UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-Q

MARK ONE

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

FOR THE QUARTERLY PERIOD ENDED JUNE 30, 1998 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 NUMBER: 0-20720

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

DELAWARE	77-0160744
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(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: (619) 535-7500

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 [ ]

As of July 31, 1998 the registrant had 39,309,031 shares of Common Stock outstanding.

LIGAND PHARMACEUTICALS INCORPORATED
QUARTERLY REPORT

FORM 10-Q

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* No information provided due to inapplicability of item.

PART I. FINANCIAL INFORMATION
ITEM 1 FINANCIAL STATEMENTS

LIGAND PHARMACEUTICALS INCORPORATED
CONSOLIDATED BALANCE SHEETS
(IN THOUSANDS, EXCEPT SHARE DATA)

<TABLE>
<CAPTION>

	June 30, 1998	December 31, 1997
	(Unaudited)	
<S>	<C>	<C>
ASSETS		
Current assets:		
Cash and cash equivalents	$ 25,613	$ 62,252
Short-term investments	23,540	20,978
Other current assets	3,178	864
Total current assets	52,331	84,094
Restricted short-term investments	2,809	3,057
Property and equipment, net	15,516	14,853
Notes receivable from officers and employees	577	559
Other assets	11,035	4,860
	$ 82,268	$ 107,423
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities:		
Accounts payable	$ 7,265	$ 10,717
Accrued liabilities	5,289	5,609
Deferred revenue	4,291	2,616
Current portion of obligations under capital leases	2,817	2,753
Total current liabilities	19,662	21,695

Long-term obligations under capital leases	8,406	8,501
Convertible note	2,500	6,250
Convertible subordinated debentures	37,965	36,628
Stockholders' equity:		
Convertible preferred stock, $.001 par value; 5,000,000 shares authorized; none issued	--	--
Common stock, $.001 par value; 80,000,000 shares authorized; 39,304,101 shares and 38,504,459 shares issued at June 30, 1998 and December 31, 1997, respectively	39	39
Paid-in capital	320,564	311,681
Adjustment for unrealized gains (losses) on available-for-sale securities	1,838	384
Accumulated deficit	(308,695)	(277,744)
	13,746	34,360
Less treasury stock, at cost (1,114 shares at June 30, 1998 and December 31, 1997)	(11)	(11)
Total stockholders' equity	13,735	34,349
	$ 82,268	$ 107,423

</TABLE>

See accompanying notes.

LIGAND PHARMACEUTICALS INCORPORATED
CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)
(IN THOUSANDS, EXCEPT PER SHARE DATA)

<TABLE>
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	Three Months Ended June 30,		Six Months Ended June 30,	
	1998	1997	1998	1997
<S>	<C>	<C>	<C>	<C>
Revenues:				
Collaborative research and development:				
Related parties	$ --	$ 6,247	$ --	$ 12,213
Unrelated parties	4,300	3,552	9,273	7,289
Other	87	117	179	226
	4,387	9,916	9,452	19,728
Costs and expenses:				
Research and development	17,332	16,689	32,237	33,315
Selling, general and administrative	3,330	2,559	6,100	4,878
Total operating expenses	20,662	19,248	38,337	38,193
Loss from operations	(16,275)	(9,332)	(28,885)	(18,465)
Interest income	838	933	1,882	2,002
Interest expense	(1,973)	(2,015)	(3,948)	(4,090)
Net loss	$(17,410)	$(10,414)	$(30,951)	$(20,553)
Basic and diluted loss per share	$ (.45)	$ (.32)	$ (.80)	$ (.64)

Shares used in computing net loss per share	38,849	32,520	38,708	32,259

</TABLE>

See accompanying notes.

LIGAND PHARMACEUTICALS INCORPORATED
CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)
(IN THOUSANDS)

<TABLE>
<CAPTION>

	Six Months Ended June 30,	
	1998	1997
<S>	<C>	<C>
OPERATING ACTIVITIES		
Net loss	$(30,951)	$(20,553)
Adjustments to reconcile net loss to net cash used by operating activities:		
Depreciation and amortization	2,154	1,951
Amortization of notes receivable from officers and employees	99	124
Amortization of deferred compensation and consulting	--	216
Amortization of warrant subscription receivable	--	985
Accretion of debt discount	1,337	1,337
Change in operating assets and liabilities:		
Other current assets	(2,314)	558
Receivable from a related party	--	107
Accounts payable and accrued liabilities	(3,772)	(185)
Deferred revenue	1,675	(756)
Net cash used in operating activities	(31,772)	(16,216)
INVESTING ACTIVITIES		
Purchase of short-term investments	(25,514)	(16,364)
Proceeds from short-term investments	24,406	19,671
Increase in notes receivable from officers and employees	(117)	(125)
Increase in other assets	(7,305)	(3,670)
Decrease in other assets	1,130	59
Purchase of property and equipment	(1,331)	(3,512)
Net cash used in investing activities	(8,731)	(3,941)
FINANCING ACTIVITIES		
Principal payments on obligations under capital leases	(1,517)	(1,400)
Net change in restricted short-term investment	248	232
Net proceeds from sale of common stock	5,133	4,218
Net cash provided by financing activities	3,864	3,050
Net decrease in cash and cash equivalents	(36,639)	(17,107)
Cash and cash equivalents at beginning of period	62,252	34,830
Cash and cash equivalents at end of period	$ 25,613	$ 17,723
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Interest paid	$ 2,611	$ 2,678
SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Additions to obligations under capital leases	$ 1,486	$1739
Conversion of note to common stock	$ 3,750	$ 3,750

</TABLE>

See accompanying notes.

LIGAND PHARMACEUTICALS INCORPORATED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

JUNE 30, 1998

1. BASIS OF PRESENTATION

The consolidated financial statements of Ligand Pharmaceuticals Incorporated (the "Company") for the three and six months ended June 30, 1998 and 1997 are unaudited. These financial statements reflect all adjustments, consisting of only normal recurring adjustments which, in the opinion of management, are necessary to fairly present the consolidated financial position as of June 30, 1998 and the consolidated results of operations for the three and six months ended June 30, 1998 and 1997. The results of operations for the period ended June 30, 1998 are not necessarily indicative of the results to be expected for the year ending December 31, 1998. For more complete financial information, these financial statements, and the notes thereto, should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 1997 included in the Ligand Pharmaceuticals Incorporated Form 10-K filed with the Securities and Exchange Commission.

In June 1997, the Financial Accounting Standards Board issued SFAS 130, Reporting Comprehensive Income and SFAS 131, Segment Information. Both of these standards are effective for fiscal years beginning after December 15, 1997. SFAS 130 requires that all components of comprehensive income, including net income, be reported in the financial statements in the period in which they are recognized. SFAS 130 requires the change in net unrealized gains (losses) on available-for-sale securities to be included in comprehensive income. As adjusted for this item, comprehensive net loss for the six month periods ended June 30, 1998 and 1997 are $(29.5) million and $(20.5) million, respectively. SFAS 131 amends the requirements for public enterprises to report financial and descriptive information about its reportable operating segments. The Company currently operates in one business and operating segment and does not believe adoption of this standard will have a material impact on the Company's financial statements as reported.

2. NET LOSS PER SHARE

Basic and diluted net loss per share is computed using the weighted average number of common shares outstanding.

3. COLLABORATIVE RESEARCH AGREEMENT

In April 1998, SmithKline Beecham plc. and the Company initiated a new collaboration to develop small molecule drugs for the treatment or prevention of obesity. As part of the collaboration, SmithKline Beecham plc. purchased 274,423 shares of Ligand Common Stock for $5.0 million ($18.22 per share), a 20 percent premium over a 15-day average of the daily closing price of the Company's Common Stock prior to execution of the agreement, which premium has been deferred and will be recognized as revenue over two years and also purchased for $1 million a warrant to purchase 150,000 shares of Ligand Common Stock at $20 per share. The warrant expires in five years, and Ligand may require SmithKline Beecham plc. to exercise the warrant under certain circumstances after three years. SmithKline Beecham plc. will also purchase additional Ligand Common Stock at a 20 percent premium if a certain research milestone is achieved and will make cash payments to Ligand if subsequent milestones are met.

4. MERGER AGREEMENT

On August 12, 1998, Ligand and Seragen announced the closing under a definitive agreement under which a wholly owned subsidiary of Ligand was merged with Seragen (the "Merger"). In addition, Ligand had previously announced that it had signed a definitive asset purchase agreement to acquire substantially all the assets of Marathon Biopharmaceuticals, LLC, ("Marathon") which currently provides services to Seragen under a service agreement. Finally, Seragen signed an agreement with Ligand and Eli Lilly and Company ("Lilly") under which Lilly

assigned to Ligand Lilly's rights and obligations under its agreements with Seragen, including its rights to ONTAK(TM) (DAB389IL-2, Interleukin-2 Fusion Protein or denileukin diftitox).

Under the terms of the merger agreement, Ligand paid merger consideration at closing in the amount of $30 million, $4 million of which was in cash and $26 million of which was in the form of approximately 1,858,800 shares of Ligand Common Stock valued at $13.99 per share under the terms of the merger agreement. Ligand's stock price for this portion of

the transaction is based on the average closing share price for the five trading days prior to signing of the definitive agreement in May 1998. From the upfront payment, Seragen's common shareholders received at the time of closing approximately .036 of a share of Ligand stock for every share of Seragen common stock owned immediately prior to closing. The remainder of the $30 million in merger consideration paid at closing was used to settle claims of Seragen's creditors and preferred shareholders.

The merger agreement also calls for an additional $37 million payment in cash and/or Ligand Common Stock, at Ligand's option, to be paid six months after the date of receipt of final U.S. Food and Drug Administration (FDA) clearance to market ONTAK(TM). The $37 million payment will not be made, however, if ONTAK(TM) is not cleared by the FDA by August 12, 2000. From the $37 million, Seragen's common shareholders will receive $0.23 in, at Ligand's option, cash or equivalent value of Ligand Common Stock (based on the average closing price for the 10 trading days immediately preceding the second closing), for every Seragen common share owned. The remainder of the $37 million payment will be used to settle claims of Seragen's creditors and preferred shareholders

Additionally, Ligand's agreement with Lilly calls for up to $10 million, payable in cash or Ligand Common Stock, at Ligand's option, in potential milestone payments to Lilly, if ONTAK(TM) is approved by the FDA, and upon certain other events. Upon certain other events, Lilly could receive an additional $10 million in milestones.

The agreement with Marathon, the organization which has a service contract with Seragen for manufacturing and development services, provides for Ligand's acquisition of substantially all of Marathon assets for $5 million, and an additional $3 million to be paid six months after FDA approval of ONTAK(TM). Ligand may purchase the assets of Marathon at any time before January 31, 1999, and has the option to extend the closing date in certain circumstances. The purchase payments can be paid in cash or Ligand common stock, at Ligand's option.

5. CONVERSION OF CONVERTIBLE NOTE

In June 1998, the Company converted $3.8 million of the convertible notes outstanding with American Home Products, into 374,625 shares of the Company's Common Stock at a $10.01 conversion price.

PART I. FINANCIAL INFORMATION

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This quarterly report may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed below at "Risks and Uncertainties." While this outlook represents management's current judgment on the future direction of the business, such risks and uncertainties could cause actual results to differ materially from any future performance suggested below. The Company undertakes no obligation to release publicly the results of any revisions to these forward-looking statements to reflect events or circumstances arising after the date hereof.

OVERVIEW

Since January 1989, the Company has devoted substantially all of its resources to its intracellular receptor ("IR") and Signal Transducers and Activators of Transcription ("STATs") drug discovery and development programs. The Company has been unprofitable since its inception and expects to incur substantial additional operating losses due to continued requirements for research and development, preclinical testing, clinical trials, regulatory activities, establishment of manufacturing processes and sales and marketing capabilities until the approval and commercialization of the Company's products generate sufficient revenues, expected in 1999. The Company expects that losses will fluctuate from quarter to quarter as a result of differences in the timing of expenses incurred and the revenues earned from collaborative arrangements. Some of these fluctuations may be significant. As of June 30, 1998, the Company's accumulated deficit was approximately $308.7 million.

On August 12, 1998, Ligand and Seragen, Inc., ("Seragen") announced the closing under a definitive agreement under which a wholly owned subsidiary of Ligand was merged with Seragen (the "Merger"). In addition, Ligand previously announced that it had signed a definitive asset purchase agreement to acquire substantially all the assets of Marathon Biopharmaceuticals, LLC ("Marathon"), which currently provides services to Seragen under a service agreement (the "Asset Purchase"). Finally, Seragen signed an agreement with Ligand and Eli Lilly and Company ("Lilly") under which Lilly assigned to Ligand Lilly's rights and obligations under its agreements with Seragen, including its rights to ONTAK(TM) (DAB389IL-2, Interleukin-2 Fusion Protein or denileukin diftitox).

In December 1994, the Company and Allergan, Inc. ("Allergan") formed Allergan Ligand Retinoid Therapeutics, Inc. ("ALRT") to continue the research and development activities previously conducted by the Allergan Ligand Joint Venture (the "Joint Venture"). In June 1995, the Company and ALRT completed a public offering of 3,250,000 units (the "Units") with aggregate proceeds of $32.5 million (the "ALRT Offering") and cash contributions by Allergan and the Company of $50.0 million and $17.5 million, respectively, providing for net proceeds of $94.3 million for retinoid product research and development. Each Unit consisted of one share of ALRT's callable common stock ("Callable Common Stock") and two warrants, each warrant entitling the holder to purchase one share of the Common Stock of the Company. In September 1997, the Company and Allergan exercised their respective options to purchase all of the Callable Common Stock (the "Stock Purchase Option") and certain assets (the "Asset Purchase Option") of ALRT. The Company's exercise of the Stock Purchase Option required the issuance of 3,166,567 shares of the Company's Common Stock along with cash payments totaling $25.0 million, to holders of the Callable Common Stock in November 1997. Allergen's exercise of the Asset Purchase Option required a cash payment of $8.9 million to ALRT in November 1997, which was used by the Company to pay a portion of the Stock Purchase Option. Prior to September 1997, cash received from ALRT was recorded as contract revenue. As a result of the ALRT buyback, research expenditures incurred related to ALRT activities are no longer reimbursed, eliminating the ALRT contract revenue recognition. The buyback of ALRT was accounted for using the purchase method of accounting. The excess of the purchase price over the fair value of net assets acquired was allocated to in-process technology and written off resulting in a one time noncash charge to results of operations of $65.0 million in 1997.

RESULTS OF OPERATIONS

Three Months Ended June 30, 1998 ("1998"), as Compared with Three Months Ended June 30, 1997 ("1997")

The Company had revenues of $4.4 million for 1998 compared to revenues of $9.9 million for 1997. The decrease in revenues is primarily due to the buyback of ALRT which resulted in reduced revenue of $6.2 million compared to 1997, completion of the Glaxo-Wellcome, plc ("Glaxo") and Sankyo Company Ltd. ("Sankyo") collaborations in 1997, resulting in reduced revenues of $407,000 and $688,000, respectively, offset by increased revenues of $2.5 million in 1998 from a new research and development collaboration with Lilly which began in November 1997. Revenues in 1998 were derived from the Company's research and development agreements with (i) Lilly of $2.5 million, (ii) SmithKline Beecham Corporation ("SmithKline Beecham") of $1.0 million, (iii) American Home Products

Corporation ("AHP") of $475,000, (iv) Abbott Laboratories ("Abbott") of $300,000, as well as from product sales of Ligand (Canada) in-licensed products of $87,000. Revenues for 1997 were derived from the Company's research and development agreements with (i) ALRT of $6.2 million, (ii) AHP of $1.1 million, (iii) Sankyo of $688,000, (iv) Abbott of $540,000, (v) SmithKline Beecham of $792,000, (vi) Glaxo of $407,000 as well as from product sales of Ligand (Canada) in-licensed products of $117,000.

For 1998, research and development expenses increased to $17.3 million from $16.7 million in 1997. These expenses increased primarily due to expenses related to completion of pivotal phase III trials and NDA preparation and submission, offset by a decrease in research expenses primarily due to closure of Glycomed's Alameda facility and completion of the research portion of the Sankyo collaboration in October 1997. Selling, general and administrative expenses increased to $3.3 million in 1998 from $2.6 million in 1997. The increase was primarily attributable to personnel additions and resource expansion in preparation for commercialization activities. Interest income decreased to $838,000 in 1998 from $933,000 in 1997 due to a decrease in cash in support of expansion activities. Interest expense was $2.0 million for 1998 and 1997.

The Company has significant net operating loss carryforwards for federal and state income taxes which are available subject to Internal Revenue Code Sections 382 and 383 carryforward limitations.

Six Months Ended June 30, 1998 ("1998"), as Compared with Six Months Ended June 30, 1997 ("1997")

The Company had revenues of $9.5 million for 1998 compared to revenues of $19.7 million for 1997. The decrease in revenues is primarily due to the buyback of ALRT which resulted in reduced revenue of $12.2 million compared to 1997, completion of the Glaxo and Sankyo collaborations in 1997, resulting in reduced revenues of $898,000 and $1.4 million, respectively, headcount reductions in the AHP collaboration resulting in a revenue decrease of $1.4 million in 1998, offset by increased revenues of $5.0 million in 1998 from the new collaboration with Lilly which began in November 1997. Revenues in 1998 were derived from the Company's research and development agreements with (i) Lilly of $5.0 million, (ii) SmithKline Beecham of $1.8 million, (iii) AHP of $1.2 million, (iv) Abbott of $600,000, product sales of Ligand (Canada) in-licensed products of $179,000 and a one-time license fee payment of $679,000. Revenues for 1997 were derived from the Company's research and development agreements with (i) ALRT of $12.2 million, (ii) AHP of $2.4 million, (iii) Sankyo of $1.4 million, (iv) Abbott of $1.1 million, (v) SmithKline Beecham of $1.5 million, (vi) Glaxo of $898,000 as well as from product sales of Ligand (Canada) in-licensed products of $226,000.

For 1998, research and development expenses decreased to $32.2 million in 1998 from $33.3 million in 1997. These expenses decreased primarily due to closure of Glycomed's Alameda facility and completion of the research portion of the Sankyo collaboration in October 1997, offset by expenses related to completion of pivotal phase III trials and NDA preparation and submission. Selling, general and administrative expenses increased to $6.1 million in 1998 from $4.9 million in 1997. The increase was primarily attributable to personnel additions and resource expansion in preparation for commercialization activities. Interest income decreased slightly to $1.9 million in 1998 from $2.0 million in 1997. Interest expense decreased from $3.9 million in 1998, from $4.1 million in 1997.

The Company has significant net operating loss carryforwards for federal and state income taxes which are available subject to Internal Revenue Code Sections 382 and 383 carryforward limitations.

LIQUIDITY AND CAPITAL RESOURCES

The Company has financed its operations through private and public offerings of its equity securities, collaborative research revenues, capital and operating lease transactions, issuance of convertible notes, investment income and product sales. From inception through June 30, 1998, the Company has raised $200.9 million from sales of equity securities: $78.2 million from the Company's public offerings and an aggregate of $122.7 million from private placements and the exercise of options and warrants.

As of June 30, 1998, the Company had acquired an aggregate of $27.4 million in property, laboratory and office equipment, and $4.7 million in tenant leasehold improvements, substantially all of which has been funded through capital lease and equipment note obligations. In addition, the Company leases its office and laboratory facilities under operating leases. In July 1994, the Company entered into a long-term lease related to the construction of a new laboratory facility, which was completed and occupied in August 1995. In March 1997, the Company entered into a long-term lease, related to a second build-to-suit facility and loaned the construction partnership $3.7 million at an annual interest rate of 8.5% which will be paid back monthly over a 10-year period. The second build-to-suit facility was completed and occupied in December 1997. In February 1997, the Company signed a master lease agreement to finance future capital equipment up to $1.5 million, and in July 1997, the master lease agreement was extended to December 1998 to include up to an additional $4.5 million. Each individual schedule under the extended master lease agreement will be paid back monthly with interest over a five-year period. As of June 30, 1998, the company had $2.2 million available to finance future capital equipment.

Working capital decreased to $32.7 million as of June 30, 1998, from $62.4 million at the end of 1997. The decrease in working capital resulted from a decrease in cash due to increases in clinical trials and product development expenses in late 1997, increased selling expenses, semi-annual interest payments due on convertible subordinated debentures and convertible notes offset by a decrease in accrued liabilities from year end 1997. For the same reasons, cash and cash equivalents, short-term investments and restricted cash decreased to $52.0 million at June 30, 1998 from $86.3 million at December 31, 1997. The Company primarily invests its cash in United States government and investment grade corporate debt securities.

In April 1998, SmithKline Beecham plc. and the Company initiated a new collaboration to develop small molecule drugs for the treatment or prevention of obesity. As part of the collaboration, SmithKline Beecham plc. purchased 274,423 shares of Ligand Common Stock for $5.0 million ($18.22 per share), a 20 percent premium over a 15-day average of the daily closing price of the Company's Common Stock prior to execution of the agreement, which premium has been deferred and will be recognized as revenue over two years and also purchased for $1 million a warrant to purchase 150,000 shares of Ligand Common Stock at $20 per share. The warrant expires in five years, and Ligand may require SmithKline Beecham plc. to exercise the warrant under certain circumstances after three years. SmithKline Beecham plc. will also purchase additional Ligand Common Stock at a 20 percent premium if a certain research milestone is achieved and will make cash payments to Ligand if subsequent milestones are met.

In June 1998, the Company converted $3.8 million of the convertible notes outstanding to AHP into 374,625 shares of the Company's Common Stock at a $10.01 conversion price.

In August 1998, the Company paid merger consideration in the amount of $30 million, $4 million of which was in cash and $26 million of which was in the form of approximately 1,858,000 shares of Ligand Common Stock valued at $13.99 per share under the terms of the Merger. The merger agreement also calls for an additional $37 million payment in cash and/or Company Common Stock, at the Company's option, to be paid six months after the date of receipt of final U.S. Food and Drug Administration ("FDA") clearance to market ONTAK(TM). The $37 million payment will not be made, however, if ONTAK(TM) is not cleared by the FDA by August 12, 2000.

The Company believes that its available cash, cash equivalents, marketable securities and existing sources of funding will be adequate to satisfy its anticipated capital requirements through 1999. The Company's future capital requirements will depend on many factors, including the pace of scientific progress in research and development programs, the magnitude of these programs, the scope and results of preclinical testing and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims, competing technological and market developments, the ability to establish additional collaborations, changes in the existing collaborations, the cost of manufacturing scale-up and the effectiveness of the Company's commercialization activities.

YEAR 2000 COMPLIANCE

Many currently installed computer systems and software products are coded to accept only two digit entries in the date code field. These date code fields will need to accept four digit entries to distinguish 21st century dates from 20th century dates. As a result, many companies' software and computer systems may need to be upgraded or replaced in order to comply with such "Year 2000" requirements. Certain of the Company's internal computer systems are not year 2000 compliant, and the Company utilizes third-party equipment and software that may not be Year 2000 compliant. The Company has commenced taking actions to correct or convert such internal systems and is in the intermediate stages of conducting an audit of its third-party suppliers as to the Year 2000 compliance of their systems. The Company does not believe that the cost of these actions will have a material adverse affect on the Company's business, financial condition or operating results. However, there can be no assurance that a failure of the Company's internal computer systems or of third-party equipment or software used by the Company, or of systems maintained by the Company's suppliers, to be Year 2000 compliant will not have a material adverse effect on the Company's business, financial condition or operating results. In addition, there can be no assurance that adverse changes in the purchasing patterns of the Company's potential customers as a result of Year 2000 issues affecting such customers will not have a material adverse effect on the Company's business, financial condition or results of operations. These expenditures may result in reduced funds available to purchase the Company's products which could have a material adverse effect on the Company's business, operating results and financial condition.

RISKS AND UNCERTAINTIES

In addition to the other business information contained herein, the following are among the factors that should also be considered carefully in evaluating Ligand, its wholly-owned subsidiaries, Glycomed Inc., Seragen., Ligand (Canada) Inc. and Allergan Ligand Retinoid Therapeutics, Inc. ("Ligand" or the "Company") and its business.

Uncertainty of Product Development and Commercialization and Related Technology. Ligand was founded in 1987 and has not generated any revenues from the sale of products developed by Ligand or its collaborative partners. To achieve profitable operations, the Company, alone or with others, must successfully develop, clinically test, market and sell its products. Any products resulting from the Company's or its collaborative partners' product development efforts are not expected to be available for sale until next year, if at all. No assurance can be given that required regulatory approvals from the FDA or equivalent foreign authorities for their intended indications or any other indication with respect to ONTAK(TM)(DAB(389)IL-2) or Panretin gel (alitretinoin) 0.1% or any other potential products will be obtained in a timely manner or at all. If any such approvals are not obtained, it could have a material adverse effect on the Company.

The development of new pharmaceutical products is highly uncertain and subject to a number of significant risks. Potential products that appear to be promising at early stages of development may not reach the market for a number of reasons. Such reasons include the possibilities that potential products are found during preclinical testing or clinical trials to be ineffective or to cause harmful side effects, that they fail to receive necessary regulatory approvals, are difficult or uneconomical to manufacture on a large scale, fail to achieve market acceptance or are precluded from commercialization by proprietary rights of third parties. To date, Ligand's resources have been substantially dedicated to the research and development of potential pharmaceutical products based upon its expertise in IR and STATs technologies. Even though certain pharmaceutical products act through IRs, some aspects of the Company's IR technologies have not been used to produce marketed products. In addition, the Company is not aware of any drugs that have been developed and successfully commercialized that interact directly with STATs. Much remains to be learned about the location and function of IRs and STATs. Seragen has concentrated its product development efforts on potential pharmaceutical products based on its fusion protein technology. The Company expects that its potential products, other than ONTAK(TM)(DAB(389)IL-2) for CTCL and Panretin gel for AIDS-related Kaposi's Sarcoma ("KS"), will not be available for commercial sale or use for several years, if at all. Potential products previously tested in preclinical trials may not be successful in human clinical trials. Products currently in, or which in the future advance to,

various phases of human clinical trials may not prove to be efficacious, or unintended or unacceptably high levels of toxic side effects may occur. Most of the Company's potential products will require extensive additional development, including preclinical testing and clinical trials, as well as regulatory approvals, prior to commercialization. No assurance can be given that the Company's product development efforts will be successful, that required regulatory approvals from the FDA or equivalent foreign authorities for any indication will be obtained or that any products, if introduced, will be capable of being produced in commercial quantities at reasonable costs or will be successfully marketed. Further, the Company has no sales and only limited marketing capabilities outside Canada, and even if the Company's products in internal development are approved for marketing, there can be no assurance that the Company will be able to develop such capabilities or successfully market such products.

Uncertainties Related to Regulatory Review of ONTAK(TM) and Panretin Gel. In December 1997, Seragen submitted a Biologic License Application ("BLA") to the FDA requesting clearance to market its lead molecule, ONTAK(TM) for the treatment of patients with advanced CTCL who have received previous treatment with other agents. In May 1998, Ligand announced the submission of New Drug Application ("NDA") to the FDA for Panretin gel (altitretinoin) 0.1% for the treatment of AIDS-related KS.

On June 2, 1998, Ligand and Seragen announced that the ODAC had voted favorably on questions put to it by the FDA regarding the efficacy of, and the acceptability of the incidence and severity of toxicity associated with, ONTAK(TM) for the treatment of patients with recurrent or persistent CTCL. The ODAC also recommended that treating physicians should decide the appropriate doses within a prescribed dose range. The ODAC's votes, although not binding, will be considered by the FDA in its review of the BLA.

On June 9, 1998, the FDA issued the Complete Review Letter to Seragen in respect to its BLA. The Center for Biologics Evaluation and Research ("CBER"), the division of the FDA responsible for reviewing Seragen's application, no longer issues so-called "approvable" or "non-approvable" letters at the conclusion of their formal review of license applications when the action is not an approval. Instead, the CBER issues letters signifying that a complete review of all information and data submitted has been carried out. Per the CBER's January 22, 1998 correspondence to applicants, a complete review letter "summarizes all of the deficiencies and describes actions necessary to place the application in a condition for approval."

The Complete Review Letter fulfills the FDA's commitment under the Prescription Drug User Fee Act to a six-month review of the BLA, which was designated for priority review. Upon the issuance of the Complete Review Letter, the review clock was suspended with respect to the BLA and will not be reactivated until all deficiencies have been addressed by Seragen.

The Complete Review Letter identified certain deficiencies in the BLA related to safety, efficacy, manufacturing and product characterization. Seragen is in the process of addressing and responding to the issues set out in the Complete Review Letter.

The short-term future financial results of the Company and the price of the Company's Common Stock will be highly dependent on the timely receipt of regulatory approvals required to market these products in the United States and other jurisdictions and the subsequent successful commercial introduction of such products. Any failure to obtain required regulatory approvals on a timely basis could have a material adverse effect on the Company and a significant impact on the trading price of the Company's Common Stock. Generally, only a small percentage of new pharmaceutical products are approved for sale. Moreover, if regulatory approval of a product is granted, the approval may limit the indicated uses for which the product may be marketed. Such regulatory approvals may be conditioned upon the performance of additional clinical trials or other requirements established by the regulatory authorities. Even if regulatory approval is obtained, a marketed product and its manufacturer are subject to continual review. Discovery of previously unknown problems with a product or manufacturer may result in restrictions on the use of the product or its manufacturer, including withdrawal of the product from market. Also, prior to marketing, the Company will be required to finalize labeling requirements and

satisfy the regulatory authorities that all manufacturing facilities meet regulatory requirements.

There can be no assurance that regulatory approvals required for ONTAK(TM) or Panretin gel will be received in a timely manner, if at all, that the products will be capable of being produced in commercial quantities at a reasonable cost, or that the products will be successfully marketed.

History of Operating Losses; Accumulated Deficit; Future Capital Needs; Uncertainty of Additional Funding. Ligand has experienced significant operating losses since its inception in 1987. As of June 30, 1998, Ligand had an accumulated deficit of approximately $308.7 million. To date, substantially all of Ligand's revenues have consisted of amounts received under collaborative arrangements. The Company expects to incur additional losses due to continued requirements for research and development, preclinical testing, clinical trials, regulatory activities, establishment of manufacturing processes and sales and marketing capabilities until the approval and commercialization of the Company's products generate sufficient revenues, expected in 1999.

The discovery, development and commercialization of products will require the commitment of substantial resources to conduct research, preclinical testing and clinical trials, to establish pilot scale and commercial scale manufacturing processes and facilities, and to establish and develop quality control, regulatory, marketing, sales and administrative capabilities. The future capital requirements of the Company will depend on many factors, including the pace of scientific progress in its research and development programs, the magnitude of these programs, the scope and results of preclinical

testing and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims, competing technological and market developments, the ability to establish additional collaborations, changes in existing collaborations, the cost of manufacturing scale-up and the effectiveness of the Company's commercialization activities. To date, Ligand has not generated any revenue from the sales of products developed by Ligand or its collaborative partners. There can be no assurance that Ligand independently or through its collaborations will successfully develop, manufacture or market any products or ever achieve or sustain revenues or profitability from the commercialization of such products. Moreover, even if profitability is achieved, the level of that profitability cannot be accurately predicted. Ligand expects that operating results will fluctuate from quarter to quarter as a result of differences in the timing of expenses incurred and the revenues received from collaborative arrangements and other sources. Some of these fluctuations may be significant. The Company believes that its available cash, cash equivalents, marketable securities and existing sources of funding will be adequate to satisfy its anticipated capital requirements through 1999.

Glycomed's outstanding indebtedness includes $50 million principal amount of 7-1/2% Convertible Subordinated Debentures Due 2003 (the "Debentures"). There can be no assurance that Glycomed will have the funds necessary to pay the interest on and the principal of the Debentures or, if not, that it will be able to refinance the Debentures.

The Company has incurred negative cash flow from operations since inception and does not expect to generate positive cash flow to fund its for at least the next year. As a result, substantial additional equity or debt financings will be required in the near future to fund the Company's operations. There can be no assurance that any additional equity or debt financings will be available on acceptable terms, if at all, or that such financings, if consummated, will be adequate to meet the Company's capital requirements. Any additional equity or convertible debt financings could result in substantial dilution to Ligand's stockholders. If adequate funds are not available, the Company may be required to delay, reduce the scope of or eliminate one or more of their drug development programs or attempt to continue development by entering into arrangements with collaborative partners or others that may require the Company to relinquish some or all of their rights to certain technologies or drug candidates that the Company would not otherwise relinquish. Any inability of the Company to obtain additional financing or of Glycomed to service its obligations under the Debentures could have a material adverse effect on the Company.

No Assurance that Businesses Can Be Successfully Combined. The combination of Ligand and Seragen will be significantly more complex and diverse than either Ligand or Seragen prior to the combination. Following the Merger, to achieve optimal synergies, the Company will need to successfully integrate and streamline overlapping functions and control expenditures resulting from the Company's business operations in San Diego, California, and Hopkinton, Massachusetts. Some Seragen employees, including officers of Seragen, have left, effective upon the Merger and others may leave if they find new assignments unattractive or unacceptable. These departures may create operating difficulties and could adversely affect morale and operations at Seragen for some period of time following the Merger. In addition, the two companies have different systems and procedures in many areas which must be reconciled. The effort required to reconcile systems and procedures and the impact of success or failure may be material. The Merger may also place significant demands on the Company's business, including their administrative technical and financial personnel and systems. There can be no assurance that the process of integrating the two companies can be effectively managed to achieve desired results. There can be no assurance that any of the objectives for the Merger, including reducing the Company's dependence on a few products, broadening product development capabilities or achieving other financial synergies, can be achieved. Failure to achieve any of the objectives could have a material adverse effect on the Company.

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

The rate of completion of clinical trials of the Company's potential products is dependent upon, among other factors, obtaining adequate clinical supplies and the rate of patient accrual. Patient accrual is a function of many factors, including

the size of the patient population, the proximity of patients to clinical sites and the eligibility criteria for the trial. Delays in planned patient enrollment in clinical trials may result in increased costs, program delays or both, which could have a material adverse effect on the Company. In addition, some of the Company's current collaborative partners have certain rights to control the planning and execution of product development and clinical programs, and there can be no assurance that such corporate partners' rights to control aspects of such programs will not impede the Company's ability to conduct such programs in accordance with the schedules and in the manner currently contemplated by the Company for such programs. There can be no assurance that, if clinical trials are completed, the Company or its collaborative partners will submit an NDA with respect to any potential products or that any such application will be reviewed and approved by the FDA in a timely manner, if at all.

Reliance on Collaborative Relationships. The Company's strategy for the development, clinical testing, manufacturing and commercialization of certain of its potential products includes entering into collaborations with corporate partners, licensors, licensees and others. To date, Ligand has entered into drug discovery and development collaborations with Lilly, SmithKline Beecham, AHP, Abbott, Sankyo, Glaxo, Allergan and Pfizer. These collaborations provide Ligand 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, respectively. The Company's collaborative agreements allow its collaborative partners significant discretion in electing to pursue or not to pursue any development program. There can be no assurance that the Company's collaborations will continue or that the collaborations will be successful. In addition, there can be no assurance that Ligand's collaborators will not pursue alternative technologies either on their own or in collaboration with others as a means of developing drugs competitive with the types of drugs currently being developed in collaboration with Ligand, and any such action may result in the withdrawal of support and increased competition for the Company's programs. In addition, if products are approved for marketing under these programs, any revenues to Ligand from these products will be dependent on the manufacturing, marketing and sales efforts of its collaborators, which generally retain commercialization rights under the collaborative agreements. Ligand's current collaborators also generally have the right to terminate their respective collaborations under certain circumstances. If any of the Company's collaborative partners were to breach or terminate its agreements with the Company or otherwise fail to conduct its collaborative activities successfully, the development of the Company's products under such agreements would be delayed or terminated. The delay or termination of any of the collaborations could have a material adverse effect on Ligand.

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

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

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

in the future discussions with its current and potential collaborators regarding the scope and validity of the Company's patent and other proprietary rights to its technologies, including the Company's co-transfection assay. If a collaborator or other party were successful in having substantial patent rights

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

Ligand owns or has exclusive rights to more than 150 currently pending patent applications in the United States relating to Ligand's technology, as well as foreign counterparts of certain of these applications in many countries. There can be no assurance that patents will issue from any of these applications or, if patents do issue, that claims allowed will be sufficient to protect Ligand's technology. In addition, Ligand is the owner or exclusive licensee of rights covered by approximately 200 worldwide patents issued or allowed to it or to The Salk Institute of Biological Studies ("The Salk Institute"), Baylor College of Medicine ("Baylor") and other licensors. Further, there can be no assurance that any patents issued to Ligand or to licensors of Ligand's technology will not be challenged, invalidated, circumvented or rendered unenforceable based on, among other things, subsequently discovered prior art, lack of entitlement to the priority of an earlier, related application, or failure to comply with the written description, best mode, enablement or other applicable requirements, or that the rights granted under any such patents will provide significant proprietary protection or commercial advantage to Ligand. The invalidation, circumvention or unenforceability of any of Ligand's patent protection could have a material adverse effect on the Company.

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

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

and the Company may not be able to obtain patent protection for the Panretin Capsules and Gel products.

Ligand also relies upon trade secrets, know-how, continuing technological innovations and licensing opportunities to develop and maintain its competitive position. There can be no assurance that others will not independently develop substantially equivalent proprietary information or otherwise gain access to or disclose such information regarding Ligand. It is Ligand's policy to require its employees, certain contractors, consultants, members of its Scientific Advisory Board and parties to collaborative agreements to execute confidentiality agreements upon the commencement of employment or

consulting relationships or a collaboration with Ligand. There can be no assurance that these agreements will not be breached, that they will provide meaningful protection of Ligand's trade secrets or adequate remedies in the event of unauthorized use or disclosure of such information or that Ligand's trade secrets will not otherwise become known or be independently discovered by its competitors.

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

Under a Service Agreement which expires January 31, 1999, Seragen depends on Marathon's ability to provide certain services relating to product research, development, manufacturing, clinical trials, quality control and quality assurance. The Marathon employees providing such services are comprised primarily of former employees of Seragen. The terms of the Service Agreement provide that Boston University ("BU"), which indirectly owns Marathon and has assigned its rights under the Service Agreement to Marathon, may terminate the agreement if annual losses exceed $9.0 million and if, after notice, Seragen fails to reimburse BU for any losses in excess of such amount. In addition, Seragen, and its manufacturing service provider, Marathon, have never engaged in large-scale manufacturing. Seragen regularly contracts with a variety of third parties in addition to Marathon for testing and manufacturing services, some of which services will be essential to Seragen. Generally these contracts may be terminated at any time by these third parties.

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

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

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

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

Extensive Government Regulation; No Assurance of Regulatory Approval. The manufacturing and marketing of Ligand's products and its ongoing research and development activities are subject to and regulation for safety and efficacy by numerous governmental authorities in the United States and other countries. Prior to marketing, any drug developed by the Company must undergo rigorous preclinical and clinical testing and an extensive regulatory approval process mandated by the FDA and equivalent foreign authorities. These processes can take a number of years and require the expenditure of substantial resources.

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

in restrictions on such product or manufacturer, including withdrawal of the product from the market.

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

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

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

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

Use of Hazardous Materials. Ligand's research and development involves the controlled use of hazardous materials, chemicals and various radioactive compounds. For example, retinoids as a class are known to contain compounds

which can cause birth defects. Although the Company believes that its current safety procedures for handling and disposing of such materials, chemicals and compounds comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of any accident, the Company could be held liable for any damages that result and any such liability could be significant. The Company may incur substantial costs to comply with environmental regulations. Any such event could have a material adverse effect on the Company.

Volatility of Stock Price. The market prices and trading volumes for securities of emerging companies, like Ligand, have historically been highly volatile and have experienced significant fluctuations unrelated to the operating performance of such companies. Future announcements concerning the Company or its competitors may have a significant impact on the market price of the Common Stock. Such announcements might include the results of research, development testing, technological innovations, new commercial products, government regulation, developments concerning proprietary rights, litigation or public concern as to the safety of the products.

Absence of Cash Dividends. No cash dividends have been paid on the Company's Common Stock to date, and Ligand does not anticipate paying cash dividends in the foreseeable future.

Year 2000 Compliance. Many currently installed computer systems and software products are coded to accept only two digit entries in the date code field. These date code fields will need to accept four digit entries to distinguish 21st century dates from the 20th century dates. As a result, many companies' software and computer systems may need to be upgraded or replaced in order to comply with such "Year 2000" requirements. Certain of the Company's internal computer systems are not Year 2000 compliant, and the Company utilizes third-party equipment and software that may not be Year 2000 compliant. The Company has commenced taking actions to correct or convert such internal systems and is in the intermediate stages of conducting an audit of its third-party suppliers as to the Year 2000 compliance of their systems. The Company does not believe that the cost of these actions will have a material adverse effect on the Company's business, financial condition or operating results. However, there can be no assurance that a failure of the Company's internal computer systems or of third-party equipment or software used by such company, or of systems maintained by the Company's suppliers, to be Year 2000 compliant will not have a material adverse effect on the Company. In addition, there can be no assurance that adverse changes in the purchasing patterns of the Company's potential customers as a result of Year 2000 issues affecting such customers will not have a material adverse effect on the Company's business financial condition or results of operations. These expenditures may result in reduced funds available to purchase the Company's respective products which could have a material adverse effect on the Company's business financial condition and operating results.

Effect of Shareholder Rights Plan and Certain Anti-Takeover Provisions. In September 1996, the Company's Board of Directors adopted a preferred shares rights plan (the "Shareholder Rights Plan") which provides for a dividend distribution of one preferred share purchase right (a "Right") on each outstanding share of the 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 will become exercisable following the tenth day after a person or group announces acquisition of 20% or more of the Company's Common Stock, or announces commencement of a tender offer, the consummation of which would result in ownership by the person or group of 20% or more of the Company's Common Stock. The Company will be entitled to redeem the Rights at $0.01 per Right at any time on or before the earlier of the tenth day following acquisition by a person or group of 20% or more of the Company's Common Stock and September 13, 2006.

Ligand's Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") includes a provision that requires the approval of the holders of 66 2/3% of Ligand's voting stock as a condition to a merger or certain other business transactions with, or proposed by, a holder of 15% or more of Ligand's voting stock, except in cases where certain directors approve the transaction or

certain minimum price criteria and other procedural requirements are met (the "Fair Price Provision"). The Certificate of Incorporation also requires that any action required or permitted to be taken by stockholders of Ligand must be effected at a duly called annual or special meeting of stockholders and may not be effected by any consent in writing. In addition, special meetings of the stockholders of Ligand may be called only by the Board of Directors, the Chairman of the Board or the President of Ligand or by any person or persons holding shares representing at least 10% of the outstanding Common Stock of the Company. The Shareholder Rights Plan, the Fair Price Provision and other charter provisions may discourage certain types of transactions involving an actual or potential change in control of Ligand, including transactions in which the stockholders might otherwise receive a premium for their shares over then current market prices, and may limit the ability of the stockholders to approve transactions that they may deem to be in their best interests. In addition, the Board of Directors has the authority to fix the rights and preferences of and issue shares of preferred stock, which may have the effect of delaying or preventing a change in control of Ligand without action by the stockholders.

PART II. OTHER INFORMATION

ITEM 2. CHANGES IN SECURITIES AND USE OF PROCEEDS

In April 1998, the Company issued to SmithKline Beecham plc. 274,423 shares of Ligand Common Stock for an aggregate offering price of $5.0 million pursuant to an agreement entered into in March 1998. In connection with this issuance of Ligand Common Stock, the Company issued a warrant exercisable into 150,000 shares of Ligand Common Stock for an aggregate offering price of $1.0 million. The warrant expires in five years, is exercisable during that period at $20 per share of Ligand Common Stock and Ligand may require SmithKline Beecham plc. to exercise the warrant under certain circumstances after three years. The shares of Ligand Common Stock and the warrant were issued in reliance on Section 4(2) of the Securities Act of 1933, as amended (the "Securities Act").

In June 1998, the Company issued to AHP 374,625 shares of Ligand Common Stock upon conversion of $3.8 million of the convertible notes previously outstanding to AHP at a conversion price of $10.01 per share. The shares of Ligand Common Stock were issued in reliance on Section 4(2) of the Securities Act.

ITEM 4. SUBMISSIONS OF MATTERS TO A VOTE OF SECURITY HOLDERS

The Company's Annual Meeting of Stockholders was held on May 21, 1998. The following elections and proposals were approved at the Company's Annual Meeting:

<TABLE>
<CAPTION>

	VOTES FOR	VOTES AGAINST	VOTES WITHHELD	VOTES ABSTAINING	BROKER NONVOTE
<S>	<C>	<C>	<C>	<C>	<C>
1. Election of a Board of Directors. The total number of votes cast for, or withheld for each nominee was as follows:					
Henry F. Blissenbach	34,237,555	-- --	103,164	-- --	-- --
Alexander D. Cross, Ph.D.	34,193,346	-- --	147,373	-- --	-- --
John Groom	34,206,706	-- --	134,013	-- --	-- --
Irving S. Johnson, Ph.D.	34,172,378	-- --	168,341	-- --	-- --
Carl C. Peck	34,235,911	-- --	104,808	-- --	-- --
David E. Robinson	34,132,168	-- --	208,551	-- --	-- --
Victoria R. Fash	34,240,049	-- --	100,670	-- --	-- --
2. Amendment of 1992 Stock Option/ Stock Issuance Plan to increase the authorized number of shares of Common Stock from 7,303,457 to 8,088,457.	26,739,801	7,453,822	-- --	146,446	650

3. Amendment of the 1992 Employee Stock Purchase Plan, to increase the authorized number of shares of Common Stock available for issuance under such plan from 206,500 to 260,000.	32,408,728	1,808,153	-- --	123,838	-- --
4. Ratification of the appointment of Ernst & Young LLP as the independent auditors for the fiscal year ending December 31, 1998.	34,189,418	60,360	-- --	90,941	-- --

ITEM 6. (A) EXHIBITS

(1)(2)	Exhibit 2.1	Agreement and Plan of Reorganization dated May 11, 1998, by and among the Company, Knight Acquisition Corp. and Seragen, Inc.
(1)	Exhibit 2.2	Form of Certificate of Merger.
(1)	Exhibit 3.1	Amended and Restated Certificate of Incorporation of the Company.
(1)	Exhibit 3.2	Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of the Company.
(1)	Exhibit 3.3	Bylaws of the Company, as amended.
(3)	Exhibit 4.1	Specimen stock certificate for shares of Common Stock of the Company.
(4)	Exhibit 10.1	Form of Seragen Stockholder Voting Agreement.
(4)	Exhibit 10.2	Form of Irrevocable Proxy to Vote Seragen, Inc. stock.
(1)(2)	Exhibit 10.3	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.
(5)	Exhibit 10.4	Extension Option Agreement, dated May 11, 1998, by and among the Company, Seragen, Inc., Marathon Biopharmaceuticals, LLC, 520 Commonwealth Avenue Real Estate Corp. and 660 Corporation. (Exhibit 99.5)
(5)	Exhibit 10.5	Letter agreement, dated May 11, 1998, by and among the Company, Eli Lilly & Company and Seragen, Inc. (Exhibit 99.6).
(1)	Exhibit 10.6	Amendment No. 3 to Option and Wholesale Purchase Agreement, dated May 11, 1998, by and between Eli Lilly and Company and the Company.
(1)	Exhibit 10.7	Agreement, dated May 11, 1998, by and among Eli Lilly and Company, the Company and Seragen, Inc.
(1)	Exhibit 10.8	Form of Escrow Agreement to be entered into by and among Lehman Brothers Inc., Shoreline Pacific Institutional Finance, Seragen LLC, Reed R. Prior, Jean C. Nichols, Elizabeth C. Chen, Robert W. Crane, Leon C. Hirsch, Turi Josefsen, Gerald S.J. Cassidy and Loretta P. Cassidy, the Company, Knight Acquisition Corporation, Seragen, Inc. and State Street Bank and Trust Company.
(5)	Exhibit 10.9	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 (Exhibit 99.2).
(5)	Exhibit 10.10	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 (Exhibit 99.4).
(1)	Exhibit 10.11	Amendment No. 1 to Service Agreement, dated as of May 11, 1998, by and between Seragen, Inc. and Marathon Biopharmaceuticals, LLC.
	Exhibit 27.1	Financial Data Schedule

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

(2) 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.

(3) These exhibits were previously filed as part of, and are 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.

(4) Previously filed as, and hereby incorporated by reference to, Exhibit A filed with the Schedule 13D of the Company filed with the Commission on May 21, 1998 for Seragen, Inc.

(5) Previously filed as, and hereby incorporated by reference to, the same-numbered exhibit filed with the Current Report on Form 8-K of Seragen, Inc. filed with the Commission on May 15, 1998 (except as otherwise noted).

</TABLE>

ITEM 6. (B) REPORTS ON FORMS 8-K

None.

SIGNATURE

Pursuant to the requirements 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: _____ By_____

Paul V. Maier
Senior Vice President and Chief
Financial Officer

<TABLE> <S> <C>

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THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM SEC FORM 10-Q FOR THE THREE MONTHS ENDED JUNE 30, 1998 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.
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<FN>
<F1>Includes bonds, mortgages and other long-term debt, including capitalized leases.
<F2>Includes additional paid in capital, other additional capital and retained earnings, appropriated and unappropriated.
<F3>Per Chief Accountant at the SEC, this amount excludes sales and G&A expenses, includes costs and expenses applicable to sales and revenues, and tangible costs of goods sold.
<F4>Includes Restricted Cash.

Note: This above schedule is defined in Regulation S-K 229.601 (Page 13,202), as well as Article 5 of the Federal Securities Laws, Regulation 210.5-03 and per Chief Accountant at the SEC, this schedule will not foot.
</FN>

</TABLE>