extent (i) those repurchase rights are to be assigned to the successor corporation (or parent thereof) or are otherwise to continue in full force and effect pursuant to the terms of the Change in Control transaction or (ii) such accelerated vesting is precluded by other limitations imposed in the Stock Issuance Agreement.

B. The Plan Administrator shall have the discretionary authority to structure one or more of the Corporation's repurchase rights under the Stock Issuance Program so that those rights shall automatically terminate in whole or in part, and the shares of Common Stock subject to those terminated rights shall immediately vest, in the event the Participant's Service should subsequently terminate by reason of an Involuntary Termination within a designated period (not to exceed eighteen (18) months) following the effective date of any Change in Control transaction in which those repurchase rights are assigned to the successor corporation (or parent thereof) or are otherwise continued in effect.

C. The Plan Administrator shall also have the discretionary authority to structure one or more of the Corporation's repurchase rights under the Stock Issuance Program so that those rights shall automatically terminate in whole or in part, and the shares of Common Stock subject to those terminated rights shall immediately vest, either upon the occurrence of a Hostile Take-Over or upon the subsequent termination of the Participant's Service by reason of an Involuntary Termination within a designated period (not to exceed eighteen (18) months) following the effective date of that Hostile Take-Over.

III. SHARE ESCROW/LEGENDS

Unvested shares may, in the Plan Administrator's discretion, be held in escrow by the Corporation until the Participant's interest in such shares vests or may be issued directly to the Participant with restrictive legends on the certificates evidencing those unvested shares.

ARTICLE FOUR

AUTOMATIC OPTION GRANT PROGRAM

I. OPTION TERMS

A. GRANT DATES. Option grants shall be made on the dates specified below:

1. Each individual who is first elected or appointed as a non-employee Board member at any time on or after the Effective Date shall automatically be granted, on the date of such initial election or appointment, a Non-Statutory Option to purchase 20,000 shares of Common Stock, provided that individual has not previously been in the employ of the Corporation or any Parent or Subsidiary.

2. On the date of each Annual Stockholders Meeting held after the Effective Date, each individual who is to continue to serve as a non-employee Board member, whether or not that individual is standing for re-election to the Board at that particular Annual Meeting, shall automatically be granted a Non-Statutory Option to purchase 10,000 shares of Common Stock, provided such individual has served as a non-employee Board member for at least six (6) months. There shall be no limit on the number of such 10,000-share option grants any one non-employee Board member may receive over his or her period of Board service, and non-employee Board members who have previously been in the employ of the Corporation (or any Parent or Subsidiary) or who have otherwise received one or more stock option grants from the Corporation prior to the Effective Date shall be eligible to receive one or more such annual option grants over their period of continued Board service.

B. EXERCISE PRICE.

1. The exercise price per share shall be equal to one hundred percent (100%) of the Fair Market Value per share of Common Stock on the option grant date.

2. The exercise price shall be payable in one or more of the alternative forms authorized under the Discretionary Option Grant Program. Except to the extent the sale and remittance procedure specified thereunder is utilized, payment of the exercise price for the purchased shares must be made on the Exercise Date.

C. OPTION TERM. Each option shall have a term of ten (10) years measured from the option grant date.

D. EXERCISABILITY AND VESTING OF OPTIONS. Each automatic grant shall become fully vested and exercisable upon the Optionee's completion of the one (1)-year period of continued Board service measured from the grant date.

E. LIMITED TRANSFERABILITY OF OPTIONS. Each option under this Article Four may be assigned in whole or in part during the Optionee's lifetime to one or more members of the Optionee's family or to a trust established exclusively for one or more such family members or to Optionee's former spouse, to the extent such assignment is in connection with the Optionee's estate plan or pursuant to a domestic relations order. The assigned portion may only be exercised by the person or persons who acquire a proprietary interest in the option pursuant to the assignment. The terms applicable to the assigned portion shall be the same as those in effect for the option immediately prior to such assignment and shall be set forth in such documents issued to the assignee as the Plan Administrator may deem appropriate. The Optionee may also designate one or more persons as the beneficiary or beneficiaries of his or her outstanding options under this Article Four, and those options shall, in accordance with

such designation, automatically be transferred to such beneficiary or beneficiaries upon the Optionee's death while holding those options. Such beneficiary or beneficiaries shall take the transferred options subject to all the terms and conditions of the applicable agreement evidencing each such transferred option, including (without limitation) the limited time period during which the option may be exercised following the Optionee's death.

F. TERMINATION OF BOARD SERVICE. The following provisions shall govern the exercise of any options held by the Optionee at the time the Optionee ceases to serve as a Board member:

(i) The Optionee shall have a three (3)-year period following the date of such cessation of Board service in which to exercise each such option.

(ii) During the three (3)-year exercise period, the option may not be exercised in the aggregate for more than the number of vested shares of Common Stock for which the option is exercisable at the time of the Optionee's cessation of Board service.

(iii) Should the Optionee cease to serve as a Board member by reason of death or Permanent Disability, then all shares at the time subject to the option shall immediately vest so that such option may, during the three (3)-year exercise period following such cessation of Board service, be exercised for any or all of those shares as fully vested shares of Common Stock.

(iv) In no event shall the option remain exercisable after the expiration of the option term. Upon the expiration of the exercise period or (if earlier) upon the expiration of the option term, the option shall terminate and cease to be outstanding for any vested shares for which the option has not been exercised. However, the option shall, immediately upon the Optionee's cessation of Board service for any reason other than death or Permanent Disability, terminate and cease to be outstanding to the extent the option is not otherwise at that time exercisable for vested shares.

II. CHANGE IN CONTROL/HOSTILE TAKE-OVER/HOSTILE TENDER-OFFER

A. In the event of a Change in Control while the Optionee remains a Board member, the shares of Common Stock at the time subject to each outstanding option held by such Optionee under this Automatic Option Grant Program but not otherwise vested shall automatically vest in full so that each such option shall, immediately prior to the effective date of the Change in Control, become exercisable for all the option shares as fully vested shares of Common Stock and may be exercised for any or all of those vested shares. Immediately following the consummation of the Change in Control, each automatic option grant shall terminate and cease to be outstanding, except to the extent assumed by the successor corporation (or parent thereof) or otherwise continued in effect pursuant to the terms of the Change in Control transaction.

B. In the event of a Hostile Take-Over while the Optionee remains a Board member, the shares of Common Stock at the time subject to each outstanding option held by such Optionee under this Automatic Option Grant Program but not otherwise vested shall automatically vest in full so that each such option shall, immediately prior to the effective date of the Hostile Take-Over, become exercisable for all the option shares as fully vested shares of Common Stock and may be exercised for any or all of those vested shares. Each such option shall remain exercisable for such fully vested option shares until the expiration or sooner termination of the option term or the surrender of the option in connection with a Hostile Tender-Offer.

C. All outstanding repurchase rights under this under this Automatic Option Grant Program shall automatically terminate, and the shares of Common Stock subject to those terminated rights shall immediately vest in full, in the event of any Change in Control or Hostile Take-Over.

D. Upon the occurrence of a Hostile Tender-Offer while the Optionee

remains a Board member, such Optionee shall have a thirty (30)-day period in which to surrender to the Corporation each of his or her outstanding options under this Automatic Option Grant Program. The Optionee shall in return be entitled to a cash distribution from the Corporation in an amount equal to the excess of (i) the Tender-Offer Price of the shares of Common Stock at the time subject to each surrendered option (whether or not the Optionee is otherwise at the time vested in those shares) over (ii) the aggregate exercise price payable for such shares. Such cash distribution shall be paid within five (5) days following the surrender of the option to the Corporation. No approval or consent of the Board or any Plan Administrator shall be required at the time of the actual option surrender and cash distribution.

E. Each option which is assumed in connection with a Change in Control or otherwise continued in effect shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities which would have been issuable to the Optionee in consummation of such Change in Control had the option been exercised immediately prior to such Change in Control. Appropriate adjustments shall also be made to the exercise price payable per share under each outstanding option, provided the aggregate exercise price payable for such securities shall remain the same. To the extent the actual holders of the Corporation's outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control, the successor corporation may, in connection with the assumption of the outstanding options under the Automatic Option Grant Program, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control transaction.

F. The grant of options under the Automatic Option Grant Program shall in no way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

III. REMAINING TERMS

The remaining terms of each option granted under the Automatic Option Grant Program shall be the same as the terms in effect for option grants made under the Discretionary Option Grant Program.

ARTICLE FIVE

DIRECTOR FEE OPTION GRANT PROGRAM

I. OPTION GRANTS

The Primary Committee shall have the sole and exclusive authority to determine the calendar year or years for which the Director Fee Option Grant Program is to be in effect. For each such calendar year the program is in effect, each non-employee Board member may irrevocably elect to apply all or any portion of the annual fee otherwise payable in cash for his or her service on the Board for that year to the acquisition of a special option grant under this Director Fee Option Grant Program. Such election must be filed with the Corporation's Chief Financial Officer prior to the first day of the calendar year for which the annual fee which is the subject of that election is otherwise payable. Each non-employee Board member who files such a timely election shall automatically be granted an option under this Director Fee Option Grant Program on the first trading day in January in the calendar year for which the fee election is in effect. The dollar amount of the fee subject to the Board member's election each year shall be equal to the number of regularly scheduled Board meetings for that year multiplied by the per Board meeting fee in effect for such year, plus any annual retainer fee(s) in effect for such year.

II. OPTION TERMS

Each option shall be a Non-Statutory Option governed by the terms and conditions specified below.

A. EXERCISE PRICE.

1. The exercise price per share shall be thirty-three and one-third percent (33-1/3%) of the Fair Market Value per share of Common Stock on the option grant date.

2. The exercise price shall become immediately due upon exercise of the option and shall be payable in one or more of the alternative forms authorized under the Discretionary Option Grant Program. Except to the extent the sale and remittance procedure specified thereunder is utilized, payment of the exercise price for the purchased shares must be made on the Exercise Date.

B. NUMBER OF OPTION SHARES. The number of shares of Common Stock subject to the option shall be determined pursuant to the following formula (rounded down to the nearest whole number):

X = A / (B x 66-2/3%), where

X is the number of option shares,

A is the portion of the annual retainer fee subject to the non-employee Board member's election under this Director Fee Option Grant Program, and

B is the Fair Market Value per share of Common Stock on the option grant date.

C. EXERCISE AND TERM OF OPTIONS. The option shall become exercisable in a series of twelve (12) equal monthly installments upon the Optionee's completion of each calendar month of Board service during the calendar year for which the retainer fee election is in effect. Each option shall have a maximum term of ten (10) years measured from the option grant date.

D. LIMITED TRANSFERABILITY OF OPTIONS. Each option under this Article Five may be assigned in whole or in part during the Optionee's lifetime to one or more members of the Optionee's family or to a trust established exclusively for one or more such family members or to Optionee's former spouse, to the extent such

assignment is in connection with Optionee's estate plan or pursuant to a domestic relations order. The assigned portion may only be exercised by the person or persons who acquire a proprietary interest in the option pursuant to the assignment. The terms applicable to the assigned portion shall be the same as those in effect for the option immediately prior to such assignment and shall be set forth in such documents issued to the assignee as the Plan Administrator may deem appropriate. The Optionee may also designate one or more persons as the beneficiary or beneficiaries of his or her outstanding options under this Article Five, and those options shall, in accordance with such designation, automatically be transferred to such beneficiary or beneficiaries upon the Optionee's death while holding those options. Such beneficiary or beneficiaries shall take the transferred options subject to all the terms and conditions of the applicable agreement evidencing each such transferred option, including (without limitation) the limited time period during which the option may be exercised following the Optionee's death.

E. TERMINATION OF BOARD SERVICE. Should the Optionee cease Board service for any reason other than death or Permanent Disability while holding one or more options under this Director Fee Option Grant Program, then each such option shall remain exercisable, for any or all of the shares for which the option is exercisable at the time of such cessation of Board service, until the earlier of (i) the expiration of the ten (10)-year option term or (ii) the expiration of the three (3)-year period measured from the date of such cessation of Board service. However, each option held by the Optionee under this Director Fee Option Grant Program at the time of his or her cessation of Board service

shall immediately terminate and cease to remain outstanding with respect to any and all shares of Common Stock for which the option is not otherwise at that time exercisable.

F. DEATH OR PERMANENT DISABILITY. Should the Optionee's service as a Board member cease by reason of death or Permanent Disability, then each option held by such Optionee under this Director Fee Option Grant Program shall immediately become exercisable for all the shares of Common Stock at the time subject to that option, and the option may be exercised for any or all of those shares as fully vested shares until the EARLIER of (i) the expiration of the ten (10)-year option term or (ii) the expiration of the three (3)-year period measured from the date of such cessation of Board service. To the extent such option is held by the Optionee at the time of his or her death, that option may be exercised by the personal representative of the Optionee's estate or by the person or persons to whom the option is transferred pursuant to the Optionee's will or the laws of inheritance or by the designated beneficiary or beneficiaries of such option.

III. CHANGE IN CONTROL/HOSTILE TAKE-OVER/HOSTILE TENDER-OFFER

A. In the event of any Change in Control while the Optionee remains a Board member, each outstanding option held by such Optionee under this Director Fee Option Grant Program shall automatically accelerate so that each such option shall, immediately prior to the effective date of the Change in Control, become exercisable for all the shares of Common Stock at the time subject to such option and may be exercised for any or all of those shares as fully vested shares of Common Stock. Each such outstanding option shall terminate immediately following the Change in Control, except to the extent assumed by the successor corporation (or parent thereof) or otherwise continued in effect pursuant to the terms of the Change in Control transaction. Any option so assumed or continued shall remain exercisable for the fully vested shares until the EARLIEST to occur of (i) the expiration of the ten (10)-year option term, (ii) the expiration of the three (3)-year period measured from the date of the Optionee's cessation of Board service or (iii) the surrender of the option in connection with a Hostile Tender-Offer.

B. In the event of a Hostile Take-Over while the Optionee remains a Board member, each outstanding option held by such Optionee under this Director Fee Option Grant Program shall automatically accelerate so that each such option shall, immediately prior to the effective date of the Hostile Take-Over, become exercisable for all the shares of Common Stock at the time subject to such option and may be exercised for any or all of those shares as fully vested shares of Common Stock. The option shall remain so exercisable until the EARLIEST to occur of (i) the expiration of the ten (10)-year option term, (ii) the expiration of the three (3)-year period measured from the date of the Optionee's cessation of Board service, (iii) the termination of the option in connection with a Change in Control transaction or (iv) the surrender of the option in connection with a Hostile Tender-Offer.

C. Upon the occurrence of a Hostile Tender-Offer while the Optionee remains a Board member, such Optionee shall have a thirty (30)-day period in which to surrender to the Corporation each outstanding option held by him or her under the Director Fee Option Grant Program. The Optionee shall in return be entitled to a cash

distribution from the Corporation in an amount equal to the excess of (i) the Tender-Offer Price of the shares of Common Stock at the time subject to each surrendered option (whether or not the option is otherwise at the time exercisable for those shares) over (ii) the aggregate exercise price payable for such shares. Such cash distribution shall be paid within five (5) days following the surrender of the option to the Corporation. No approval or consent of the Board or any Plan Administrator shall be required at the time of the actual option surrender and cash distribution.

D. Each option which is assumed in connection with a Change in Control or otherwise continued in effect shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities which would have been issuable to the Optionee in consummation of such Change in Control had the option been exercised immediately prior to such Change in

Control. Appropriate adjustments shall also be made to the exercise price payable per share under each outstanding option, PROVIDED the aggregate exercise price payable for such securities shall remain the same. To the extent the actual holders of the Corporation's outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control, the successor corporation may, in connection with the assumption of the outstanding options under the Director Fee Option Grant Program, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control transaction.

E. The grant of options under the Director Fee Option Grant Program shall in no way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

IV. REMAINING TERMS

The remaining terms of each option granted under this Director Fee Option Grant Program shall be the same as the terms in effect for option grants made under the Discretionary Option Grant Program.

ARTICLE SIX

MISCELLANEOUS

I. FINANCING

[omitted]

II. TAX WITHHOLDING

A. The Corporation's obligation to deliver shares of Common Stock upon the exercise of options or the issuance or vesting of such shares under the Plan shall be subject to the satisfaction of all applicable income and employment tax withholding requirements.

B. The Plan Administrator may, in its discretion, provide any or all holders of Non-Statutory Options or unvested shares of Common Stock under the Plan (other than the options granted or the shares issued under the Automatic Option Grant or Director Fee Option Grant Program) with the right to use shares of Common Stock in satisfaction of all or part of the Withholding Taxes to which such holders may become subject in connection with the exercise of their options or the vesting of their shares. Such right may be provided to any such holder in either or both of the following formats:

STOCK WITHHOLDING: The election to have the Corporation withhold, from the shares of Common Stock otherwise issuable upon the exercise of such Non-Statutory Option or the vesting of such shares, a portion of those shares with an aggregate Fair Market Value equal to the percentage of the Withholding Taxes (not to exceed one hundred percent (100%)) designated by the holder.

STOCK DELIVERY: The election to deliver to the Corporation, at the time the Non-Statutory Option is exercised or the shares vest, one or more shares of Common Stock previously acquired by such holder (other than in connection with the option exercise or share vesting triggering the Withholding Taxes) with an aggregate Fair Market Value equal to the percentage of the Withholding Taxes (not to exceed one hundred percent (100%)) designated by the holder.

III. EFFECTIVE DATE AND TERM OF THE PLAN

A. The Plan was adopted by the Board on March 7, 2002, and shall become effective on the Plan Effective Date. However, the Director Fee Option Grant Program shall not be implemented until such time as the Primary Committee may deem appropriate. Options may be granted under the Discretionary Option Grant Program at any time on or after the Plan Effective Date. However, no options granted under the Plan may be exercised, and no shares shall be issued

under the Plan, until the Plan is approved by the Corporation's stockholders. If such stockholder approval is not obtained within twelve (12) months after the Plan Effective Date, then all options previously granted under this Plan shall terminate and cease to be outstanding, and no further options shall be granted and no shares shall be issued under the Plan.

B. The Plan shall serve as the successor to the Predecessor Plan, and no further option grants or direct stock issuances shall be made under the Predecessor Plan after the Plan Effective Date. All options outstanding under the Predecessor Plan on the Plan Effective Date shall be transferred to the Plan at that time and shall be treated as outstanding options under the Plan. However, each outstanding option so transferred shall continue to be governed solely by the terms of the documents evidencing such option, and no provision of the Plan shall be deemed to affect or otherwise modify the rights or obligations of the holders of such transferred options with respect to their acquisition of shares of Common Stock.

C. One or more provisions of the Plan, including (without limitation) the option/vesting acceleration provisions of Article Two relating to Changes in Control and Hostile Take-Overs, may, in the Plan Administrator's discretion, be extended to one or more options incorporated from the Predecessor Plan which do not otherwise contain such provisions.

D. The Plan shall terminate upon the earliest to occur of (i) March 7, 2012, or (ii) the termination of all outstanding options in connection with a Change in Control. Should the Plan terminate on March 7, 2012, then all option grants and unvested stock issuances outstanding at that time shall continue to have force and effect in accordance with the provisions of the documents evidencing such grants or issuances.

IV. AMENDMENT OF THE PLAN

A. The Board shall have complete and exclusive power and authority to amend or modify the Plan in any or all respects. However, no such amendment or modification shall adversely affect the rights and obligations with respect to stock options or unvested stock issuances at the time outstanding under the Plan unless the Optionee or the Participant consents to such amendment or modification. In addition, certain amendments may require stockholder approval pursuant to applicable laws or regulations.

B. Options to purchase shares of Common Stock may be granted under the Discretionary Option Grant Program and shares of Common Stock may be issued under the Stock Issuance Program that are in each instance in excess of the number of shares then available for issuance under the Plan, provided any excess shares actually issued under those programs shall be held in escrow until there is obtained stockholder approval of an amendment sufficiently increasing the number of shares of Common Stock available for issuance under the Plan. If such stockholder approval is not obtained within twelve (12) months after the date the first such excess issuances are made, then (i) any unexercised options granted on the basis of such excess shares shall terminate and cease to be outstanding and (ii) the Corporation shall promptly refund to the Optionees and the Participants the exercise or purchase price paid for any excess shares issued under the Plan and held in escrow, together with interest (at the applicable Short Term Federal Rate) for the period the shares were held in escrow, and such shares shall thereupon be automatically cancelled and cease to be outstanding.

V. USE OF PROCEEDS

Any cash proceeds received by the Corporation from the sale of shares of Common Stock under the Plan shall be used for general corporate purposes.

VI. REGULATORY APPROVALS

A. The implementation of the Plan, the granting of any stock option under the Plan and the issuance of any shares of Common Stock (i) upon the exercise of any granted option or (ii) under the Stock Issuance Program shall be subject to the Corporation's procurement of all approvals and permits required by regulatory authorities having jurisdiction over the Plan, the stock options

granted under it and the shares of Common Stock issued pursuant to it.

B. No shares of Common Stock or other assets shall be issued or delivered under the Plan unless and until there shall have been compliance with all applicable requirements of applicable securities laws, including the filing and effectiveness of the Form S-8 registration statement for the shares of Common Stock issuable under the Plan, and all applicable listing requirements of any stock exchange (or the Nasdaq National Market, if applicable) on which Common Stock is then listed for trading.

VII. NO EMPLOYMENT/SERVICE RIGHTS

Nothing in the Plan shall confer upon the Optionee or the Participant any right to continue in Service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Corporation (or any Parent or Subsidiary employing or retaining such person) or of the Optionee or the Participant, which rights are hereby expressly reserved by each, to terminate such person's Service at any time for any reason, with or without cause.

APPENDIX

The following definitions shall be in effect under the Plan:

A. AUTOMATIC OPTION GRANT PROGRAM shall mean the automatic option grant program in effect under Article Four of the Plan.

B. BOARD shall mean the Corporation's Board of Directors.

C. CHANGE IN CONTROL shall mean a change in ownership or control of the Corporation effected through any of the following transactions:

(i) a merger, consolidation or other reorganization approved by the Corporation's stockholders, unless securities representing more than fifty percent (50%) of the total combined voting power of the voting securities of the successor corporation are immediately thereafter beneficially owned, directly or indirectly and in substantially the same proportion, by the persons who beneficially owned the Corporation's outstanding voting securities immediately prior to such transaction, or

(ii) the sale, transfer or other disposition of all or substantially all of the Corporation's assets in complete liquidation or dissolution of the Corporation, or

(iii) the acquisition, directly or indirectly by any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation), of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders.

D. CODE shall mean the Internal Revenue Code of 1986, as amended.

E. COMMON STOCK shall mean the Corporation's common stock.

F. CORPORATION shall mean Ligand Pharmaceuticals Incorporated, a Delaware corporation, and any corporate successor to all or substantially all of the assets or voting stock of Ligand Pharmaceuticals Incorporated which shall by appropriate action adopt the Plan.

G. DIRECTOR FEE OPTION GRANT PROGRAM shall mean the special stock option grant in effect for non-employee Board members under Article Five of the Plan.

H. DISCRETIONARY OPTION GRANT PROGRAM shall mean the discretionary

option grant program in effect under Article Two of the Plan.

I. EMPLOYEE shall mean an individual who is in the employ of the Corporation (or any Parent or Subsidiary), subject to the control and direction of the employer entity as to both the work to be performed and the manner and method of performance.

J. EXERCISE DATE shall mean the date on which the Corporation shall have received written notice of the option exercise.

K. FAIR MARKET VALUE per share of Common Stock on any relevant date shall be determined in accordance with the following provisions:

(i) If the Common Stock is at the time traded on the Nasdaq National Market, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question, as such price is reported by the National Association of Securities Dealers on the Nasdaq National Market

and published in THE WALL STREET JOURNAL. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(ii) If the Common Stock is at the time listed on any Stock Exchange, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question on the Stock Exchange determined by the Plan Administrator to be the primary market for the Common Stock, as such price is officially quoted in the composite tape of transactions on such exchange and published in THE WALL STREET JOURNAL. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

L. HOSTILE TAKE-OVER shall mean a change in ownership or control of the Corporation effected through either of the following transactions:

(i) a change in the composition of the Board over a period of thirty-six (36) consecutive months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be comprised of individuals who either (A) have been Board members continuously since the beginning of such period or (B) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (A) who were still in office at the time the Board approved such election or nomination, or

(ii) a Hostile Tender-Offer.

M. HOSTILE TENDER-OFFER shall mean the acquisition, directly or indirectly, by any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation) of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders which the Board does not recommend such stockholders to accept.

N. INCENTIVE OPTION shall mean an option which satisfies the requirements of Code Section 422.

O. INVOLUNTARY TERMINATION shall mean the termination of the Service of any individual which occurs by reason of:

(i) such individual's involuntary dismissal or discharge by

the Corporation for reasons other than Misconduct, or

(ii) such individual's voluntary resignation following (A) a change in his or her position with the Corporation which materially reduces his or her duties and responsibilities or the level of management to which he or she reports, (B) a reduction in his or her level of compensation (including base salary, fringe benefits and target bonus under any corporate-performance based bonus or incentive programs) by more than fifteen percent (15%) or (C) a relocation of such individual's place of employment by more than fifty (50) miles, provided and only if such change, reduction or relocation is effected by the Corporation without the individual's consent.

P. MISCONDUCT shall mean the commission of any act of fraud, embezzlement or dishonesty by the Optionee or Participant, any unauthorized use or disclosure by such person of confidential information or trade secrets of the Corporation (or any Parent or Subsidiary), or any other intentional misconduct by such person adversely affecting the business or affairs of the Corporation (or any Parent or Subsidiary) in a material manner. The foregoing definition shall not in any way preclude or restrict the right of the Corporation (or any Parent or Subsidiary) to discharge or dismiss any Optionee, Participant or other person in the Service of the Corporation (or

any Parent or Subsidiary) for any other acts or omissions, but such other acts or omissions shall not be deemed, for purposes of the Plan, to constitute grounds for termination for Misconduct.

P. 1934 ACT shall mean the Securities Exchange Act of 1934, as amended.

Q. NON-STATUTORY OPTION shall mean an option not intended to satisfy the requirements of Code Section 422.

R. OPTIONEE shall mean any person to whom an option is granted under the Discretionary Option Grant, Automatic Option Grant or Director Fee Option Grant Program.

S. PARENT shall mean any corporation (other than the Corporation) in an unbroken chain of corporations ending with the Corporation, provided each corporation in the unbroken chain (other than the Corporation) owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

T. PARTICIPANT shall mean any person who is issued shares of Common Stock under the Stock Issuance Program.

U. PERMANENT DISABILITY OR PERMANENTLY DISABLED shall mean the inability of the Optionee or the Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment expected to result in death or to be of continuous duration of twelve (12) months or more. However, solely for purposes of the Automatic Option Grant and Director Fee Option Grant Programs, Permanent Disability or Permanently Disabled shall mean the inability of the non-employee Board member to perform his or her usual duties as a Board member by reason of any medically determinable physical or mental impairment expected to result in death or to be of continuous duration of twelve (12) months or more.

V. PLAN shall mean the Corporation's 2002 Stock Incentive Plan, as set forth in this document.

W. PLAN ADMINISTRATOR shall mean the particular entity, whether the Primary Committee, the Board or the Secondary Committee, which is authorized to administer the Discretionary Option Grant and Stock Issuance Programs with respect to one or more classes of eligible persons, to the extent such entity is carrying out its administrative functions under those programs with respect to the persons under its jurisdiction.

X. PLAN EFFECTIVE DATE shall mean the date the Plan shall become effective and shall be coincident with the first business day following the 2002 Annual Meeting of Stockholders scheduled to take place on May 15, 2002.

Y. PREDECESSOR PLAN shall mean the Corporation's 1992 Stock Incentive Plan in effect immediately prior to the Plan Effective Date hereunder.

Z. PRIMARY COMMITTEE shall mean the committee of two (2) or more non-employee Board members appointed by the Board to administer the Discretionary Option Grant and Stock Issuance Programs with respect to Section 16 Insiders.

AA. SECONDARY COMMITTEE shall mean a committee of one or more Board members appointed by the Board to administer the Discretionary Option Grant and Stock Issuance Programs with respect to eligible persons other than Section 16 Insiders.

BB. SECTION 16 INSIDER shall mean an officer or director of the Corporation subject to the short-swing profit liabilities of Section 16 of the 1934 Act.

CC. SERVICE shall mean the performance of services for the Corporation (or any Parent or Subsidiary) by a person in the capacity of an Employee, a non-employee member of the board of directors or a

consultant or independent advisor, except to the extent otherwise specifically provided in the documents evidencing the option grant or stock issuance.

DD. STOCK EXCHANGE shall mean either the American Stock Exchange or the New York Stock Exchange.

EE. STOCK ISSUANCE AGREEMENT shall mean the agreement entered into by the Corporation and the Participant at the time of issuance of shares of Common Stock under the Stock Issuance Program.

FF. STOCK ISSUANCE PROGRAM shall mean the stock issuance program in effect under Article Three of the Plan.

GG. SUBSIDIARY shall mean any corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation, provided each corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

HH. TENDER-OFFER PRICE shall mean the greater of (i) the Fair Market Value per share of Common Stock on the date the option is surrendered to the Corporation in connection with a Hostile Tender-Offer or (ii) the highest reported price per share of Common Stock paid by the tender offeror in effecting such Hostile Tender-Offer. However, if the surrendered option is an Incentive Option, the Tender-Offer Price shall not exceed the clause (i) price per share.

II. 10% STOCKHOLDER shall mean the owner of stock (as determined under Code Section 424(d)) possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Corporation (or any Parent or Subsidiary).

JJ. WITHHOLDING TAXES shall mean the applicable income and employment withholding taxes to which the holder of Non-Statutory Options or unvested shares of Common Stock may become subject in connection with the exercise of those options or the vesting of those shares.

EXHIBIT 10.268

LIGAND PHARMACEUTICALS INCORPORATED

2002 EMPLOYEE STOCK PURCHASE PLAN

JULY 1, 2002
(AS AMENDED THROUGH JUNE 30, 2003)

I. PURPOSE OF THE PLAN

This Employee Stock Purchase Plan is intended to promote the interests of Ligand Pharmaceuticals Incorporated, a Delaware corporation, by providing eligible employees with the opportunity to acquire a proprietary interest in the Corporation through participation in a payroll deduction-based employee stock purchase plan designed to qualify under Section 423 of the Code.

Capitalized terms herein shall have the meanings assigned to such terms in the attached Appendix.

II. ADMINISTRATION OF THE PLAN

The Plan Administrator shall have full authority to interpret and construe any provision of the Plan and to adopt such rules and regulations for administering the Plan as it may deem necessary in order to comply with the requirements of Code Section 423. Decisions of the Plan Administrator shall be final and binding on all parties having an interest in the Plan.

III. STOCK SUBJECT TO PLAN

A. The stock purchasable under the Plan shall be shares of authorized but unissued or reacquired Common Stock, including shares of Common Stock purchased on the open market. The number of shares of Common Stock reserved for issuance over the term of the Plan shall be 510,248 shares, consisting of (i) 35,248 shares that remained available for issuance, as of the Effective Date, under the Predecessor Plan as last approved by the Corporation's stockholders plus (ii) an additional increase of 75,000 shares that was approved by the Corporation's stockholders at the 2002 Annual Meeting plus (iii) an additional 400,000 shares approved by the Corporation's stockholders subsequent to the adoption of the Plan.

B. Should any change be made to the Common Stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration, appropriate adjustments shall be made to (i) the maximum number and class of securities issuable under the Plan, (ii) the maximum number and class of securities purchasable per Participant on any one Purchase Date and (iii) the number and class of securities and the price per share in effect under each outstanding purchase right in order to prevent the dilution or enlargement of benefits thereunder.

IV. OFFERING PERIODS

A. Shares of Common Stock shall be offered for purchase under the Plan through a series of successive offering periods, which shall continue until such time as (i) the maximum number of shares of Common Stock available for issuance under the Plan shall have been purchased (ii) the Plan Administrator shall have terminated the offering period as provided below or (iii) the Plan shall have been sooner terminated.

B. Each offering period shall consist of one Purchase Interval or such other duration (not to exceed twenty-four (24) months) as determined by the Plan Administrator prior to the start date of such offering period.

C. Each offering period shall consist of a series of one or more successive Purchase Intervals. Purchase Intervals shall run from (i) the first business day in January to the last business day in March each year (ii) from the first business day in April to the last business day in June each year, (iii) from the first business day in July to the last business day in September each year and (iv) from the first business day in October to the last business day in December each year.

D. It its sole discretion, the Plan Administrator may provide that, should the Fair Market Value per share of Common Stock on any Purchase Date within an offering period be less than the Fair Market Value per share of Common Stock on the start date of that offering period, then immediately after the purchase of shares of Common Stock on behalf of the participants in that offering period on that Purchase Date, that offering period will automatically terminate, and a new offering period will begin on the next business day, with all participants in the terminated offering period to be automatically transferred to the new offering period.

E. The Plan Administrator may in its discretion terminate any ongoing offering period with respect to future Purchase Interval(s), effective on a current or future Purchase Date in such offering period when, in the sole discretion of the Plan Administrator, such termination would be in the best interests of the Corporation or its stockholders including without limitation to assure that the Corporation will not recognize, for financial reporting purposes, any compensation expense in connection with the shares of Common Stock offered for purchase under the Plan. Upon such early termination, a new offering period will begin at the time designated by the Plan Administrator.

V. ELIGIBILITY

A. Each individual who is an Eligible Employee on the start date of any offering period under the Plan may enter that offering period on such start date or on any subsequent Quarterly Entry Date within that offering period, provided he or she remains an Eligible Employee.

B. Each individual who first becomes an Eligible Employee after the start date of an offering period may enter that offering period on any subsequent Quarterly Entry Date within that offering period on which he or she is an Eligible Employee.

C. The date an individual enters an offering period shall be designated his or her Entry Date for purposes of that offering period.

D. Except as otherwise provided in Sections IV.D. and V.A. above, the Eligible Employee must complete the enrollment forms prescribed by the Plan Administrator (including a stock purchase agreement and a payroll deduction authorization) and file such forms with the Plan Administrator (or its designate) on or before his or her scheduled Entry Date. Participants in the Plan at the expiration of an offering period may be automatically enrolled in the next offering period at the discretion of the Plan Administrator.

VI. PAYROLL DEDUCTIONS

A. The payroll deduction authorized by the Participant for purposes of acquiring shares of Common Stock during an offering period may be any multiple of one percent (1%) of the Cash Earnings paid to the Participant during each Purchase Interval within that offering period, up to a maximum of ten percent (10%). The deduction rate so authorized shall continue in effect throughout the offering period, except to the extent such rate is changed in accordance with the following guidelines:

(i) The Participant may, at any time during the offering period, reduce his or her rate of payroll deduction (or to the extent applicable, the percentage of Cash Earnings to serve as his or her lump sum contribution for the initial Purchase Interval of the first offering period) to become effective as soon as possible after filing the appropriate form with the Plan

Administrator. The Participant may not, however, effect more than one (1) such reduction per Purchase Interval.

(ii) The Participant may, prior to the commencement of any new Purchase Interval within the offering period, increase the rate of his or her payroll deduction by filing the appropriate form with the Plan Administrator. The new rate (which may not exceed the ten percent (10%) maximum) shall become effective on the start date of the first Purchase Interval following the filing of such form.

B. Payroll deductions shall begin on the first pay day administratively feasible following the Participant's Entry Date into the offering period and shall (unless sooner terminated by the Participant) continue through the pay day ending with or immediately prior to the last day of that offering period. The amounts so collected shall be credited to the Participant's book account under the Plan, but no interest shall be paid on the balance from time to time outstanding in such account. The amounts collected from the Participant shall not be required to be held in any segregated account or trust fund and may be commingled with the general assets of the Corporation and used for general corporate purposes.

C. Payroll deductions shall automatically cease upon the termination of the Participant's purchase right in accordance with the provisions of the Plan.

D. The Participant's acquisition of Common Stock under the Plan on any Purchase Date shall neither limit nor require the Participant's acquisition of Common Stock on any subsequent Purchase Date, whether within the same or a different offering period.

VII. PURCHASE RIGHTS

A. GRANT OF PURCHASE RIGHTS. A Participant shall be granted a separate purchase right for each offering period in which he or she participates. The purchase right shall be granted on the Participant's Entry Date into the offering period and shall provide the Participant with the right to purchase shares of Common Stock, in a series of one or more installments over the remainder of such offering period, upon the terms set forth below. The Participant shall execute a stock purchase agreement embodying such terms and such other provisions (not inconsistent with the Plan) as the Plan Administrator may deem advisable.

Under no circumstances shall purchase rights be granted under the Plan to any Eligible Employee if such individual would, immediately after the grant, own (within the meaning of Code Section 424(d)) or hold outstanding options or other rights to purchase, stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Corporation or any Corporate Affiliate.

B. EXERCISE OF THE PURCHASE RIGHT. Each purchase right shall be automatically exercised in one or more installments on each successive Purchase Date within the offering period, and shares of Common Stock shall accordingly be purchased on behalf of each Participant on each such Purchase Date. The purchase shall be effected by applying the Participant's payroll deductions (or, to the extent applicable, his or her lump sum contribution) for the Purchase Interval ending on such Purchase Date to the purchase of whole shares of Common Stock at the purchase price in effect for the Participant for that Purchase Date.

C. PURCHASE PRICE. The purchase price per share at which Common Stock will be purchased on the Participant's behalf on each Purchase Date within the offering period shall be equal to eighty-five percent (85%) of the lower of (i) the Fair Market Value per share of Common Stock on the Participant's Entry Date into that offering period or (ii) the Fair Market Value per share of Common Stock on that Purchase Date.

D. NUMBER OF PURCHASABLE SHARES. The number of shares of Common Stock purchasable by a Participant on each Purchase Date during the offering period shall be the number of whole shares obtained by dividing the amount collected from the Participant through payroll deductions during the Purchase Interval ending

with that Purchase Date (or, to the extent applicable, his or her lump sum contribution for that Purchase Interval) by the purchase price in effect for the Participant for that Purchase Date. However, the maximum number of shares of Common Stock purchasable per Participant on any one Purchase Date shall not exceed 1,330 shares, subject to periodic adjustments in the event of certain changes in the Corporation's capitalization. However, the Plan Administrator shall have the discretionary authority, exercisable prior to the start of any offering period under the Plan, to increase or decrease the limitations to be in effect for the number of shares purchasable per Participant and to establish limitations on the maximum number of shares that may be purchased in total by

all Participants on each Purchase Date during that offering period.

E. EXCESS PAYROLL DEDUCTIONS. Any payroll deductions not applied to the purchase of shares of Common Stock on any Purchase Date because they are not sufficient to purchase a whole share of Common Stock shall be held for the purchase of Common Stock on the next Purchase Date. However, any payroll deductions not applied to the purchase of Common Stock by reason of the limitation on the maximum number of shares purchasable per Participant or in total by all Participants on the Purchase Date shall be promptly refunded.

F. SUSPENSION OF PAYROLL DEDUCTIONS. In the event that a Participant is, by reason of the accrual limitations in Article VIII, precluded from purchasing additional shares of Common Stock on one or more Purchase Dates during the offering period in which he or she is enrolled, then no further payroll deductions shall be collected from such Participant with respect to those Purchase Dates. The suspension of such deductions shall not terminate the Participant's purchase right for the offering period in which he or she is enrolled, and payroll deductions shall automatically resume on behalf of such Participant once he or she is again able to purchase shares during that offering period in compliance with the accrual limitations of Article VIII.

G. TERMINATION OF PURCHASE RIGHT. The following provisions shall govern the termination of outstanding purchase rights:

(i) A Participant may, at any time prior to the next scheduled Purchase Date in the offering period, terminate his or her outstanding purchase right by filing the appropriate form with the Plan Administrator (or its designate), and no further payroll deductions shall be collected from the Participant with respect to the terminated purchase right. Any payroll deductions collected during the Purchase Interval in which such termination occurs shall, at the Participant's election, be immediately refunded or held for the purchase of shares on the next Purchase Date. If no such election is made at the time such purchase right is terminated, then the payroll deductions collected with respect to the terminated right shall be refunded as soon as possible.

(ii) The termination of such purchase right shall be irrevocable, and the Participant may not subsequently rejoin the offering period for which the terminated purchase right was granted. In order to resume participation in any subsequent offering period, such individual must re-enroll in the Plan (by making a timely filing of the prescribed enrollment forms) on or before his or her scheduled Entry Date into that offering period.

(iii) Should the Participant cease to remain an Eligible Employee for any reason (including death, disability or change in status) while his or her purchase right remains outstanding, then that purchase right shall immediately terminate, and all of the Participant's payroll deductions for the Purchase Interval in which the purchase right so terminates shall be immediately refunded. However, should the Participant cease to remain in active service by reason of an approved unpaid leave of absence, then the Participant shall have the right, exercisable up until the last business day of the Purchase Interval in which such leave commences, to (a) withdraw all the payroll deductions collected to date on his or her behalf for that Purchase Interval or (b) have such funds held for the purchase of shares on his or her behalf on the next scheduled Purchase Date. In no event, however, shall any further payroll deductions be collected on the Participant's behalf during such leave. Upon the Participant's return to active service (x)

within ninety (90) days following the commencement of such leave or (y) prior to the expiration of any longer period for which such Participant's right to reemployment with the Corporation is guaranteed by statute or contract, his or her payroll deductions under the Plan shall automatically resume at the rate in effect at the time the leave began, unless the Participant withdraws from the Plan prior to his or her return. An individual who returns to active employment following a leave of absence that exceeds in duration the applicable (x) or (y) time period will be treated as a new Employee for purposes of subsequent participation in the Plan and must accordingly re-enroll in the Plan (by making a timely filing of the prescribed enrollment forms) on or before his or her scheduled Entry Date into the offering period.

H. CHANGE IN CONTROL. Each outstanding purchase right shall automatically be exercised, immediately prior to the effective date of any Change in Control, by applying the payroll deductions of each Participant for the Purchase Interval in which such Change in Control occurs to the purchase of whole shares of Common Stock at a purchase price per share equal to eighty-five percent (85%) of the lower of (i) the Fair Market Value per share of Common Stock on the Participant's Entry Date into the offering period in which such Change in Control occurs or (ii) the Fair Market Value per share of Common Stock immediately prior to the effective date of such Change in Control. However, the applicable limitation on the number of shares of Common Stock purchasable per Participant shall continue to apply to any such purchase, but not the limitation applicable to the maximum number of shares of Common Stock purchasable in total by all Participants on any one Purchase Date.

The Corporation shall use its best efforts to provide at least ten (10) days' prior written notice of the occurrence of any Change in Control, and Participants shall, following the receipt of such notice, have the right to terminate their outstanding purchase rights prior to the effective date of the Change in Control.

I. PRORATION OF PURCHASE RIGHTS. Should the total number of shares of Common Stock to be purchased pursuant to outstanding purchase rights on any particular date exceed the number of shares then available for issuance under the Plan, the Plan Administrator shall make a pro-rata allocation of the available shares on a uniform and nondiscriminatory basis, and the payroll deductions of each Participant, to the extent in excess of the aggregate purchase price payable for the Common Stock pro-rated to such individual, shall be refunded. In addition, the Plan Administrator may limit the total number of shares to be issued on any Purchase Date when, in the sole discretion of the Plan Administrator, such limitation would be in the best interests of the Corporation or its stockholders, including without limitation to limit or eliminate any compensation expense to the Corporation in connection with the shares of Common Stock to be issued under the Plan. In the event of such a limitation, the Plan Administrator shall make a pro-rata allocation of the available shares and any appropriate refund as provided above.

J. ASSIGNABILITY. The purchase right shall be exercisable only by the Participant and shall not be assignable or transferable by the Participant.

K. STOCKHOLDER RIGHTS. A Participant shall have no stockholder rights with respect to the shares subject to his or her outstanding purchase right until the shares are purchased on the Participant's behalf in accordance with the provisions of the Plan and the Participant has become a holder of record of the purchased shares.

VIII. ACCRUAL LIMITATIONS

A. No Participant shall be entitled to accrue rights to acquire Common Stock pursuant to any purchase right outstanding under this Plan if and to the extent such accrual, when aggregated with (i) rights to purchase Common Stock accrued under any other purchase right granted under this Plan and (ii) similar rights accrued under other employee stock purchase plans (within the meaning of Code Section 423)) of the Corporation or any Corporate Affiliate, would otherwise permit such Participant to purchase more than Twenty-Five Thousand Dollars ($25,000.00) worth of stock of the Corporation or any Corporate Affiliate (determined on the basis of the Fair Market Value per share on the date or dates such rights are granted) for each calendar year such rights are at any time outstanding.

B. For purposes of applying such accrual limitations to the purchase rights granted under the Plan, the following provisions shall be in effect:

(i) The right to acquire Common Stock under each outstanding purchase right shall accrue in a series of installments on each successive Purchase Date during the offering period on which such right remains outstanding.

(ii) No right to acquire Common Stock under any outstanding purchase right shall accrue to the extent the Participant has already accrued in the same calendar year the right to acquire Common Stock under one or more other purchase rights at a rate equal to Twenty-Five Thousand Dollars

($25,000.00) worth of Common Stock (determined on the basis of the Fair Market Value per share on the date or dates of grant) for each calendar year such rights were at any time outstanding.

C. If by reason of such accrual limitations, any purchase right of a Participant does not accrue for a particular Purchase Interval, then the payroll deductions that the Participant made during that Purchase Interval with respect to such purchase right shall be promptly refunded.

D. In the event there is any conflict between the provisions of this Article and one or more provisions of the Plan or any instrument issued thereunder, the provisions of this Article shall be controlling.

IX. EFFECTIVE DATE AND TERM OF THE PLAN

A. The Plan was adopted by the Board on March 7, 2002, and became effective at the Effective Time.

B. The Plan shall serve as the successor to the Predecessor Plan, and no further purchase rights shall be granted or exercised under the Predecessor Plan after the Effective Date.

C. Unless sooner terminated by the Board, the Plan shall terminate upon the earliest of (i) the last business day in June 2012 or (ii) the date on which all purchase rights are exercised in connection with a Change in Control. No further purchase rights shall be granted or exercised, and no further payroll deductions shall be collected, under the Plan following such termination.

X. AMENDMENT OF THE PLAN

A. The Board may alter, amend, suspend or terminate the Plan at any time. However, no such amendment, modification or termination may adversely affect any purchase rights outstanding under the Plan without the consent of the affected Plan participant if such Board action shall become effective prior to the close of the current Purchase Interval. However, the Plan may be amended or terminated immediately upon Board action, if and to the extent necessary to assure that the Corporation will not recognize, for financial reporting purposes, any compensation expense in connection with the shares of Common Stock offered for purchase under the Plan, should the financial accounting rules applicable to the Plan at the Effective Time be subsequently revised so as to require the Corporation to recognize compensation expense in the absence of such amendment or termination.

B. In no event may the Board effect any of the following amendments or revisions to the Plan without the approval of the Corporation's stockholders: (i) increase the number of shares of Common Stock issuable under the Plan, except for permissible adjustments in the event of certain changes in the Corporation's capitalization, (ii) alter the purchase price formula so as to reduce the purchase price payable for the shares of Common Stock purchasable under the Plan or (iii) modify the eligibility requirements for participation in the Plan.

XI. GENERAL PROVISIONS

A. All costs and expenses incurred in the administration of the Plan shall be paid by the Corporation; however, each Plan Participant shall bear all costs and expenses incurred by such individual in the sale or other disposition of any shares purchased under the Plan.

B. Nothing in the Plan shall confer upon the Participant any right to continue in the employ of the Corporation or any Corporate Affiliate for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Corporation (or any Corporate Affiliate employing such person) or of the Participant, which rights are hereby expressly reserved by each, to terminate such person's employment at any time for any reason, with or without cause.

C. The provisions of the Plan shall be governed by the laws of the State of California without resort to that State's conflict-of-laws rules.

SCHEDULE A

CORPORATIONS PARTICIPATING IN
EMPLOYEE STOCK PURCHASE PLAN
AS OF THE EFFECTIVE TIME

Ligand Pharmaceuticals Incorporated

APPENDIX

The following definitions shall be in effect under the Plan:

A. BOARD shall mean the Corporation's Board of Directors.

B. CASH EARNINGS shall mean (i) the regular base salary paid to a Participant by one or more Participating Companies during such individual's period of participation in one or more offering periods under the Plan plus (ii) all overtime payments, bonuses, commissions, profit-sharing distributions and other incentive-type payments received during such period. Such Cash Earnings shall be calculated before deduction of (A) any income or employment tax withholdings or (B) any contributions made by the Participant to any Code Section 401(k) salary deferral plan or any Code Section 125 cafeteria benefit program now or hereafter established by the Corporation or any Corporate Affiliate. However, Cash Earnings shall NOT include any contributions made by the Corporation or any Corporate Affiliate on the Participant's behalf to any employee benefit or welfare plan now or hereafter established (other than Code Section 401(k) or Code Section 125 contributions deducted from such Cash Earnings).

C. CHANGE IN CONTROL shall mean a change in ownership of the Corporation pursuant to any of the following transactions:

(i) a merger, consolidation or other reorganization approved by the Corporation's stockholders, UNLESS securities representing more than fifty percent (50%) of the total combined voting power of the voting securities of the successor corporation are immediately thereafter beneficially owned, directly or indirectly and in substantially the same proportion, by the persons who beneficially owned the Corporation's outstanding voting securities immediately prior to such transaction, or

(ii) the sale, transfer or other disposition of all or substantially all of the assets of the Corporation in complete liquidation or dissolution of the Corporation, or

(iii) the acquisition, directly or indirectly, by a person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by or is under common control with the Corporation) of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders.

D. CODE shall mean the Internal Revenue Code of 1986, as amended.

E. COMMON STOCK shall mean the Corporation's common stock.

F. CORPORATE AFFILIATE shall mean any parent or subsidiary corporation of the Corporation (as determined in accordance with Code Section 424), whether

now existing or subsequently established.

G. CORPORATION shall mean Ligand Pharmaceuticals Incorporated, a Delaware corporation, and any corporate successor to all or substantially all of the assets or voting stock of Ligand Pharmaceuticals Incorporated that shall by appropriate action adopt the Plan.

H. EFFECTIVE TIME shall mean July 1, 2002. Any Corporate Affiliate that becomes a Participating Corporation after such Effective Time shall designate a subsequent Effective Time with respect to its employee-Participants.

I. ELIGIBLE EMPLOYEE shall mean any person who has been continuously employed by a Participating Corporation for at least three months on a basis under which he or she is regularly expected to render more than twenty (20) hours of service per week for more than five (5) months per calendar year for earnings considered wages under Code Section 3401 (a).

J. ENTRY DATE shall mean the date an Eligible Employee first commences participation in the offering period in effect under the Plan. The earliest Entry Date under the Plan shall be the Effective Time.

K. FAIR MARKET VALUE per share of Common Stock on any relevant date shall be determined in accordance with the following provisions:

(i) If the Common Stock is at the time traded on the Nasdaq National Market, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question, as such price is reported by the National Association of Securities Dealers on the Nasdaq National Market and published in THE WALL STREET JOURNAL. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(ii) If the Common Stock is at the time listed on any Stock Exchange, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question on the Stock Exchange determined by the Plan Administrator to be the primary market for the Common Stock, as such price is officially quoted in the composite tape of transactions on such exchange and published in THE WALL STREET JOURNAL. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

L. 1933 ACT shall mean the Securities Act of 1933, as amended.

M. PARTICIPANT shall mean any Eligible Employee of a Participating Corporation who is actively participating in the Plan.

N. PARTICIPATING CORPORATION shall mean the Corporation and such Corporate Affiliate or Affiliates as may be authorized from time to time by the Board to extend the benefits of the Plan to their Eligible Employees. The Participating Corporations in the Plan are listed in attached Schedule A.

O. PLAN shall mean the Corporation's Employee Stock Purchase Plan, as set forth in this document.

P. PLAN ADMINISTRATOR shall mean the committee of two (2) or more Board members appointed by the Board to administer the Plan.

Q. PREDECESSOR PLAN shall mean the Corporation's 1992 Employee Stock Purchase Plan in effect immediately prior to the Effective Date hereunder.

R. PURCHASE DATE shall mean the last business day of each Purchase Interval.

S. PURCHASE INTERVAL shall mean each successive three (3)-month period within the offering period at the end of which there shall be purchased shares of Common Stock on behalf of each Participant.

T. QUARTERLY ENTRY DATE shall mean the first business day in January, April, July and October each year on which an Eligible Employee may first enter

an offering period.

U. STOCK EXCHANGE shall mean either the American Stock Exchange or the New York Stock Exchange.

EXHIBIT 10.269

LIGAND PHARMACEUTICALS INCORPORATED

STOCK OPTION AGREEMENT

RECITALS

A. The Board has adopted the Plan for the purpose of retaining the services of selected Employees, non-employee members of the Board (or the board of directors of any Parent or Subsidiary) and consultants and other independent advisors who provide services to the Corporation (or any Parent or Subsidiary).

B. Optionee is to render valuable services to the Corporation (or a Parent or Subsidiary), and this Agreement is executed pursuant to, and is intended to carry out the purposes of, the Plan in connection with the Corporation's grant of an option to Optionee.

C. All capitalized terms in this Agreement shall have the meaning assigned to them in the attached Appendix.

NOW, THEREFORE, it is hereby agreed as follows:

1. GRANT OF OPTION. The Corporation hereby grants to Optionee, as of the Grant Date, an option to purchase up to the number of Option Shares specified in the Grant Notice. The Option Shares shall be purchasable from time to time during the option term specified in Paragraph 2 at the Exercise Price.

2. OPTION TERM. This option shall have a maximum term of ten (10) years measured from the Grant Date and shall accordingly expire at the close of business on the Expiration Date, unless sooner terminated in accordance with Paragraph 5 or 6.

3. LIMITED TRANSFERABILITY.

(a) This option shall be neither transferable nor assignable by Optionee other than by will or the laws of inheritance following Optionee's death and may be exercised, during Optionee's lifetime, only by Optionee. However, Optionee may designate one or more persons as the beneficiary or beneficiaries of this option, and this option shall, in accordance with such designation, automatically be transferred to such beneficiary or beneficiaries upon the Optionee's death while holding this option. Such beneficiary or beneficiaries shall take the transferred option subject to all the terms and conditions of this Agreement, including (without limitation) the limited time period during which this option may, pursuant to Paragraph 5, be exercised following Optionee's death.

(b) If this option is designated a Non-Statutory Option in the Grant Notice, then this option may be assigned in whole or in part during Optionee's lifetime to one or more members of Optionee's family or to a trust established for the exclusive benefit of one or more such family members or to Optionee's former spouse, to the extent such assignment is in connection with the Optionee's estate plan or pursuant to a domestic relations order. The assigned portion shall be exercisable only by the person or persons who acquire a proprietary interest in the option pursuant to such assignment. The terms applicable to the assigned portion shall be the same as those in effect for this option immediately prior to such assignment.

4. DATES OF EXERCISE. This option shall become exercisable for the Option Shares in one or more installments as specified in the Grant Notice. As the option becomes exercisable for such installments, those installments shall accumulate, and the option shall remain exercisable for the accumulated installments until the Expiration Date or sooner termination of the option term under Paragraph 5 or 6.

5. CESSATION OF SERVICE. The option term specified in Paragraph 2 shall terminate (and this option shall cease to be outstanding) prior to the Expiration Date should any of the following provisions become applicable:

(a) Should Optionee cease to remain in Service for any reason

(other than death or Permanent Disability) while this option is outstanding, then Optionee (or any person or persons to whom this option is transferred pursuant to a permitted transfer under Paragraph 3) shall have a period of three (3) months (commencing with the date of such cessation of Service) during which to exercise this option, but in no event shall this option be exercisable at any time after the Expiration Date.

(b) Should Optionee die while this option is outstanding, then the personal representative of Optionee's estate or the person or persons to whom the option is transferred pursuant to Optionee's will or the laws of inheritance following Optionee's death or to whom the option is transferred during Optionee's lifetime pursuant to a permitted transfer under Paragraph 3 shall have the right to exercise this option. However, if Optionee dies while holding this option and has an effective beneficiary designation in effect for this option at the time of his or her death, then the designated beneficiary or beneficiaries shall have the exclusive right to exercise this option following Optionee's death. Any such right to exercise this option shall lapse, and this option shall cease to be outstanding, upon the EARLIER of (i) the expiration of the twelve (12)-month period measured from the date of Optionee's death or (ii) the Expiration Date.

(c) Should Optionee cease Service by reason of Permanent Disability while this option is outstanding, then Optionee (or any person or persons to whom this option is transferred pursuant to a permitted transfer under Paragraph 3) shall have a period of twelve (12) months (commencing with the date of such cessation of Service) during which to exercise this option. In no event shall this option be exercisable at any time after the Expiration Date.

(d) During the limited period of post-Service exercisability, this option may not be exercised in the aggregate for more than the number of Option Shares for which the option is exercisable at the time of Optionee's cessation of Service. Upon the expiration of such limited exercise period or (if earlier) upon the Expiration Date, this option shall terminate and

cease to be outstanding for any exercisable Option Shares for which the option has not been exercised. However, this option shall, immediately upon Optionee's cessation of Service for any reason, terminate and cease to be outstanding with respect to any Option Shares for which this option is not otherwise at that time exercisable.

6. SPECIAL ACCELERATION OF OPTION.

(a) This option, to the extent outstanding at the time of a Change in Control but not otherwise fully exercisable, shall automatically accelerate so that this option shall, immediately prior to the effective date of such Change in Control, become exercisable for all of the Option Shares at the time subject to this option and may be exercised for any or all of those Option Shares as fully vested shares of Common Stock. However, this option shall NOT become exercisable on such an accelerated basis, if and to the extent: (i) this option is to be assumed by the successor corporation (or parent thereof) or is otherwise to be continued in full force and effect pursuant to the terms of the Change in Control transaction or (ii) this option is to be replaced with a cash incentive program of the successor corporation which preserves the spread existing at the time of the Change in Control on any Option Shares for which this option is not otherwise at that time exercisable (the excess of the Fair Market Value of those Option Shares over the aggregate Exercise Price payable for such shares) and provides for subsequent payout of that spread in accordance with the same option exercise/vesting schedule for those Option Shares set forth in the Grant Notice.

(b) Immediately following the Change in Control, this option shall terminate and cease to be outstanding, except to the extent assumed by the successor corporation (or parent thereof) or otherwise continued in effect pursuant to the terms of the Change in Control transaction.

(c) If this option is assumed in connection with a Change in Control or otherwise continued in effect, then this option shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities which would have been issuable to Optionee in

consummation of such Change in Control had the option been exercised immediately prior to such Change in Control, and appropriate adjustments shall also be made to the Exercise Price, PROVIDED the aggregate Exercise Price shall remain the same. To the extent the actual holders of the Corporation's outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control, the successor corporation may, in connection with the assumption of this option, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control.

(d) This Agreement shall not in any way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

7. ADJUSTMENT IN OPTION SHARES. Should any change be made to the Common Stock by reason of any stock split, stock dividend, recapitalization, combination of

shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration, appropriate adjustments shall be made to (i) the total number and/or class of securities subject to this option and (ii) the Exercise Price in order to reflect such change and thereby preclude a dilution or enlargement of benefits hereunder.

8. STOCKHOLDER RIGHTS. The holder of this option shall not have any stockholder rights with respect to the Option Shares until such person shall have exercised the option, paid the Exercise Price and become a holder of record of the purchased shares.

9. MANNER OF EXERCISING OPTION.

(a) In order to exercise this option with respect to all or any part of the Option Shares for which this option is at the time exercisable, Optionee (or any other person or persons exercising the option) must take the following actions:

(i) Execute and deliver to the Corporation a Notice of Exercise (see attached form) for the Option Shares for which the option is exercised.

(ii) Pay the aggregate Exercise Price for the purchased shares in one or more of the following forms:

(A) cash or check made payable to the Corporation (includes cash paid from Optionee's brokerage pursuant to a presale of shares in a so-called "cashless" exercise);

(B) shares of Common Stock held by Optionee (or any other person or persons exercising the option) for the requisite period necessary to avoid a charge to the Corporation's earnings for financial reporting purposes and valued at Fair Market Value on the Exercise Date; or

(C) through a special sale and remittance procedure pursuant to which Optionee (or any other person or persons exercising the option) shall concurrently provide irrevocable instructions (i) to a brokerage firm to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate Exercise Price payable for the purchased shares plus all applicable income and employment taxes required to be withheld by the Corporation by reason of such exercise and (ii) to the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm in order to complete the sale.

Except to the extent the sale and remittance procedure is utilized in connection with the option exercise, payment of the Exercise Price must accompany the Notice of Exercise delivered to the Corporation in connection with the option exercise.

Payment forms (B) and (C) above shall be accepted solely at the option of the Plan Administrator.

(iii) Furnish to the Corporation appropriate documentation that the person or persons exercising the option (if other than Optionee) have the right to exercise this option.

(iv) Make appropriate arrangements with the Corporation (or Parent or Subsidiary employing or retaining Optionee) for the satisfaction of all applicable income and employment tax withholding requirements applicable to the option exercise.

(b) As soon as practical after the Exercise Date, the Corporation shall issue to or on behalf of Optionee (or any other person or persons exercising this option) a certificate for the purchased Option Shares, with the appropriate legends affixed thereto.

(c) In no event may this option be exercised for any fractional shares.

10. COMPLIANCE WITH LAWS AND REGULATIONS.

(a) The exercise of this option and the issuance of the Option Shares upon such exercise shall be subject to compliance by the Corporation and Optionee with all applicable requirements of law relating thereto and with all applicable regulations of any stock exchange (or the Nasdaq National Market, if applicable) on which the Common Stock may be listed for trading at the time of such exercise and issuance.

(b) The inability of the Corporation to obtain approval from any regulatory body having authority deemed by the Corporation to be necessary to the lawful issuance and sale of any Common Stock pursuant to this option shall relieve the Corporation of any liability with respect to the non-issuance or sale of the Common Stock as to which such approval shall not have been obtained. The Corporation, however, shall use its best efforts to obtain all such approvals.

11. SUCCESSORS AND ASSIGNS. Except to the extent otherwise provided in Paragraphs 3 and 6, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the Corporation and its successors and assigns and Optionee, Optionee's assigns, the legal representatives, heirs and legatees of Optionee's estate and any beneficiaries of this option designated by Optionee.

12. NOTICES. Any notice required to be given or delivered to the Corporation under the terms of this Agreement shall be in writing and addressed to the Corporation at its

principal corporate offices. Any notice required to be given or delivered to Optionee shall be in writing and addressed to Optionee at the address indicated below Optionee's signature line on the Grant Notice. All notices shall be deemed effective upon personal delivery or upon deposit in the U.S. mail, postage prepaid and properly addressed to the party to be notified.

13. CONSTRUCTION. This Agreement and the option evidenced hereby are made and granted pursuant to the Plan and are in all respects limited by and subject to the terms of the Plan. All decisions of the Plan Administrator with respect to any question or issue arising under the Plan or this Agreement shall be conclusive and binding on all persons having an interest in this option.

14. GOVERNING LAW. The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of California without resort to that State's conflict-of-laws rules.

15. EXCESS SHARES. If the Option Shares covered by this Agreement exceed, as of the Grant Date, the number of shares of Common Stock which may without stockholder approval be issued under the Plan, then this option shall be void with respect to those excess shares, unless stockholder approval of an amendment sufficiently increasing the number of shares of Common Stock issuable under the Plan is obtained in accordance with the provisions of the Plan.

16. ADDITIONAL TERMS APPLICABLE TO AN INCENTIVE OPTION. In the event this option is designated an Incentive Option in the Grant Notice, the following terms and conditions shall also apply to the grant:

(a) This option shall cease to qualify for favorable tax treatment as an Incentive Option if (and to the extent) this option is exercised for one or more Option Shares: (A) more than three (3) months after the date Optionee ceases to be an Employee for any reason other than death or Permanent Disability or (B) more than twelve (12) months after the date Optionee ceases to be an Employee by reason of Permanent Disability.

(b) No installment under this option shall qualify for favorable tax treatment as an Incentive Option if (and to the extent) the aggregate Fair Market Value (determined at the Grant Date) of the Common Stock for which such installment first becomes exercisable hereunder would, when added to the aggregate value (determined as of the respective date or dates of grant) of the Common Stock or other securities for which this option or any other Incentive Options granted to Optionee prior to the Grant Date (whether under the Plan or any other option plan of the Corporation or any Parent or Subsidiary) first become exercisable during the same calendar year, exceed One Hundred Thousand Dollars ($100,000) in the aggregate. Should such One Hundred Thousand Dollar ($100,000) limitation be exceeded in any calendar year, this option shall nevertheless become exercisable for the excess shares in such calendar year as a Non-Statutory Option.

(c) Should the exercisability of this option be accelerated upon a Change in Control, then this option shall qualify for favorable tax treatment as an Incentive

Option only to the extent the aggregate Fair Market Value (determined at the Grant Date) of the Common Stock for which this option first becomes exercisable in the calendar year in which the Change in Control transaction occurs does not, when added to the aggregate value (determined as of the respective date or dates of grant) of the Common Stock or other securities for which this option or one or more other Incentive Options granted to Optionee prior to the Grant Date (whether under the Plan or any other option plan of the Corporation or any Parent or Subsidiary) first become exercisable during the same calendar year, exceed One Hundred Thousand Dollars ($100,000) in the aggregate. Should the applicable One Hundred Thousand Dollar ($100,000) limitation be exceeded in the calendar year of such Change in Control, the option may nevertheless be exercised for the excess shares in such calendar year as a Non-Statutory Option.

(d) Should Optionee hold, in addition to this option, one or more other options to purchase Common Stock which become exercisable for the first time in the same calendar year as this option, then the foregoing limitations on the exercisability of such options as Incentive Options shall be applied on the basis of the order in which such options are granted.

EXHIBIT I

NOTICE OF EXERCISE

I hereby notify Ligand Pharmaceuticals Incorporated (the "Corporation") that I elect to purchase _____ shares of the Corporation's Common Stock (the "Purchased Shares") at the option exercise price of $_____ per share (the "Exercise Price") pursuant to that certain option (the "Option") granted to me under the Corporation's 2002 Stock Incentive Plan on _____, _____.

Concurrently with the delivery of this Exercise Notice to the Corporation, I shall hereby pay to the Corporation the Exercise Price for the Purchased Shares in accordance with the provisions of my agreement with the Corporation (or other documents) evidencing the Option and shall deliver whatever additional documents may be required by such agreement as a condition for exercise. Alternatively, I may utilize the special broker-dealer sale and remittance procedure specified in my agreement to effect payment of the Exercise Price.

_____, _____
Date

_____
Optionee

Address:_____

_____

Print name in exact manner it is to appear on the stock certificate: _____

Address to which certificate is to be sent, if different from address above: _____

_____

Social Security Number: _____

APPENDIX

The following definitions shall be in effect under the Agreement:

A. AGREEMENT shall mean this Stock Option Agreement.

B. BOARD shall mean the Corporation's Board of Directors.

C. CHANGE IN CONTROL shall mean a change in ownership or control of the Corporation effected through any of the following transactions:

(i) a merger, consolidation or other reorganization approved by the Corporation's stockholders, UNLESS securities representing more than fifty percent (50%) of the total combined voting power of the voting securities of the successor corporation are immediately thereafter beneficially owned, directly or indirectly and in substantially the same proportion, by the persons who beneficially owned the Corporation's outstanding voting securities immediately prior to such transaction, or

(ii) the sale, transfer or other disposition of all or substantially all of the Corporation's assets in complete liquidation or dissolution of the Corporation, or

(iii) the acquisition, directly or indirectly by any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation), of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders.

D. COMMON STOCK shall mean shares of the Corporation's common stock.

E. CODE shall mean the Internal Revenue Code of 1986, as amended.

F. CORPORATION shall mean Ligand Pharmaceuticals Incorporated, a Delaware corporation, and any successor corporation to all or substantially all

of the assets or voting stock of Ligand Pharmaceuticals Incorporated which shall by appropriate action adopt the Plan.

G. EMPLOYEE shall mean an individual who is in the employ of the Corporation (or any Parent or Subsidiary), subject to the control and direction of the employer entity as to both the work to be performed and the manner and method of performance.

H. EXERCISE DATE shall mean the date on which the option shall have been exercised in accordance with Paragraph 9 of the Agreement.

I. EXERCISE PRICE shall mean the exercise price per Option Share as specified in the Grant Notice.

J. EXPIRATION DATE shall mean the date on which the option expires as specified in the Grant Notice.

K. FAIR MARKET VALUE per share of Common Stock on any relevant date shall be determined in accordance with the following provisions:

(i) If the Common Stock is at the time traded on the Nasdaq National Market, then the Fair Market Value shall be deemed equal to the closing selling price per share of Common Stock on the date in question, as the price is reported by the National Association of Securities Dealers on the Nasdaq National Market and published in THE WALL STREET JOURNAL. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists, or

(ii) If the Common Stock is at the time listed on any Stock Exchange, then the Fair Market Value shall be deemed equal to the closing selling price per share of Common Stock on the date in question on the Stock Exchange determined by the Plan Administrator to be the primary market for the Common Stock, as such price is officially quoted in the composite tape of transactions on such exchange and published in THE WALL STREET JOURNAL. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

L. GRANT DATE shall mean the date of grant of the option as specified in the Grant Notice.

M. GRANT NOTICE shall mean the Notice of Grant of Stock Option accompanying the Agreement, pursuant to which Optionee has been informed of the basic terms of the option evidenced hereby.

N. INCENTIVE OPTION shall mean an option which satisfies the requirements of Code Section 422.

O. NON-STATUTORY OPTION shall mean an option not intended to satisfy the requirements of Code Section 422.

P. NOTICE OF EXERCISE shall mean the notice of exercise in the form attached hereto as Exhibit I.

Q. OPTION SHARES shall mean the number of shares of Common Stock subject to the option as specified in the Grant Notice.

R. OPTIONEE shall mean the person to whom the option is granted as specified in the Grant Notice.

S. PARENT shall mean any corporation (other than the Corporation) in an unbroken chain of corporations ending with the Corporation, provided each corporation in the unbroken chain (other than the Corporation) owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total

combined voting power of all classes of stock in one of the other corporations in such chain.

T. PERMANENT DISABILITY shall mean the inability of Optionee to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which is expected to result in death or has lasted or can be expected to last for a continuous period of twelve (12) months or more.

U. PLAN shall mean the Corporation's 2002 Stock Incentive Plan.

V. PLAN ADMINISTRATOR shall mean either the Board or a committee of the Board acting in its capacity as administrator of the Plan.

W. SERVICE shall mean the Optionee's performance of services for the Corporation (or any Parent or Subsidiary) in the capacity of an Employee, a non-employee member of the board of directors or a consultant or independent advisor. Service shall not be deemed to cease during a period of military leave, sick leave or other personal leave approved by the Corporation; PROVIDED, HOWEVER, that for a leave which exceeds ninety (90) days, Service shall be deemed to cease, if the Option is designated an Incentive Stock Option in the Grant Notice, on the ninety-first (91st) day of such leave, unless the Optionee's right to return to Service following such leave is guaranteed by law or statute. Except to the extent otherwise required by law, no Service credit shall be given for vesting purposes hereunder for any period the Optionee is on a leave of absence.

X. STOCK EXCHANGE shall mean the American Stock Exchange or the New York Stock Exchange.

Y. SUBSIDIARY shall mean any corporation (other than the Corporation) in an unbroken chain of corporations beginning with the Corporation, provided each corporation (other than the last corporation) in the unbroken chain owns, at the time of the determination, stock possessing fifty percent (50%) or more of the total combined voting power of all classes of stock in one of the other corporations in such chain.

EXHIBIT 10.270

LIGAND PHARMACEUTICALS INCORPORATED
EMPLOYEE STOCK PURCHASE PLAN
STOCK PURCHASE AGREEMENT

I hereby elect to participate in the Employee Stock Purchase Plan (the "ESPP") for the next available offering period, and I hereby subscribe to purchase shares of Common Stock of Ligand Pharmaceuticals Incorporated (the "Corporation") in accordance with the provisions of this Agreement and the ESPP. I understand that I may participate through payroll deductions from each of my paychecks following my entry into the ESPP in any whole percentage of my base salary (1% up to a maximum of 10%). Such payroll deductions will not begin, however, until I receive the official ESPP Prospectus under the federal securities laws (available on the Corporation's intranet) and complete the requisite payroll deduction authorization form. Once I authorize such payroll deductions, those deductions will be governed by the provisions of this Stock Purchase Agreement.

The offering period consists of one or more successive purchase intervals. Each purchase interval will be of three months duration and will run from the first business day of January to the last business day of March each year, from the first business day of April to the last business day of June each year, from the first business day of July to the last business day of September each year and from the first business day of October to the last business day of December each year. My participation will automatically remain in effect from one purchase interval to the next in accordance with my payroll deduction authorization, unless I withdraw from the ESPP or change the rate of my payroll deduction or unless my employment status changes. I may reduce the rate of my payroll deductions on one occasion per purchase interval, and I may increase my rate of payroll deductions to become effective at the beginning of any subsequent purchase interval.

My payroll deductions will be accumulated for the purchase of shares of Common Stock on the last business day of each purchase interval within the offering period. The purchase price per share will be equal to 85% of the LOWER of (i) the fair market value per share of Common Stock on the start date of the offering period or (ii) the fair market value per share on the purchase date. I will also be subject to ESPP restrictions (i) limiting the maximum number of shares which I may purchase per purchase interval, (ii) limiting the maximum number of shares which may be purchased in total by all participants per purchase interval (if such limitations are implemented) and (iii) prohibiting me from purchasing more than $25,000 worth of Common Stock for each calendar year my purchase right remains outstanding.

I may withdraw from the ESPP at any time prior to eight days before the last business day of the purchase interval and elect either to have the Corporation refund all my payroll deductions for that interval or to have such payroll deductions applied to the purchase of Common Stock at the end of such interval. However, I may not rejoin that particular offering period at any later date. Upon the termination of my employment for any reason (including death or disability) or my loss of eligible employee status, my participation in the ESPP will immediately cease, and all my payroll deductions for the purchase interval in which my employment terminates or my loss of eligibility occurs will immediately be refunded.

If I take an unpaid leave of absence, my payroll deductions will immediately cease, and any payroll deductions for the purchase interval in which my leave begins will, at my election, either be refunded or applied to the purchase of shares of Common Stock at the end of that purchase interval. If my re-employment is guaranteed by either law or contract, or if I return to active service within ninety (90) days, then upon my return my payroll deductions will automatically resume at the rate in effect when my leave began.

The Corporation will issue a stock certificate for the shares purchased on my behalf after the end of each purchase interval. The certificate will be issued to me or to my spouse and me and mailed as I direct upon enrollment. I will notify the Corporation of any disposition of shares purchased under the ESPP, and I will satisfy all applicable income and employment tax withholding requirements applicable either at the time of my acquisition of ESPP shares or at the time of my subsequent disposition of those shares. I understand that ESPP shares that I wish to sell may be subject to the Corporation's Insider Trading Policy.

The Corporation has the right, exercisable in its sole discretion, to amend or terminate all outstanding purchase rights under the ESPP at any time, with such amendment or termination to become effective immediately following the end of any purchase interval. Upon any such termination, I will cease to have any further rights to purchase shares of common stock under this Agreement.

I have read this Agreement and hereby agree to be bound by the terms of both this Agreement and the ESPP. However, the effectiveness of this Agreement is dependent upon my eligibility to participate in the ESPP.

Dated as of _____, _____

Signature of Employee_____
Printed Name:_____

EXHIBIT 10.271

LIGAND PHARMACEUTICALS INCORPORATED

AUTOMATIC STOCK OPTION AGREEMENT

RECITALS

A. The Corporation has implemented an automatic option grant program under the Plan pursuant to which eligible non-employee members of the Board will automatically receive special option grants at periodic intervals over their period of Board service in order to provide such individuals with a meaningful incentive to continue to serve as members of the Board.

B. Optionee is an eligible non-employee Board member, and this Agreement is executed pursuant to, and is intended to carry out the purposes of, the Plan in connection with the automatic grant of an option to purchase shares of Common Stock under the Plan.

C. All capitalized terms in this Agreement shall have the meaning assigned to them in the attached Appendix.

NOW, THEREFORE, it is hereby agreed as follows:

1. GRANT OF OPTION. The Corporation hereby grants to Optionee, as of the Grant Date, a Non-Statutory Option to purchase up to the number of Option Shares specified in the Grant Notice. The Option Shares shall be purchasable from time to time during the option term specified in Paragraph 2 at the Exercise Price.

2. OPTION TERM. This option shall have a term of ten (10) years measured from the Grant Date and shall accordingly expire at the close of business on the Expiration Date, unless sooner terminated in accordance with Paragraph 5, 6 or 7.

3. LIMITED TRANSFERABILITY.

(a) This option may be assigned in whole or in part during Optionee's lifetime to one or more members of Optionee's family or to a trust established for the exclusive benefit of one or more such family members or to Optionee's former spouse, to the extent such assignment is in connection with the Optionee's estate plan or pursuant to a domestic relations order. The assigned portion shall be exercisable only by the person or persons who acquire a proprietary interest in the option pursuant to such assignment. The terms applicable to the assigned portion shall be the same as those in effect for this option immediately prior to such assignment.

(b) Should the Optionee die while holding this option, then this option shall be transferred in accordance with Optionee's will or the laws of inheritance. However, Optionee may designate one or more persons as the beneficiary or beneficiaries of this option, and this option shall, in accordance with such designation, automatically be transferred to such beneficiary or beneficiaries upon the Optionee's death while holding this option. Such

beneficiary or beneficiaries shall take the transferred option subject to all the terms and conditions of this Agreement, including (without limitation) the limited time period during which this option may, pursuant to Paragraph 5, be exercised following Optionee's death.

4. EXERCISABILITY/VESTING. This option shall become vested and exercisable for the Option Shares in one or more installments as specified in the Grant Notice. As the option becomes exercisable for such installments, those installments shall accumulate, and the option shall remain exercisable for the accumulated installments until the Expiration Date or sooner termination of the option term under Paragraph 5, 6 or 7. The Option Shares shall, however, be subject to accelerated vesting pursuant to the provisions of Paragraph 5, 6 or 7, but in no event shall any additional Option Shares vest following Optionee's cessation of service as a Board member.

5. CESSATION OF BOARD SERVICE. Should Optionee's service as a Board

member cease while this option remains outstanding, then the option term specified in Paragraph 2 shall terminate (and this option shall cease to be outstanding) prior to the Expiration Date in accordance with the following provisions:

(a) Should Optionee cease to serve as a Board member for any reason while this option is outstanding, then the period during which this option may be exercised shall be reduced to a three (3)-year period measured from the date of such cessation of Board service, but in no event shall this option be exercisable at any time after the Expiration Date. During such limited period of exercisability, Optionee (or the person or persons to whom this option is transferred pursuant to a permitted transfer under Paragraph 3) may not exercise this option in the aggregate for more than the number of Option Shares (if any) in which Optionee is vested on the date of his or her cessation of Board service. Upon the EARLIER of (i) the expiration of such three (3)-year period or (ii) the specified Expiration Date, the option shall terminate and cease to be exercisable with respect to any vested Option Shares for which the option has not been exercised.

(b) Should Optionee cease service as a Board member by reason of death or Permanent Disability, then any Option Shares at the time subject to this option but not otherwise vested shall vest in full so that this option may be exercised for any or all of the Option Shares as fully vested shares of Common Stock at any time prior to the EARLIER of (i) the expiration of the three (3)-year period measured from the date of Optionee's cessation of Board service or (ii) the specified Expiration Date, whereupon this option shall terminate and cease to be outstanding.

(c) Upon Optionee's cessation of Board service for any reason other than death or Permanent Disability, this option shall immediately terminate and cease to be outstanding with respect to any and all Option Shares in which Optionee is not otherwise at that time vested in accordance with the normal Vesting Schedule or the special vesting acceleration provisions of Paragraphs 6 and 7 below.

6. CHANGE IN CONTROL.

(a) In the event of a Change in Control effected during Optionee's period of Board service, any Option Shares at the time subject to this option but not otherwise vested shall automatically vest so that this option shall, immediately prior to the specified effective date for that Change in Control, become exercisable for all of the Option Shares as fully vested shares of Common Stock and may be exercised for any or all of those vested shares. Immediately following the consummation of the Change in Control, this option shall terminate and cease to be outstanding, except to the extent assumed by the successor corporation or its parent company or otherwise continued in effect pursuant to the terms of the Change in Control transaction.

(b) If this option is assumed in connection with a Change in Control or otherwise continued in effect, then this option shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities which would have been issuable to Optionee in consummation of such Change in Control had the option been exercised immediately prior to such Change in Control, and appropriate adjustments shall also be made to the Exercise Price, PROVIDED the aggregate Exercise Price shall remain the same. To the extent the actual holders of the Corporation's outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control transaction, the successor corporation may, in connection with the assumption of this option, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control transaction.

7. HOSTILE TAKE-OVER/HOSTILE TENDER-OFFER.

(a) In the event of a Hostile Take-Over effected during Optionee's period of Board service, any Option Shares at the time subject to this option but not otherwise vested shall automatically vest so that this option shall, immediately prior to the effective date of that Hostile Take-Over, become exercisable for all of the Option Shares as fully vested shares of Common Stock and may be exercised for any or all of those vested shares. This option

shall remain exercisable for such fully vested Option Shares until the EARLIEST to occur of (i) the specified Expiration Date, (ii) the sooner termination of this option in accordance with Paragraph 5 or 6 or (iii) the surrender of this option under Paragraph 7(b).

(b) Optionee shall have an unconditional right, exercisable at any time during the thirty (30)-day period immediately following the consummation of a Hostile Tender-Offer effected during his or her period of Board service, to surrender this option to the Corporation in exchange for a cash distribution from the Corporation in an amount equal to the excess of (i) the Tender-Offer Price of the Option Shares at the time subject to the surrendered option (whether or not those Option Shares are otherwise at the time vested) over (ii) the aggregate Exercise Price payable for such shares. This Paragraph 7(b) limited stock appreciation right shall in all events terminate upon the expiration or sooner termination of the option term and may not be assigned or transferred by Optionee, except to the extent the option is transferred in accordance with the provisions of this Agreement.

(c) To exercise the Paragraph 7(b) limited stock appreciation right, Optionee must, during the applicable thirty (30)-day exercise period, provide the Corporation with written notice of the option surrender in which there is specified the number of Option Shares as to which the option is being surrendered. Such notice must be accompanied by the return of Optionee's copy of this Agreement, together with any written amendments to such Agreement. The cash distribution shall be paid to Optionee within five (5) business days following such delivery date. The exercise of such limited stock appreciation right in accordance with the terms of this Paragraph 7 has been pre-approved pursuant to the express provisions of the Automatic Option Grant Program, and neither the approval of the Plan Administrator nor the consent of the Board shall be required at the time of the actual option surrender and cash distribution. Upon receipt of the cash distribution, this option shall be cancelled with respect to the shares subject to the surrendered option (or the surrendered portion), and Optionee shall cease to have any further right to acquire those Option Shares under this Agreement. The option shall, however, remain outstanding for the balance of the Option Shares (if any) in accordance with the terms and provisions of this Agreement, and the Corporation shall accordingly issue a replacement stock option agreement (substantially in the same form as this Agreement) for those remaining Option Shares.

8. ADJUSTMENT IN OPTION SHARES. Should any change be made to the Common Stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class without the Corporation's receipt of consideration, appropriate adjustments shall be made to (i) the total number and/or class of securities subject to this option and (ii) the Exercise Price in order to reflect such change and thereby preclude a dilution or enlargement of benefits hereunder.

9. STOCKHOLDER RIGHTS. The holder of this option shall not have any stockholder rights with respect to the Option Shares until such person shall have exercised the option, paid the Exercise Price and become a holder of record of the purchased shares.

10. MANNER OF EXERCISING OPTION.

(a) In order to exercise this option with respect to all or any part of the Option Shares for which this option is at the time exercisable, Optionee (or any other person or persons exercising the option) must take the following actions:

(i) To the extent the option is exercised for vested Option Shares, execute and deliver to the Corporation a Notice of Exercise (see attached form) for the Option Shares for which the option is exercised. To the extent this option is exercised for unvested Option Shares, execute and deliver to the Corporation a Purchase Agreement for those unvested Option Shares.

(ii) Pay the aggregate Exercise Price for the purchased shares in one or more of the following forms:

(A) cash or check made payable to the Corporation (includes cash paid from Optionee's brokerage pursuant to a presale of shares in a so-called "cashless" exercise),

(B) shares of Common Stock held by Optionee (or any other person or persons exercising the option) for the requisite period necessary to avoid a charge to the Corporation's earnings for financial reporting purposes and valued at Fair Market Value on the Exercise Date, or

(C) to the extent the option is exercised for vested Option Shares, through a special sale and remittance procedure pursuant to which Optionee (or any other person or persons exercising the option) shall concurrently provide irrevocable instructions (I) to a brokerage firm to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate Exercise Price payable for the purchased shares plus all applicable income and employment taxes required to be withheld by the Corporation by reason of such exercise and (II) to the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm in order to complete the sale.

Payment forms (B), and (C) above shall be accepted solely at the option of the Plan Administrator.

(iii) Furnish to the Corporation appropriate documentation that the person or persons exercising the option (if other than Optionee) have the right to exercise this option.

(b) Except to the extent the sale and remittance procedure is utilized in connection with the option exercise, payment of the Exercise Price must accompany the Notice of Exercise (or the Purchase Agreement) delivered to the Corporation in connection with the option exercise.

(c) As soon after the Exercise Date as practical, the Corporation shall issue to or on behalf of Optionee (or any other person or persons exercising this option) a certificate for the purchased Option Shares, with the appropriate legends affixed thereto. To the extent any such Option Shares are unvested, the certificates for those Option Shares shall be endorsed with an appropriate legend evidencing the Corporation's repurchase rights and may be held in escrow with the Corporation until such shares vest.

(d) In no event may this option be exercised for any fractional shares.

11. NO IMPAIRMENT OF RIGHTS. This Agreement shall not in any way affect the right of the Corporation to adjust, reclassify, reorganize or otherwise make changes in its

capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets. In addition, this Agreement shall not in any way be construed or interpreted so as to affect adversely or otherwise impair the right of the Corporation or the stockholders to remove Optionee from the Board at any time in accordance with the provisions of applicable law.

12. COMPLIANCE WITH LAWS AND REGULATIONS.

(a) The exercise of this option and the issuance of the Option Shares upon such exercise shall be subject to compliance by the Corporation and Optionee with all applicable requirements of law relating thereto and with all applicable regulations of any stock exchange (or the Nasdaq National Market, if applicable) on which the Common Stock may be listed for trading at the time of

such exercise and issuance.

(b) The inability of the Corporation to obtain approval from any regulatory body having authority deemed by the Corporation to be necessary to the lawful issuance and sale of any Common Stock pursuant to this option shall relieve the Corporation of any liability with respect to the non-issuance or sale of the Common Stock as to which such approval shall not have been obtained. The Corporation, however, shall use its best efforts to obtain all such approvals.

13. SUCCESSORS AND ASSIGNS. Except to the extent otherwise provided in Paragraph 3 or 6, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the Corporation and its successors and assigns and Optionee, Optionee's assigns, the legal representatives, heirs and legatees of Optionee's estate and any beneficiaries of this option designated by Optionee.

14. NOTICES. Any notice required to be given or delivered to the Corporation under the terms of this Agreement shall be in writing and addressed to the Corporation at its principal corporate offices. Any notice required to be given or delivered to Optionee shall be in writing and addressed to Optionee at the address indicated below Optionee's signature line on the Grant Notice. All notices shall be deemed effective upon personal delivery or upon deposit in the U.S. mail, postage prepaid and properly addressed to the party to be notified.

15. CONSTRUCTION. This Agreement and the option evidenced hereby are made and granted pursuant to the Plan and are in all respects limited by and subject to the terms of the Plan.

16. GOVERNING LAW. The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of California without resort to that State's conflict-of-laws rules.

EXHIBIT I

NOTICE OF EXERCISE

I hereby notify Ligand Pharmaceuticals Incorporated (the "Corporation") that I elect to purchase _____ shares of the Corporation's Common Stock (the "Purchased Shares") at the option exercise price of $_____ per share (the "Exercise Price") pursuant to that certain option (the "Option") granted to me under the Corporation's 2002 Stock Incentive Plan on _____, _____.

Concurrently with the delivery of this Exercise Notice to the Corporation, I shall hereby pay to the Corporation the Exercise Price for the Purchased Shares in accordance with the provisions of my agreement with the Corporation (or other documents) evidencing the Option and shall deliver whatever additional documents may be required by such agreement as a condition for exercise. Alternatively, I may utilize the special broker-dealer sale and remittance procedure specified in my agreement to effect payment of the Exercise Price for any Purchased Shares in which I am vested at the time of exercise of the Option.

_____, _____
Date

_____
Optionee

_____

Address:_____

_____

Print name in exact manner
it is to appear on the

stock certificate: _____

Address to which certificate
is to be sent, if different
from address above: _____

_____

Social Security Number: _____

APPENDIX

The following definitions shall be in effect under the Agreement:

A. AGREEMENT shall mean this Automatic Stock Option Agreement.

B. BOARD shall mean the Corporation's Board of Directors.

C. CHANGE IN CONTROL shall mean a change in ownership or control of the Corporation effected through any of the following transactions:

(i) a merger, consolidation or other reorganization approved by the Corporation's stockholders, UNLESS securities representing more than fifty percent (50%) of the total combined voting power of the voting securities of the successor corporation are immediately thereafter beneficially owned, directly or indirectly and in substantially the same proportion, by the persons who beneficially owned the Corporation's outstanding voting securities immediately prior to such transaction, or

(ii) the sale, transfer or other disposition of all or substantially all of the Corporation's assets in complete liquidation or dissolution of the Corporation, or

(iii) .the acquisition, directly or indirectly, by any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation) of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders.

D. COMMON STOCK shall mean shares of the Corporation's common stock.

E. CODE shall mean the Internal Revenue Code of 1986, as amended.

F. CORPORATION shall mean Ligand Pharmaceuticals Incorporated, a Delaware corporation, and any successor corporation to all or substantially all of the assets or voting stock of Ligand Pharmaceuticals Incorporated which shall by appropriate action adopt the Plan.

G. EXERCISE DATE shall mean the date on which the option shall have been exercised in accordance with Paragraph 10 of the Agreement.

H. EXERCISE PRICE shall mean the exercise price per share as specified in the Grant Notice.

I. EXPIRATION DATE shall mean the date on which the option expires as specified in the Grant Notice.

J. FAIR MARKET VALUE per share of Common Stock on any relevant date shall be determined in accordance with the following provisions:

(i) If the Common Stock is at the time traded on the Nasdaq National Market, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question, as the price is reported by

the National Association of Securities Dealers on the Nasdaq National Market and published in THE WALL STREET JOURNAL. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

(ii) If the Common Stock is at the time listed on any Stock Exchange, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question on the Stock Exchange which serves as the primary market for the Common Stock, as such price is officially quoted in the composite tape of transactions on such exchange and published in THE WALL STREET JOURNAL. If there is no closing selling price for the Common Stock on the date in question, then the Fair Market Value shall be the closing selling price on the last preceding date for which such quotation exists.

K. GRANT DATE shall mean the date of grant of the option as specified in the Grant Notice.

L. GRANT NOTICE shall mean the Notice of Grant of Automatic Stock Option accompanying the Agreement, pursuant to which Optionee has been informed of the basic terms of the option evidenced hereby.

M. HOSTILE TAKE-OVER shall mean a change in ownership or control of the Corporation effected through either of the following transactions:

(i) a change in the composition of the Board over a period of thirty-six (36) consecutive months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be comprised of individuals who either (A) have been Board members continuously since the beginning of such period or (B) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (A) who were still in office at the time the Board approved such election or nomination; or

(ii) a Hostile Tender-Offer.

N. HOSTILE TENDER-OFFER shall mean the acquisition, directly or indirectly, by any person or related group of persons (other than the Corporation or a person that directly or

indirectly controls, is controlled by, or is under common control with, the Corporation) of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders which the Board does not recommend such stockholders to accept.

O. 1934 ACT shall mean the Securities Exchange Act of 1934, as amended.

P. NON-STATUTORY OPTION shall mean an option not intended to satisfy the requirements of Code Section 422.

Q. NOTICE OF EXERCISE shall mean the notice of exercise in the form of Exhibit I.

R. OPTION SHARES shall mean the number of shares of Common Stock subject to the option.

S. OPTIONEE shall mean the person to whom the option is granted as specified in the Grant Notice.

T. PERMANENT DISABILITY shall mean the inability of Optionee to perform his or her usual duties as a member of the Board by reason of any medically determinable physical or mental impairment which is expected to result in death or has lasted or can be expected to last for a continuous period of twelve (12) months or more.

U. PLAN shall mean the Corporation's 2002 Stock Incentive Plan.

V. PURCHASE AGREEMENT shall mean the stock purchase agreement (in form and substance satisfactory to the Corporation) which grants the Corporation the right to repurchase, at the Exercise Price, any and all unvested Option Shares held by Optionee at the time of Optionee's cessation of Board service and which precludes the sale, transfer or other disposition of any purchased Option Shares while those shares are unvested and subject to such repurchase right.

W. STOCK EXCHANGE shall mean the American Stock Exchange or the New York Stock Exchange.

X. TENDER-OFFER PRICE shall mean the GREATER of (i) the Fair Market Value per share of Common Stock on the date the option is surrendered to the Corporation in connection with a Hostile Tender-Offer or (ii) the highest reported price per share of Common Stock paid by the tender offeror in effecting the Hostile Tender-Offer.

Y. VESTING SCHEDULE shall mean the vesting schedule specified in the Grant Notice, pursuant to which the Option Shares will vest in one or more installments over the Optionee's period of Board service, subject to acceleration in accordance with the provisions of the Agreement.

EXHIBIT 10.272

LIGAND PHARMACEUTICALS INCORPORATED

DIRECTOR FEE STOCK OPTION AGREEMENT

RECITALS

A. The Corporation has implemented a special director fee stock option grant program under the Plan pursuant to which non-employee members of the Board may, by prior irrevocable election, apply all or any portion of the annual fee(s) otherwise payable to them in cash to the acquisition of a special stock option grant.

B. Optionee is a non-employee Board member who made the requisite election to apply a portion of his or her annual fee(s) to the acquisition of the special option, and this Agreement is executed pursuant to, and is intended to carry out the purposes of, the Plan in connection with the grant of such special option to Optionee.

C. All capitalized terms in this Agreement shall have the meaning assigned to them in the attached Appendix.

NOW, THEREFORE, it is hereby agreed as follows:

1. GRANT OF OPTION. The Corporation hereby grants to Optionee, as of the Grant Date, a Non-Statutory Stock Option to purchase up to the number of Option Shares specified in the Grant Notice. The Option Shares shall be purchasable from time to time during the option term specified in Paragraph 2 at the Exercise Price.

2. OPTION TERM. This option shall have a term of ten (10) years measured from the Grant Date and shall accordingly expire at the close of business on the Expiration Date, unless sooner terminated in accordance with Paragraph 5, 6 or 8.

3. LIMITED TRANSFERABILITY

(a) This option may be assigned in whole or in part during Optionee's lifetime to one or more members of the Optionee's immediate family or to a trust established for the exclusive benefit of one or more such family members or to Optionee's former spouse, to the extent such assignment is in connection with the Optionee's estate plan or pursuant to a domestic relations order. The assigned portion shall be exercisable only by the person or persons who acquire a proprietary interest in the option pursuant to such assignment. The terms applicable to the assigned portion shall be the same as those in effect for this option immediately prior to such assignment.

(b) Should the Optionee die while holding this option, then this option shall be transferred in accordance with Optionee's will or the laws of inheritance. However, Optionee may designate one or more persons as the beneficiary or beneficiaries of this option, and this option shall, in accordance with such designation, automatically be transferred to such

beneficiary or beneficiaries upon the Optionee's death while holding this option. Such beneficiary or beneficiaries shall take the transferred option subject to all the terms and conditions of this Agreement, including (without limitation) the limited time period during which this option may, pursuant to Paragraph 5, be exercised following Optionee's death.

4. EXERCISABILITY/VESTING. This option shall become exercisable for the Option Shares in a series of successive equal monthly installments as specified in the Grant Notice. As the option becomes exercisable for those installments, the installments shall accumulate, and the option shall remain exercisable for the accumulated installments until the Expiration Date or sooner termination of the option term under Paragraph 5, 6 or 8.

5. CESSATION OF BOARD SERVICE. Should Optionee's service as a Board member cease while this option remains outstanding, then the option term specified in Paragraph 2 shall terminate (and this option shall cease to be outstanding) prior to the Expiration Date in accordance with the following

provisions:

(a) Should Optionee cease to serve as a Board member for any reason while this option is outstanding, then the period during which this option may be exercised shall be reduced to a three (3)-year period measured from the date of such cessation of Board service, but in no event shall this option be exercisable at any time after the Expiration Date. During such limited exercise period, Optionee (or the person or persons to whom this option is transferred pursuant to a permitted transfer under Paragraph 3) may not exercise this option in the aggregate for more than the number of Option Shares (if any) for which the option is exercisable on the date of Optionee's cessation of Board service. Upon the EARLIER of (A) the expiration of such three (3)-year period or (B) the specified Expiration Date, the option shall terminate and cease to be exercisable with respect to any exercisable Option Shares for which the option has not been exercised.

(b) Should Optionee cease service as a Board member by reason of death or Permanent Disability, then this option shall automatically accelerate and become immediately exercisable for all the Option Shares at the time subject to this option so that Optionee (or the personal representative of Optionee's estate or the person or persons to whom the option is transferred upon Optionee's death or to whom the option is transferred during Optionee's lifetime pursuant to a permitted transfer under Paragraph 3 or the designated beneficiary or beneficiaries of this option, as the case may be) shall have the right to exercise this option for any or all of those Option Shares as fully-vested shares of Common Stock. Any such right to exercise this option shall lapse upon the EARLIER of (A) the expiration of the three (3)-year period measured from the date of Optionee's cessation of Board service or (B) the specified Expiration Date.

(c) Upon Optionee's cessation of Board service for any reason other than death or Permanent Disability, this option shall immediately terminate and cease to be outstanding with respect to any and all Option Shares for which the option is not otherwise at that time exercisable.

6. CHANGE IN CONTROL.

(a) In the event of a Change in Control effected during Optionee's period of Board service, this option, to the extent outstanding at that time but not otherwise fully exercisable for all the Option Shares, shall automatically accelerate so that this option shall, immediately prior to the effective date of such Change in Control, become exercisable for all the Option Shares at the time subject to this option and may be exercised for any or all of those Option Shares as fully vested shares of Common Stock. Immediately following such Change in Control, this option shall terminate and cease to be outstanding, except to the extent assumed by the successor corporation (or parent thereof) or otherwise continued in effect pursuant to the terms of the Change in Control transaction.

(b) To the extent assumed by the successor corporation (or parent thereof) in connection with the Change in Control or otherwise continued in effect, this option shall be appropriately adjusted, immediately after such Change in Control, to apply to the number and class of securities which would have been issuable to Optionee in consummation of such Change in Control had the option been exercised immediately prior to such Change in Control, and appropriate adjustments shall also be made to the Exercise Price, PROVIDED the aggregate Exercise Price shall remain the same. To the extent the actual holders of the Corporation's outstanding Common Stock receive cash consideration for their Common Stock in consummation of the Change in Control, the successor corporation may, in connection with the assumption of this option, substitute one or more shares of its own common stock with a fair market value equivalent to the cash consideration paid per share of Common Stock in such Change in Control. This option, as so assumed or continued, shall remain fully exercisable for all the Option Shares subject to such option until the EARLIEST to occur of (i) the expiration of the three (3)-year period measured from the date of Optionee's cessation of Board service, (ii) the specified Expiration Date or (iii) the cash-out of this option pursuant to the provisions of Paragraph 8.

(c) This Agreement shall not in any way affect the right of the

Corporation to adjust, reclassify, reorganize or otherwise change its capital or business structure or to merge, consolidate, dissolve, liquidate or sell or transfer all or any part of its business or assets.

7. HOSTILE TAKE-OVER.

(a) In the event of a Hostile Take-Over effected during Optionee's period of Board service, this option, to the extent outstanding at that time but not otherwise fully exercisable for all the Option Shares, shall automatically accelerate so that this option shall, immediately prior to the effective date of such Hostile Take-Over, become exercisable for all the Option Shares at the time subject to this option and may be exercised for any or all of those Option Shares as fully vested shares of Common Stock.

(b) The option shall remain exercisable for such fully-vested Option Shares until the EARLIEST to occur of (i) the expiration of the three (3)-year period measured from the date of Optionee's cessation of Board service, (ii) the specified Expiration Date, (iii) the

termination of this option in connection with a Change in Control transaction or (iv) the cash-out of this option pursuant to the provisions of Paragraph 8.

8. HOSTILE TENDER-OFFER Optionee is hereby granted a limited stock appreciation right exercisable upon the following terms and conditions:

(a) Optionee shall have the unconditional right, exercisable at any time during the thirty (30)-day period immediately following a Hostile Tender-Offer effected during his or her period of Board service, to surrender this option to the Corporation. In return for the surrendered option, Optionee shall receive a cash distribution from the Corporation in an amount equal to the excess of (A) the Tender-Offer Price of the shares of Common Stock which are at the time subject to the surrendered option (whether or not the option is otherwise at that time exercisable for those Option Shares) over (B) the aggregate Exercise Price payable for such shares.

(b) To exercise this limited stock appreciation right, Optionee must, during the applicable thirty (30)-day exercise period, provide the Corporation with written notice of the option surrender in which there is specified the number of Option Shares as to which the option is being surrendered. Such notice must be accompanied by the return of Optionee's copy of this Agreement, together with any written amendments to such Agreement. The cash distribution shall be paid to Optionee within five (5) business days following such delivery date. The exercise of the limited stock appreciation right in accordance with the terms of this Paragraph 8 has been pre-approved pursuant to the express provisions of the Plan, and no further approval of the Plan Administrator or the Board shall be required at the time of the actual option surrender and cash distribution. Upon receipt of such cash distribution, this option shall be cancelled with respect to the Option Shares for which the option has been surrendered, and Optionee shall cease to have any further right to acquire those Option Shares under this Agreement. The option shall, however, remain outstanding for the balance of the Option Shares (if any) in accordance with the terms of this Agreement, and the Corporation shall issue a replacement stock option agreement (substantially in the same form as this Agreement) for those remaining Option Shares.

(c) In no event may this limited stock appreciation right be exercised when there is not a positive spread between the Fair Market Value of the Option Shares subject to the surrendered option and the aggregate Exercise Price payable for such shares. This limited stock appreciation right shall in all events terminate upon the expiration or sooner termination of the option term and may not be assigned or transferred by Optionee, except to the extent the option is transferred in accordance with the provisions of this Agreement.

9. STOCKHOLDER RIGHTS. The holder of this option shall not have any stockholder rights with respect to the Option Shares until such person shall have exercised the option, paid the Exercise Price and become a holder of record of the purchased shares.

10. ADJUSTMENT IN OPTION SHARES. Should any change be made to the

Common Stock by reason of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares or other change affecting the outstanding Common Stock as a class

without the Corporation's receipt of consideration, appropriate adjustments shall be made to (i) the number and/or class of securities subject to this option and (ii) the Exercise Price in order to reflect such change and thereby preclude a dilution or enlargement of benefits hereunder.

11. MANNER OF EXERCISING OPTION.

(a) In order to exercise this option with respect to all or any part of the Option Shares for which this option is at the time exercisable, Optionee (or any other person or persons exercising the option) must take the following actions:

(i) Execute and deliver to the Corporation a Notice of Exercise (see attached form) for the Option Shares for which the option is exercised.

(ii) Pay the aggregate Exercise Price for the purchased shares in one or more of the following forms:

(A) cash or check made payable to the Corporation (includes cash paid from Optionee's brokerage pursuant to a presale of shares in a so-called "cashless" exercise),

(B) shares of Common Stock held by Optionee (or any other person or persons exercising the option) for the requisite period necessary to avoid a charge to the Corporation's earnings for financial reporting purposes and valued at Fair Market Value on the Exercise Date, or

(C) through a special sale and remittance procedure pursuant to which Optionee (or any other person or persons exercising the option) shall concurrently provide irrevocable instructions (I) to a Corporation-designated brokerage firm to effect the immediate sale of the purchased shares and remit to the Corporation, out of the sale proceeds available on the settlement date, sufficient funds to cover the aggregate Exercise Price payable for the purchased shares plus all applicable income taxes required to be withheld by the Corporation by reason of such exercise and (II) to the Corporation to deliver the certificates for the purchased shares directly to such brokerage firm in order to complete the sale.

Payment forms (B), and (C) above shall be accepted solely at the option of the Plan Administrator.

Except to the extent the sale and remittance procedure is utilized in connection with the option exercise, payment of the Exercise Price must accompany the Notice of Exercise.

(iii) Furnish to the Corporation appropriate documentation that the person or persons exercising the option (if other than Optionee) have the right to exercise this option.

(b) As soon after the Exercise Date as practical, the Corporation shall issue to or on behalf of Optionee (or any other person or persons exercising this option) a certificate for the purchased Option Shares, with the appropriate legends affixed thereto.

(c) In no event may this option be exercised for any fractional shares.

12. COMPLIANCE WITH LAWS AND REGULATIONS.

(a) The exercise of this option and the issuance of the Option Shares upon such exercise shall be subject to compliance by the Corporation and Optionee with all applicable requirements of law relating thereto and with all applicable regulations of any stock exchange (or the Nasdaq National Market, if applicable) on which the Common Stock may be listed for trading at the time of such exercise and issuance.

(b) The inability of the Corporation to obtain approval from any regulatory body having authority deemed by the Corporation to be necessary to the lawful issuance and sale of any Common Stock pursuant to this option shall relieve the Corporation of any liability with respect to the non-issuance or sale of the Common Stock as to which such approval shall not have been obtained. The Corporation, however, shall use its best efforts to obtain all such approvals.

13. SUCCESSORS AND ASSIGNS. Except to the extent otherwise provided in Paragraph 3, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the Corporation and its successors and assigns and Optionee, Optionee's assigns, the legal representatives, heirs and legatees of Optionee's estate and any beneficiaries of this option designated by Optionee.

14. NOTICES. Any notice required to be given or delivered to the Corporation under the terms of this Agreement shall be in writing and addressed to the Corporation at its principal corporate offices. Any notice required to be given or delivered to Optionee shall be in writing and addressed to Optionee at the address indicated below Optionee's signature line on the Grant Notice. All notices shall be deemed effective upon personal delivery or upon deposit in the U.S. mail, postage prepaid and properly addressed to the party to be notified.

15. CONSTRUCTION. This Agreement and the option evidenced hereby are made and granted pursuant to the director fee option grant program in effect under the Plan and are in all respects limited by and subject to the terms of that program.

16. GOVERNING LAW. The interpretation, performance and enforcement of this Agreement shall be governed by the laws of the State of California without resort to that State's conflict-of-laws rules.

APPENDIX

The following definitions shall be in effect under the Agreement:

A. AGREEMENT shall mean this Director Fee Stock Option Agreement.

B. BOARD shall mean the Corporation's Board of Directors.

C. CHANGE IN CONTROL shall mean a change in ownership or control of the Corporation effected through any of the following transactions:

(i) a merger, consolidation or other reorganization approved by the Corporation's stockholders, UNLESS securities representing more than fifty percent (50%) of the total combined voting power of the voting securities of the successor corporation are immediately thereafter beneficially owned, directly or indirectly and in substantially the same proportion, by the persons who beneficially owned the Corporation's outstanding voting securities immediately prior to such transaction, or

(ii) the sale, transfer or other disposition of all or substantially all of the Corporation's assets in complete liquidation or dissolution of the Corporation, or

(iii) the acquisition, directly or indirectly, by any person or related group of persons (other than the Corporation or a person that directly or indirectly controls, is controlled by, or is under common control with, the Corporation) of beneficial ownership (within the meaning of Rule 13d-3 of the 1934 Act) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders.

D. CODE shall mean the Internal Revenue Code of 1986, as amended.

E. COMMON STOCK shall mean the Corporation's common stock.

F. CORPORATION shall mean Ligand Pharmaceuticals Incorporated, a Delaware corporation, and any successor corporation to all or substantially all of the assets or voting stock of Ligand Pharmaceuticals Incorporated which shall by appropriate action adopt the Plan.

G. EXERCISE DATE shall mean the date on which the option shall have been exercised in accordance with Paragraph 10 of the Agreement.

H. EXERCISE PRICE shall mean the exercise price per share as specified in the Grant Notice.

I. EXPIRATION DATE shall mean the date on which the option expires as specified in the Grant Notice.

J. FAIR MARKET VALUE per share of Common Stock on any relevant date shall be determined in accordance with the following provisions:

(i) If the Common Stock is at the time traded on the Nasdaq National Market, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question, as such price is reported by the National Association of Securities Dealers on the Nasdaq National Market and published in THE WALL STREET JOURNAL. If there is no selling price quoted for the Common Stock on the date in question, then the Fair Market Value shall be closing selling price on the last preceding date for which such quotation exists.

(ii) If the Common Stock is at the time listed on any Stock Exchange, then the Fair Market Value shall be the closing selling price per share of Common Stock on the date in question on the Stock Exchange serving as the primary market for the Common Stock, as such price is officially quoted in the composite tape of transactions on such exchange and published in THE WALL STREET JOURNAL. If there is no selling price quoted for the Common Stock on the date in question, then the Fair Market Value shall be the average of the high and low selling price on the last preceding date for which such quotation exists.

K. GRANT DATE shall mean the date of grant of the option as specified in the Grant Notice.

L. GRANT NOTICE shall mean the Notice of Grant of Non-Employee Director Stock Option Under Director Fee Option Grant Program accompanying the Agreement, pursuant to which Optionee has been informed of the basic terms of the option evidenced hereby.

M. HOSTILE TAKE-OVER shall mean a change in ownership or control of the Corporation effected through either of the following transactions:

(i) a change in the composition of the Board over a period of thirty-six (36) consecutive months or less such that a majority of the Board members ceases, by reason of one or more contested elections for Board membership, to be comprised of individuals who either (A) have been Board members continuously since the beginning of such period or (B) have been elected or nominated for election as Board members during such period by at least a majority of the Board members described in clause (A) who were still in office at the time the Board approved such election or nomination; or

(ii) a Hostile Tender-Offer.

N. HOSTILE TENDER-OFFER shall mean the acquisition, directly or indirectly, by any person or related group of persons (other than the Corporation or a person that directly or

indirectly controls, is controlled by, or is under common control with, the Corporation) of beneficial ownership (within the meaning of Rule 13d-3 of the Securities Exchange Act of 1934, as amended) of securities possessing more than fifty percent (50%) of the total combined voting power of the Corporation's outstanding securities pursuant to a tender or exchange offer made directly to the Corporation's stockholders which the Board does not recommend such stockholders to accept.

O. 1934 ACT shall mean the Securities Exchange Act of 1934, as amended.

P. NON-STATUTORY STOCK OPTION shall mean an option not intended to satisfy the requirements of Code Section 422.

Q. NOTICE OF EXERCISE shall mean the written notice of the option exercise on the form provided by the Corporation for such purpose (see attached).

R. OPTION SHARES shall mean the number of shares of Common Stock subject to the option as specified in the Grant Notice.

S. OPTIONEE shall mean the person to whom the option is granted as specified in the Grant Notice.

T. PERMANENT DISABILITY shall mean the inability of Optionee to perform his or her usual duties as a Board member by reason of any medically determinable physical or mental impairment expected to result in death or to be of continuous duration of twelve (12) months or more.

U. PLAN shall mean the Corporation's 2002 Stock Incentive Plan.

V. STOCK EXCHANGE shall mean the American Stock Exchange or the New York Stock Exchange.

W. TENDER-OFFER PRICE per share shall mean the GREATER of (A) the Fair Market Value per Option Share on the option surrender date under Paragraph 8 or (B) the highest reported price per share of Common Stock paid by the tender offeror in effecting the Hostile Tender-Offer.

EXHIBIT 14.1

LIGAND PHARMACEUTICALS INCORPORATED
CODE OF CONDUCT AND
ETHICS POLICY

TO OUR EMPLOYEES:

Good ethics are good business.

That is not only our profound belief, but it represents a pledge of conduct. Integrity in every aspect of the way we manage and conduct the business of Ligand is a key element in our corporate culture. We do not want anyone to compromise sound standards of ethical behavior even if this action is based upon a sincere belief that such action might actually help us improve our financial performance. We place a high value on honesty, fair dealing and ethical business practices.

In 2001, we adopted a set of core values which are central to how we carry out our roles and responsibilities in this company. This policy formalizes our commitment to a number of those values, especially the highest standards of integrity, respect and accountability. It commits us to conducting business according to high ethical standards and the laws of all the countries in which we operate around the world.

This policy is designed to help you understand what Ligand expects of you. It does not cover every ethical issue, but the basics are here to help your general understanding. In addition, to help resolve ethical questions not covered in the brochure, we have developed a procedure, which begins on page 13. We know it helps people make the right decisions.

If a potential course of action seems questionable, seek guidance. We encourage

open communications regarding any possible violation of Ligand's ethical principles and business practices.

We clearly want you to be sensitive to situations that could result in illegal, unethical or improper actions. You also should be alert to activities that even LOOK improper.

Ligand's reputation is in the hands of all of us. Let us continue to demonstrate integrity and honesty, a hallmark of the way Ligand's people conduct company business.

David E. Robinson
Chairman, President and Chief Executive Officer

HIGH STANDARDS OF ETHICS ARE ESSENTIAL TO OUR SUCCESS

This policy covers a wide range of business practices and procedures that flow from the company's commitment to ethical business conduct. All Ligand employees must conduct themselves accordingly. To help us avoid even THE APPEARANCE of improper behavior, many of our standards go beyond legal requirements. Specifically addressed are:

- obeying the law,
- competition,
- conflicts of interest,
- disclosure
- government contracts,
- payments to government personnel,
- kickbacks and gratuities,
- maintaining accurate & complete records, and
- political contributions.

Each of us must become informed enough about these practices to know either the right way to act, or when we must consult with supervisors and management.

Ligand views seriously its commitment to ethical business conduct. The company will take disciplinary action against those who violate its ethics standards.

Government business requires strict adherence to our standards of ethics, which includes the need to comply with special government regulations. If you are working on government business, pay special attention to these requirements.

IF YOU ARE IN A SITUATION WHICH YOU BELIEVE MAY BE IN VIOLATION OF LIGAND POLICY, FOLLOW THE GUIDELINES TO ACTION ON PAGE 13 OF THIS POLICY.

OBEYING THE LAW

THE FOUNDATION ON WHICH LIGAND'S ETHICAL STANDARDS ARE BUILT IS OBEYING THE LAW.

We respect and obey the laws of the cities, states and countries where we operate. Although everyone is not expected to know the details of those laws, it is important for us to know enough to determine when we must get advice from supervisors or management. Obeying the law includes obeying the rules and regulations that are made by government agencies under the authority of law (e.g. FDA & SEC rules and regulations).

Fraud and theft are two important examples of illegal conduct that are not tolerated at Ligand. These include embezzlement or misappropriation of the property or funds of the company, its employees, suppliers or customers.

Another critical area of complying with the law in a business setting is record keeping and record retention. See below under "Maintaining Accurate and Complete Records"

COMPETITION

WE RESPECT THE RIGHTS OF COMPETITORS, CUSTOMERS AND SUPPLIERS.

We are fair and honest. The only competitive advantages we seek are those gained through superior value creation, e.g. in our research, development, manufacturing and marketing. It is our intention to win business through excellent products and services, never through unethical or illegal business practices.

Good customer relationships are based on integrity and trust. It is against Ligand policy to engage in unethical or illegal activity to win or keep business. Don't lie or mislead people. All information we provide about our products and services, and the products and services of others should be correct. We do not engage in unfair competition or deceptive practices. We do not discuss or agree with competitors on prices or other terms that are offered to customers.

Basic honesty is the key to ethical behavior. Trustworthiness in the marketplace is essential to building solid and lasting relationships with either commercial or government customers.

SUPPLIERS

Many of us are involved with suppliers even though we are not in the Purchasing Department. For example, you may be involved in generating a list of approved suppliers. Or you may decide which suppliers meet or exceed our quality standards. You may send out artwork or printing, recommending preferred sources. Or you may select freight carriers, travel providers or software vendors. Whenever you are involved with our suppliers, it is important to be objective and fair.

Always employ professional business practices in selecting sources, in negotiations, in awarding business and in the administration of purchasing activities. The best approach is to be friendly, but strictly business-oriented.

In deciding among competing suppliers, it's important to be impartial. The decision to place a supplier on a bidding list should be based on:

- product or service quality,
- technology,
- level of service,
- price,
- financial stability, and
- reliability.

Ultimately, the best interests of all concerned are served when Ligand and its suppliers derive mutual benefit from relationships. The way to ensure this is to conduct business fairly, impartially and honestly.

SUCCESSFUL COMPETITION REQUIRES HIGH QUALITY.

Quality is the cornerstone of our commitment to our customers and is essential to our ability to compete. Ligand is committed to total quality leadership, including producing high quality products and services. Make quality a high priority in your daily work. It is an important part of individual integrity.

Quality goes beyond ethical considerations and encompasses all of our efforts to serve our customers. It focuses on the continuous improvement of ALL our processes, so that faults are prevented before they occur. In the context of ethics, however, quality definitely requires that Ligand products and services be designed and manufactured to meet our obligations to customers. That includes making sure that all inspection and testing documents are complete, accurate, truthful and handled properly.

As a corporation, we are committed to providing our customers with quality products and service. Individual dedication to excellence permits us to honor that commitment.

CONFLICTS OF INTEREST

WE EXPECT LIGAND EMPLOYEES TO AVOID ANY ASSOCIATION WHICH MIGHT CONFLICT WITH THEIR LOYALTY TO THE COMPANY OR COMPROMISE THEIR JUDGMENT.

There is a conflict of interest when a person's private interests and his or her business responsibilities are at odds. It may help to ask yourself these questions:

- Are you sure that your job-related decisions are made on sound business principles?
- Have you permitted your personal interests to influence your Ligand business decisions?

It's extremely important to avoid actions that could even APPEAR to be influenced by personal interests.

In most circumstances, it is a conflict of interest for a Ligand employee to work simultaneously for a competitor, supplier or customer. You may not market products or services in competition with Ligand. You are not allowed to work for a competitor, whether as an employee, consultant or board member, without prior written authorization from your supervisor or his/her supervisor. The best policy is to avoid any direct or indirect employment, or other business connection, with our competitors, suppliers or customers. This is an extremely sensitive area. Check carefully before acting.

Although it may not be a conflict of interest, for many employees it is often inappropriate to have a "moonlighting" job, either in a business you own, or one owned by another. If you are contemplating additional outside duties, discuss the situation thoroughly with your supervisor first.

In no event should company equipment be used for non-company business, although incidental personal use may be permitted at your facility.

Another area of potential conflict is "inside information." Employees who have access to material, confidential information as part of their job are NOT permitted to trade Ligand stock or other Ligand securities, nor may they share that information for stock trading purposes or otherwise. To use such material non-public information for financial benefit not only is unethical, it is also illegal. Refer to our policy on insider trading (CP-LAW-001) for more detailed information.

Actual conflict of interest need not be present for a problem to arise. Its mere

appearance must be avoided. Conflict of interest can arise innocently because of circumstances alone, without deliberate action on the part of an individual. For example, if a plant manager's brother buys a janitorial service which does work for the plant, it may appear that the plant manager is favoring his brother's firm over its competitors. The best course of action here would be for the plant to switch to a different janitorial service to avoid even the APPEARANCE of a conflict of interest.

Conflicts of interest are sometimes not clear-cut and can arise in a number of different circumstances. Additional discussion of potential conflicts of interest can be found in the Ligand Employee Handbook, but neither the above discussion nor the Handbook covers all potential areas of conflict. Correct action may require consultation with higher levels of management. So, BEFORE you act, it is especially important to discuss areas of concern with your supervisor and/or his/her supervisor.

LOYALTY TO LIGAND ALSO REQUIRES THAT EMPLOYEES HELP PRESERVE LIGAND'S ASSETS.

"Assets" includes physical items AND proprietary information. Proprietary information needs to be handled carefully. This includes:

- patents,
- trademarks,
- trade secrets, and
- copyrights.

Proprietary information also includes:

- business, marketing and service plans,
- research, development and manufacturing ideas,
- designs and chemical structures,
- internal databases,
- personnel records,
- salary information, and
- unpublished financial data and reports.

Any unauthorized use or disclosure of these types of information would violate Ligand standards and the Proprietary Information and Inventions Agreement that you signed when you joined the company. In addition, misappropriating or using the proprietary information of others without their permission is also a violation of our policy. These misuses of Ligand or third party proprietary information could also be illegal, and could bring civil and even criminal penalties.

All of us should make sure that Ligand property under our control is properly used only for the company's legitimate business purposes, employing adequate controls and safeguards. Sensitive information should be stored and protected, and only made available on a need-to-know basis, precluding unauthorized access, use or removal. This includes adequate controls over remote access to Ligand's systems and databases.

Preserving Ligand assets depends upon a strong sense of ethics by the individuals to whose care they are entrusted.

IF YOU HAVE QUESTIONS ABOUT YOUR ETHICAL RESPONSIBILITIES IN THIS AREA, FOLLOW

THE GUIDELINES TO ACTION RECOMMENDED BELOW UNDER THE HEADING "HOW WE ANSWER ETHICAL QUESTIONS AT LIGAND." ALSO REFER TO THE PHARMACEUTICAL RESEARCH AND MANUFACTURERS OF AMERICA (PHRMA) CODE ON INTERACTIONS WITH HEALTHCARE PROFESSIONALS, WHICH IS LIGAND POLICY, FOR GUIDANCE ON CUSTOMER INTERACTIONS.

DISCLOSURE

WE PROVIDE FULL, FAIR, ACCURATE, TIMELY AND CLEAR DISCLOSURE TO GOVERNMENT AGENCIES AND THE PUBLIC

Ligand adheres to the principles announced in BIO's Guidelines for Corporate Communications. Specifically, the company and its employees will:

- Comply with local, state and federal securities laws and regulations regarding the disclosure of company information;
- Provide full and fair disclosure that is balanced and consistent;
- Strive to provide clear, accurate and complete information in our public communications;
- Include "fair balance" in our communications about products;
- Provide public updates on material events as soon as practical after the event occurs.

GOVERNMENT CONTRACTS

Ligand's business includes direct and indirect contractual relationships with national, state and local governments. We must take care to comply with the special laws, rules and regulations which govern contracts with government agencies.

These laws and regulations may require evidence that detailed rules have, in fact, been followed. They are very strict relating to the use and safeguarding of government property and classified data in our possession.

If your job involves business with the government, you must know the rules applicable to your job. If you are in doubt, don't make the mistake of interpreting rules by yourself. Discuss the matter with your supervisor or, if appropriate, the Legal Department.

On any government-related projects, be particularly alert to soliciting, accepting or possessing classified information for which you are not authorized. Simply put, don't do it. If you are authorized to have access to classified information, know and follow the rules for handling such information to the letter.

In many areas of business practice, the U.S. government has determined special rules of behavior which may be different from acceptable commercial practices. Marketing, accounting, record keeping, purchasing and quality - among other areas - require special attention. Some examples requiring absolute adherence to specific rules are:

- accounting for costs,
- proposal and bidding procedures,
- pricing,
- discussing potential employment with U.S. Government procurement officials,
- maintenance of time records, and
- compliance with contract obligations.

PAYMENTS TO GOVERNMENT PERSONNEL

We do not make illegal payments to government officials. In the case of U.S. federal government employees, our policy requires strict adherence to the government rules on business gratuities which may be accepted by government personnel. The promise, offer or delivery to an official or employee of the U.S. government of a gift, favor or other gratuity in violation of these rules would not only violate Ligand policy; it also could be a criminal offense.

It is clear that you must take special care when working with U.S. government employees. And you should investigate whether there are regulations imposed upon other customers you serve - employees of state, local or national governments and representatives from the commercial sector. Awareness will help you avoid inappropriate and possibly illegal situations.

Obviously, relatives or close friends employed by government agencies may be entertained socially at your own expense. But care should be taken so that the entertainment is personal and is perceived as personal, and in no way can be viewed as related to Ligand business.

In other countries, however, practices may vary. You must be careful to know the local country laws governing payment to government personnel. Nominal gratuities for lower-level government personnel, to facilitate routine transactions, are permissible in certain countries where they are customary, lawful and do not give the impression that Ligand is acting in an unethical manner. However, the Foreign Corrupt Practices Act generally forbids giving anything of value to foreign government officials or foreign political candidates in order to obtain or retain business. It is therefore important to discuss these types of payments in advance with your supervisor to make sure the company's ethical standards are maintained and the law is followed.

KICKBACKS AND GRATUITIES

WE DO NOT OFFER OR ACCEPT KICKBACKS OR BRIBES, OR GIFTS OF SUBSTANTIAL VALUE.

They are strictly forbidden. They subvert competition and corrupt those involved.

The purpose of business entertainment and gifts in a commercial or industrial setting is to create good will and sound working relationships.

Their purpose is not to gain special advantage with customers. You have crossed the line into unethical behavior when your actions unduly influence recipients, make them feel obligated to pay Ligand back or violate their own standards of conduct. It is your duty to exercise good judgment and to ACT WITH MODERATION in offering or accepting entertainment or gratuities.

Practices in offering and accepting business gratuities vary among the markets we serve. With most commercial and industrial customers, reasonable entertainment and gratuities are customary. In this regard, Ligand has adopted as its policy the PhRMA Code. It is important, however, to also observe a customer's regulations regarding gratuities. Never offer to anyone something that you know he or she is prohibited from receiving.

Practices in offering and accepting business gratuities also may vary among the countries in which we operate. At times, the offering of nominal payments to facilitate routine transactions may be permissible. Since this is a difficult area, and highly sensitive to our reputation, it is imperative that managers consult with their chain of command in advance to insure that such payments are customary, nominal and do not give the impression that Ligand is unethical. In general, such entertainment, gratuities including gifts or promotional items should have a value of $100 or less. See the PhRMA Code for additional guidance on items given to healthcare professionals.

Gifts to Ligand personnel from our suppliers and vendors are not encouraged. Generally, modest gifts whose value is less than $100 may be acceptable but should, where practical, be made available for company use. For example, if you receive a gift basket from a vendor, you should make it available to others in your area. Gifts in excess of $100 in most cases must be turned over to Ligand for its use or returned; this includes, e.g., travel vouchers or other travel

gifts whose aggregate value is more than $100.

Likewise, entertainment for or by customers or vendors should be carefully considered. Entertainment is an acceptable part of business so long as it is modest, incidental to legitimate business interactions and does not create the appearance of an inducement to transact business. See the PhRMA Code for specific guidance with respect to customers.

Consultation is critical. Please discuss your plans and actions with your supervisor any time you have a question about what is appropriate. When in doubt, don't do it until you know it's okay. Our marketing activities must not entice representatives of customers to place their own personal interests above those of the organizations they represent. In commercial business areas, for

example, it would violate company policy to give an expensive gift to a contact at a customer company even if the budget can handle it.

MAINTAINING ACCURATE AND CORRECT RECORDS

ACCURATE RECORD-KEEPING IS ESSENTIAL TO OUR BUSINESS AND OUR ETHICAL STANDARDS.

While only a few of us maintain accounting records, many Ligand employees help keep the company's records. For certain Ligand businesses, the data from a time card may become the basis for charges to customers. Specific rules apply. Be accurate! Only the true and actual number of hours worked must be reported. Never shift costs to other customers or inappropriate work order numbers - this is strictly prohibited.

Many employees regularly use business expense accounts, commonly called "Travel and Entertainment" expenses. These expenses must be documented and recorded accurately. If you are not sure whether a potential expense is a legitimate business expense, the correct approach is to ask your supervisor or the controller. Rules and guidelines are available from the Finance Department

Employees in the Accounting Department, or others who keep the company's official records, have an added professional responsibility.

They must maintain Ligand books, records, accounts and financial statements in a manner which is both accurate and auditable. It is against Ligand policy to make entries that intentionally conceal or disguise the true nature of any transaction. No funds or accounts should be kept for purposes not fully and accurately disclosed. Unrecorded or "off the books" funds or assets should not be kept for any purpose.

Each of us must be certain that the records we keep are accurate and maintained according to all applicable laws and regulations. If you have reason to believe that some aspect of Ligand record-keeping is not being conducted properly, talk to your supervisor or follow the guidelines to action starting on page 13 of this policy.

We only destroy or discard documents in accordance with the law and company policy. Among other things, this means that relevant documents may not be altered, destroyed or discarded when we have reason to believe they will be requested by a court, administrative agency or other government authority or when we are aware that they are relevant to a government investigation.

POLITICAL CONTRIBUTIONS

Our policy discourages company contributions to political candidates even where such contributions are lawful. Any Ligand contributions in connection with elections are made to political action committees in accordance with the law and only when approved by senior

management. We encourage individual employees to be involved in the political process, however, and to make personal contributions as they see fit.

Good citizenship is fostered by taking part in activities on a local, regional state or national level and expressing personal views on government, legislation and other matters of public interest. When we speak out on public issues, we must take care not to give the appearance of acting on Ligand's behalf unless authorized to do so. For example, if you decide to write to your government representatives, you should do so on your own stationery. You may not write letters regarding political issues or campaigns on company letterhead. Any Company statements on political issues will be issued by Government Affairs or the Chief Executive Officer.

In addition, Ligand employees may not allow personal political efforts to infringe on their normal workday commitments to Ligand. Ligand's facilities and equipment may not be used for personal political purposes.

United States Federal law prohibits corporations from making contributions to candidates running for Federal office. Although some state and local governments allow corporations to make political contributions within the state we only make such contributions after careful compliance review and approval by senior management. The following activities present special issues and are prohibited except when reviewed and authorized in advance by senior management through the Government Affairs Department or the Chief Executive Officer.

- the purchase of a subscription to or advertising in any type of political publication;
- the use of company cars or other Ligand property by political organizations, candidates or their staffs in connection with a political campaign;
- the use of corporate funds to purchase seats or tables at political dinners and political fund-raising events; and
- the use of Ligand's name in political or campaign literature.

HELP IS AVAILABLE FOR MAINTAINING LIGAND'S STANDARDS

As Ligand employees, we have a tremendous responsibility to sustain Ligand's reputation as an ethical company. Continued honesty and integrity are vitally important. Let us do our best each day to maintain our standards. In doing so, we will contribute immensely to Ligand's success.

Ligand policies and practices are based heavily on trust and respect for the individual. And we understand that ethical business conduct depends upon the cooperation and full support of all.

If you have questions about ethics, follow the guidelines to action recommended below. If you are unsure of what to do in any situation, seek guidance BEFORE YOU ACT.

HOW WE ANSWER ETHICS QUESTIONS AT LIGAND

With some ethics issues it is easy to know right from wrong. If the question involves a matter of law, our course is clear and unambiguous we follow the law. But often the questions are not so clear-cut. They present us with difficult choices. It is impossible to prepare in advance for all possible problems. So, the best course of action is to understand the WAY to solve such problems.

These are the steps to keep in mind:

1. GET ALL THE FACTS.

It is difficult enough to find answers WITH the facts; it is impossible to reach intelligent solutions without them.

2. ASK YOURSELF: WHAT SPECIFICALLY AM I BEING ASKED TO DO?

It should enable you to bring into sharp focus the specific questions you are

faced with, and what alternatives you may have.

3. CLARIFY YOUR RESPONSIBILITY.

Most situations we face involve shared responsibility. Are all the other parties informed? By getting others involved, and airing the problem, a good course of action usually begins to come to light.

4. IS IT FAIR?

When the problem is not a clear-cut matter of law or company policy, this simple question is often a useful guide. And if a course of action seems unfair, examine why it seems unfair and who specifically, may be wronged. Is it our customer? Ligand interests? Other employees? In many cases, the best course for ethical purposes is also the one that seems fairest to all concerned.

5. DISCUSS THE PROBLEM WITH YOUR SUPERVISOR.

This is basic guidance for most situations, and should be considered during any of the above steps. In most cases, your supervisor will have a broader perspective than you do, and will appreciate being brought into the decision-making process before it's too late. Supervisors have a prime responsibility to help you solve problems. In the rare case where it may not be appropriate to discuss an ethics issue with your supervisor, you may discuss it with his or her supervisor or the Head of Human Resources.

6. SUPERVISORS SHOULD, AS APPROPRIATE, REFER QUESTIONS TO OR SEEK GUIDANCE FROM THEIR SUPERVISOR OR THE DEPARTMENT HEAD.

7. VIOLATIONS MUST BE REPORTED IMMEDIATELY

Accountability is one of the cornerstones of ethical organizations. Suspected violations of this Code are to be reported immediately to your supervisor or his/her supervisor. Retaliation for making a report or raising questions, as long as they are done in good faith, is prohibited. Conversely, knowingly making a false report is a violation of this policy.

Violations of this policy (including intentional failure to report violations or to take reasonable, good faith action after receiving a report of a violation) may result in disciplinary action, up to and including immediate termination. Further, any apparent violations of law may be reported to law enforcement by the company.

NOTE ALSO THAT THE COMPANY HAS A SEPARATE POLICY FOR REPORTING CERTAIN ACCOUNTING AND AUDITING MATTERS (CP-FIN-___). SUCH MATTERS MAY ALSO BE REPORTED USING THE PROCEDURE DESCRIBED IN THAT POLICY.

If your situation requires that your identity be kept secret, your anonymity will be protected. If you are unsure of what to do in any situation, seek guidance BEFORE YOU ACT

ADMINISTRATION & AMENDMENT

This policy is in no way intended to modify the at-will nature of your employment with the Company. Except as provided below, the Management Committee in its sole discretion shall interpret and administer this policy. This policy may not be amended or supplemented except in writing and with the express approval of the Board of Directors or, if the change(s) are immaterial or do not affect corporate officers, the Management Committee.

Amendments or waivers to this policy which affect corporate officers must be approved by the Board and reported on form 8-K as required by SEC regulations.

Employees may not rely on any oral statements that are inconsistent with this written policy, nor which purport to change or add to it.

EXHIBIT 21.1

SUBSIDIARIES OF THE REGISTRANT
LIGAND PHARMACEUTICALS INCORPORATED
LIST OF SUBSIDIARIES

<TABLE>
<CAPTION>

Name	Jurisdiction of Incorporation
<S>	<C>
Glycomed Incorporated	California
Allergan Ligand Retinoid Therapeutics, Inc.	Delaware
Ligand Pharmaceuticals International, Inc.	Delaware
Ligand JVR, Inc.	Delaware
Seragen Incorporated	Delaware
Seragen Technology, Inc.	Delaware
Ligand Pharmaceuticals (Canada) Incorporated	Saskatchewan, Canada
Ligand Pharmaceuticals UK Limited	United Kingdom

</TABLE>

EXHIBIT 23.1

INDEPENDENT AUDITORS' CONSENT

We consent to the incorporation by reference in Registration Statement Nos. 333-53992, 333-87110, 333-102483, 333-107332 and 333-109172 on Form S-3 and Registration Statement Nos. 333-91414, 333-66256, 333-43252, 333-79447, 333-69919, 333-32297, 333-12913, 033-92436, 033-92470, 033-85366, 033-66186, 033-54674 and 333-106375 on Form S-8 of Ligand Pharmaceuticals Incorporated, of our report dated March 10, 2004 (which report expresses an unqualified opinion and includes an explanatory paragraph referring to a change in accounting principle), appearing in this Annual Report on Form 10-K of Ligand Pharmaceuticals Incorporated for the year ended December 31, 2003.

/S/DELOITTE & TOUCHE LLP

San Diego, California
March 10, 2004

EXHIBIT 31.1

CHIEF EXECUTIVE OFFICER CERTIFICATION

I, David E. Robinson, Chairman, President and Chief Executive Officer, certify that:

1. I have reviewed this annual report on Form 10-K of Ligand Pharmaceuticals Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: MARCH 12, 2004

/S/DAVID E. ROBINSON
- ----------
David E. Robinson
Chairman, President and Chief Executive Officer

EXHIBIT 31.2

CHIEF FINANCIAL OFFICER CERTIFICATION

I, Paul V. Maier, Senior Vice President, Chief Financial Officer, certify that:

1. I have reviewed this annual report on Form 10-K of Ligand Pharmaceuticals Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: MARCH 12, 2004

/S/PAUL V. MAIER
- ----------
Paul V. Maier
Senior Vice President, Chief Financial Officer

EXHIBIT 32.1

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

In connection with the accompanying Annual Report on Form 10-K of Ligand Pharmaceuticals Inc. for the year ended December 31, 2003, I, David E. Robinson, Chairman, President and Chief Executive Officer of Ligand Pharmaceuticals Inc., hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge and belief, that:

(1) such Annual Report on Form 10-K for the year ended December 31, 2003, fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in such Annual Report on Form 10-K for the year ended December 31, 2003, fairly presents, in all material respects, the financial condition and results of operations of Ligand Pharmaceuticals Inc.

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. ss. 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Date: March 12, 2004 /S/DAVID E. ROBINSON

David E. Robinson
CHAIRMAN, PRESIDENT AND CHIEF EXECUTIVE OFFICER

EXHIBIT 32.2

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

In connection with the accompanying Annual Report on Form 10-K of Ligand Pharmaceuticals Inc. for the year ended December 31, 2003, I, Paul V. Maier, Senior Vice President, Chief Financial Officer of Ligand Pharmaceuticals Inc., hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge and belief, that:

(1) such Annual Report on Form 10-K for the year ended December 31, 2003, fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in such Annual Report on Form 10-K for the year ended December 31, 2003, fairly presents, in all material respects, the financial condition and results of operations of Ligand Pharmaceuticals Inc.

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. ss. 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

Date: March 12, 2004 /S/PAUL V. MAIER

Paul V. Maier
SENIOR VICE PRESIDENT, CHIEF FINANCIAL OFFICER