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, 1999 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) 550-7500

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, 1999 the registrant had 47,365,453 shares of common stock outstanding.

LIGAND PHARMACEUTICALS INCORPORATED
QUARTERLY REPORT

FORM 10-Q

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PART I. FINANCIAL INFORMATION
ITEM 1 FINANCIAL STATEMENTS

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

<TABLE>
<CAPTION>

| | June 30, 1999 | December 31, 1998 |
|---|---|---|
| | (Unaudited) | |
| <S> | <C> | <C> |
| ASSETS | | |
| Current assets: | | |
| Cash and cash equivalents | $ 8,386 | $ 32,801 |
| Short-term investments | 25,257 | 37,166 |
| Accounts receivable, net | 2,898 | 830 |
| Inventories | 6,458 | 6,166 |
| Other current assets | 1,169 | 1,030 |
| Total current assets | 44,168 | 77,993 |
| Restricted short-term investments | 2,286 | 2,554 |
| Property and equipment, net | 22,525 | 23,722 |
| Acquired technology, net | 39,640 | 40,312 |
| Notes receivable from officers and employees | 456 | 544 |
| Other assets | 14,223 | 10,895 |
| | $ 123,298 | $ 156,020 |
| LIABILITIES AND STOCKHOLDERS' DEFICIT | | |
| Current liabilities: | | |
| Accounts payable | $ 7,601 | $ 12,363 |
| Accrued liabilities | 6,524 | 7,216 |
| Deferred revenue | 3,159 | 4,115 |
| Current portion of equipment financing obligations | 3,532 | 3,201 |

| | | |
|---|---|---|
| Total current liabilities | 20,816 | 26,895 |
| Long-term equipment financing obligations | 7,562 | 8,165 |
| Accrued acquisition obligation | 40,000 | 50,000 |
| Convertible note | 2,500 | 2,500 |
| Convertible subordinated debentures | 40,639 | 39,302 |
| Zero coupon convertible notes | 42,053 | 40,520 |
| Stockholders' deficit: | | |
| Convertible preferred stock, $.001 par value; 5,000,000 shares authorized; none issued | -- | -- |
| Common stock, $.001 par value; 80,000,000 shares authorized; 47,314,576 shares and 45,690,067 shares issued at June 30, 1999 and December 31, 1998, respectively | 47 | 46 |
| Paid-in capital | 401,663 | 384,715 |
| Deferred warrant expense | (2,214) | -- |
| Adjustment for unrealized losses on available-for-sale securities | (575) | (482) |
| Accumulated deficit | (429,182) | (395,630) |
| | (30,261) | (11,351) |
| Less treasury stock, at cost (1,114 shares at June 30, 1999 and December 31, 1998) | (11) | (11) |
| Total stockholders' deficit | (30,272) | (11,362) |
| | $ 123,298 | $ 156,020 |

</TABLE>

See accompanying notes.



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

<TABLE>
<CAPTION>

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 1999 | 1998 | 1999 | 1998 |
| <S> | <C> | <C> | <C> | <C> |
| Revenues: | | | | |
| Product sales | $ 1,931 | $ 87 | $ 6,297 | $ 179 |
| Contract manufacturing sales | 931 | -- | 1,227 | -- |
| Collaborative research and development, and other milestone revenues | 5,559 | 4,300 | 11,178 | 9,273 |
| Total revenues | 8,421 | 4,387 | 18,702 | 9,452 |
| Costs and expenses: | | | | |
| Cost of products and services sold | 2,432 | 30 | 5,014 | 204 |
| Research and development | 14,612 | 17,302 | 29,082 | 32,033 |
| Selling, general and administrative | 8,167 | 3,330 | 14,042 | 6,100 |
| Total costs and expenses | 25,211 | 20,662 | 48,138 | 38,337 |

| | | | | |
|---|---|---|---|---|
| Loss from operations | (16,790) | (16,275) | (29,436) | (28,885) |
| Interest income | 525 | 838 | 1,275 | 1,882 |
| Interest expense | (2,728) | (1,973) | (5,391) | (3,948) |
| Net loss | $(18,993) | $(17,410) | $(33,552) | $(30,951) |
| Basic and diluted net loss per share | $ (.40) | $ (.45) | $ (.73) | $ (.80) |
| Shares used in computing net loss per share | 47,033 | 38,849 | 46,129 | 38,708 |

</TABLE>

See accompanying notes.



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

<TABLE>
<CAPTION>

| | Six Months Ended June 30, | |
|---|---|---|
| | 1999 | 1998 |
| <S> | <C> | <C> |
| OPERATING ACTIVITIES | | |
| Net loss | $(33,552) | $(30,951) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | |
| Depreciation and amortization | 3,521 | 2,154 |
| Amortization of notes receivable from officers and employees | 88 | 99 |
| Accretion of debt discount and interest | 2,871 | 1,337 |
| Change in operating assets and liabilities: | | |
| Accounts receivable | (2,068) | -- |
| Inventories | (292) | -- |
| Other current assets | (139) | (2,314) |
| Accounts payable and accrued liabilities | (5,454) | (3,772) |
| Deferred revenue | (956) | 1,675 |
| Net cash used in operating activities | (35,981) | (31,772) |
| INVESTING ACTIVITIES | | |
| Purchase of short-term investments | (15,521) | (25,514) |
| Proceeds from short-term investments | 27,337 | 24,406 |
| Increase in notes receivable from officers and employees | -- | (117) |
| Increase in other assets | (4,114) | (7,305) |
| Decrease in other assets | 647 | 1,130 |
| Purchase of property and equipment | (1,513) | (2,817) |
| Net cash (used in) provided by investing activities | 6,836 | (10,217) |
| FINANCING ACTIVITIES | | |
| Principal payments on equipment financing obligations | (1,593) | (1,517) |
| Proceeds from equipment financing arrangements | 1,319 | 1,486 |
| Net change in restricted short-term investment | 268 | 248 |
| Net proceeds from sale of common stock | 4,736 | 5,133 |
| Net cash provided by financing activities | 4,730 | 5,350 |
| Net decrease in cash and cash equivalents | (24,415) | (36,639) |
| Cash and cash equivalents at beginning of period | 32,801 | 62,252 |
| Cash and cash equivalents at end of period | $ 8,386 | $ 25,613 |

| | | |
|---|---|---|
| | ======== | ======== |
| SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION: | | |
| Interest paid | $ 2,509 | $ 2,611 |
| | | |
| SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES: | | |
| Conversion of accrued acquisition obligation to common stock | $ 10,000 | -- |
| Warrants due X-Ceptor investors | $ 2,214 | -- |
| Conversion of note to common stock | -- | $ 3,750 |

</TABLE>

See accompanying notes.



LIGAND PHARMACEUTICALS INCORPORATED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

JUNE 30, 1999

1. BASIS OF PRESENTATION

The consolidated financial statements of Ligand Pharmaceuticals Incorporated ("Ligand") for the three and six months ended June 30, 1999 and 1998 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, 1999 and the consolidated results of operations for the three and six months ended June 30, 1999 and 1998. The results of operations for the period ended June 30, 1999 are not necessarily indicative of the results to be expected for the year ending December 31, 1999. 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, 1998 included in the Ligand Pharmaceuticals Incorporated Form 10-K filed with the Securities and Exchange Commission.

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

2. COMPREHENSIVE INCOME

In June 1997, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards ("SFAS") No. 130, Reporting Comprehensive Income. SFAS No. 130 requires that all components of comprehensive income, including net income or loss, be reported in the financial statements in the period in which they are recognized. SFAS No. 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 three and six month periods ended June 30, 1999 and 1998 is as follows ($,000):

<TABLE>
<CAPTION>

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|---|---|---|---|
| | 1999 | 1998 | 1999 | 1998 |
| <S> | <C> | <C> | <C> | <C> |
| Comprehensive net loss | $(19,059) | $(17,214) | $(33,645) | $(29,497) |

</TABLE>

3. NET 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 common stock equivalents in the number of shares used for the diluted computation would be anti-dilutive.

4. INVENTORIES

Inventories are stated at the lower of cost or market. Cost is determined using the first-in-first-out method. Inventories consist of the following ($,000):

<TABLE>
<CAPTION>

| | June 30, 1999 | December 31, 1998 |
|---|---|---|
| <S> | <C> | <C> |
| Raw materials | $1,302 | $2,382 |
| Work-in-process | 4,005 | 3,634 |
| Finished goods | 1,151 | 150 |
| | $6,458 | $6,166 |

</TABLE>

The products Panretin(R) and ONTAK(R) received approval for marketing by the U.S. Food and Drug Administration



("FDA") in early February 1999. Ligand uses third-party manufacturers for all manufacturing related to the production of Panretin commercial inventory. ONTAK commercial inventory is produced at the manufacturing facility of Marathon Biopharmaceuticals, Incorporated, a wholly-owned subsidiary of our subsidiary Seragen, Inc. ("Seragen"), the assets of which were acquired in January 1999. Inventory also includes Targretin(R), for which a New Drug Application ("NDA") was filed by Ligand in June 1999. In preparation for the approval by the FDA, if received, Ligand has manufactured commercial quantities of Targretin of approximately $1.4 million of work-in-process inventory as of June 30, 1999. If the FDA does not approve the NDA, and Targretin is not approved for commercial sale, any capitalized costs related to Targretin will be expensed.

5. INVESTMENT IN X-CEPTOR

Effective June 30, 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. To date, Ligand has invested $2.775 million in X-Ceptor through the acquisition of Series B Convertible Preferred Stock ("Series B Stock"). Ligand has also 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. X-Ceptor reimbursed Ligand for prior research and development expenses incurred related to the orphan nuclear receptors technology with a payment of $2.0 million with $1.711 million recognized as revenue in June 1999.

A second acquisition of Series B Stock is planned in the third quarter of 1999. At the closing of the second Series B Stock financing, Ligand will invest up to an additional $2.225 million and issue warrants exercisable into an aggregate of up to 950,000 shares of Ligand common stock to X-Ceptor investors and founders, based upon a cumulative investment of up to $20.0 million from all investors in X-Ceptor other than Ligand. The exercise price of these warrants is set at $13.80, a 30% premium to the average of the closing price of Ligand common stock for the 20 trading days immediately prior to the initial investment. The warrants will expire five years from the date of issuance.

Warrants exercisable into 527,250 of the 950,000 shares of Ligand common stock were due the X-Ceptor investors and founders effective June 30, 1999. These warrants were valued at $2.214 million using the Black-Scholes valuation

model and the following assumptions: risk free interest rate of 5.9%, volatility of 63.5%, expected life of 5 years, and no dividend yield. The value of the 527,250 warrants at June 30, 1999 was recorded as a component of stockholders' deficit and will be amortized to operating expense over a three-year period.

Ligand has the option to purchase all of the capital stock of X-Ceptor. Under this option, Ligand will have the right but not the obligation 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. Upon certain conditions, Ligand may extend the option by 12 months by providing additional funding of $5.0 million. The option price, payable pro-rata based on total cumulative non-Ligand funding, is up to $61.4 million at June 30, 2002 (or earlier, in certain circumstances) or up to $79.8 million upon extension. The option price may be paid in cash or shares of Ligand common stock, or any combination of the two, at Ligand's sole discretion.

To accomplish its research and development goals, X-Ceptor may enter into corporate partnerships, which must contain provisions allowing for the transfer of rights to Ligand in the event of an exercise of the Ligand option. In addition, Ligand will not perform any research and development activities on behalf of X-Ceptor.

6. WARRANTS

In May 1999, Ligand received net proceeds of approximately $3.5 million from an investor who elected to exercise warrants to purchase 625,000 shares of Ligand common stock.

See Note 5 regarding warrants related to the X-Ceptor investment.

7. SUBSEQUENT EVENTS

ZERO COUPON CONVERTIBLE NOTES - In July 1999, Ligand issued an additional $40.0 million of Zero Coupon Convertible Notes ("Notes") under the terms of the strategic alliance entered into in September 1998 with Elan Corporation, plc ("Elan"), and its Elan International Services, Ltd. ("EIS") subsidiary (the "Elan Agreement"). The Notes issued in this



transaction are due in November 2008, accrue interest at 8.00% per annum, compounding semi-annually, are convertible at $14.00 per share and are callable at accreted value beginning in November 2001.

Under the Elan Agreement, Ligand may use the proceeds of the issuance to satisfy up to $40.0 million of contingent merger obligations incurred in connection with the acquisition of Seragen and the purchase of the assets of Marathon Biopharmaceuticals LLC ("Marathon"). See Accrued Acquisition Obligation below.

Of the $130.0 million of financing originally available under the Elan Agreement, Elan and its affiliates have invested $20.0 million in the form of Ligand common stock and $80.0 million in the form of Notes, including the $40.0 million Notes described above.

All of the Notes purchased to date are convertible into Ligand common stock at $14.00 per share. Assuming conversion of all of the Notes issued to date, Elan and its affiliates would beneficially own approximately 13.0% of Ligand's fully diluted shares outstanding.

In addition, in August 1999 Ligand and Elan and its affiliates agreed to amend the existing Elan Agreement to provide that the remaining takedown of up to $30 million in zero coupon convertible notes may be utilized for general corporate purposes. Pursuant to this agreement, Ligand will issue on or before August 31, 1999, $20 million of zero coupon convertible notes with terms similar but not identical to the Notes previously issued to Elan and its affiliates.

ACCRUED ACQUISITION OBLIGATION - In August 1999, Ligand made a cash payment of $37.1 million to Seragen and Marathon stakeholders related to the $40.0 million contingent merger obligations incurred in connection with the acquisition of Seragen and the purchase of the assets of Marathon, which were

accrued in August 1998. According to the terms of both acquisition agreements, the payments were due on August 5, 1999, six months after receipt of final approval of ONTAK by the FDA. Pending resolution of final contingencies and in accordance with the terms of the Seragen acquisition agreement, Ligand has withheld $2.9 million from payments to certain Seragen preferred shareholders and creditors.



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." 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 below. 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 quarterly report.

Panretin(R) and Targretin(R) are registered trademarks of Ligand Pharmaceuticals Incorporated, and ONTAK(R) is a registered trademark of Seragen, Inc., our wholly-owned subsidiary.

OVERVIEW

Since January 1989, we have devoted substantially all of our resources to our intracellular receptor, also known as IR, and signal transducers and activators of transcription, also known as STATs, drug discovery and development programs. We have been unprofitable since our inception. We expect to incur substantial additional operating losses until the commercialization of our products, begun in the first quarter of 1999, generates sufficient revenues to cover our expenses. We expect that our operating results will fluctuate from quarter to quarter as a result of differences in the timing of expenses incurred and revenues earned from collaborative arrangements and product sales. Some of these fluctuations may be significant. As of June 30, 1999, our accumulated deficit was $429.2 million.

In January 1999, we formed Ligand Pharmaceuticals International, Inc. as our wholly-owned subsidiary to develop a global pharmaceutical business.

In January 1999, we consummated the purchase of the assets of Marathon Biopharmaceuticals LLC. The purchase of the assets was completed under an agreement between us, Marathon and other subsidiaries of Boston University dated May 11, 1998. The purchase price consisted of a $5.0 million payment in January 1999 through the issuance of 402,820 shares of our common stock, valued at $12.41 per share, and a $3.0 million contingent cash payment in August 1999.

In February 1999, the FDA granted us marketing approval for our first two products, Panretin gel for the treatment of cutaneous lesions of patients with AIDS-related Kaposi's sarcoma, also know as KS, and ONTAK for the treatment of patients with persistent or recurrent cutaneous T-cell lymphoma, also known as CTCL, whose malignant cells express the CD25 component of the IL-2 receptor.

In February 1999, we submitted a Marketing Authorization Application with the European Agency for the Evaluation of Medicinal Products for Panretin gel for the treatment of cutaneous lesions of patients with AIDS-related KS.

In February 1999, Eli Lilly and Company decided to discontinue the development efforts for three first generation compounds in the Retinoid X Receptor, or RXR, program in diabetes. Instead, we have agreed to focus our efforts on the second-generation program for RXR modulators, which has compounds with improved therapeutic indices relative to the three first-generation compounds, and on the program co-agonists of the PPAR receptor.

In March 1999, we issued to Lilly 434,546 shares of the our common stock as payment of a $5.0 million milestone due to Lilly under an agreement with us and Seragen, Inc. covering rights to ONTAK.

In March 1999, we signed marketing and distribution agreements with Ferrer Internacional, S.A. to exclusively market and distribute when approved, in Spain, Portugal, Greece, and Central and South America our five near-term oncology products: ONTAK, Panretin gel, Panretin capsules, Targretin gel and Targretin capsules.

In June 1999, we were granted a Notice of Compliance for Panretin gel from the Health Protection Branch of Canada. Panretin gel will be marketed and sold throughout our wholly-owned Canadian subsidiary once we have finalized labeling and gained appropriate pricing and formulary approvals in Canada.

In June 1999, we submitted a new drug application to the FDA seeking marketing clearance for Targretin capsules. The



indication sought is for once daily oral administration of Targretin capsules for the treatment of patients with early stage CTCL who have not tolerated other therapies, patients with refractory or persistent early stage CTCL, and patients with refractory advanced stage CTCL. We received approval from the FDA to file the Targretin capsules application under orphan drug designation for this indication and in August 1999 received priority review status for this new drug application filing. As a result of the Targretin capsules application being granted priority review status, the FDA is expected to respond to the application within six months of submission.

In June 1999, we became a minority equity investor in a new private corporation, X-Ceptor Therapeutics, Inc., whose mission is to conduct research in and identify therapeutic products from the field of orphan nuclear receptors. For additional details, please see note 5 of the notes to consolidated financial statements.

In July 1999, we issued an additional $40.0 million of zero coupon convertible notes under the terms of our strategic alliance with Elan Corporation, plc and in August 1999 agreed to amend the underlying financing arrangement to provide for the use of the $30.0 million of additional financing available under the arrangement for general corporate purposes. For additional details, please see note 7 of the notes to the consolidated financial statements.

In August 1999, we made a cash payment of $37.1 million related to our contingent merger obligations to Seragen and Marathon stakeholders. For additional details, please see Note 7 of the notes to consolidated financial statements.

RESULTS OF OPERATIONS

THREE MONTHS ENDED JUNE 30, 1999, AS COMPARED WITH THREE MONTHS ENDED JUNE 30, 1998

Total revenues for 1999 were $8.4 million, an increase of $4.0 million as compared to 1998. Loss from operations for 1999 was $16.8 million, an increase of $500,000 as compared to 1998. Net loss for 1999 was $18.9 million or $(.40) per share, an increase of $1.5 million from the 1998 net loss of $17.4 million or $(.45) per share. The principal factors causing these changes are discussed below.

Product sales for 1999 were $1.9 million, as compared to $87,000 in 1998. The increase is primarily due to revenues of $109,000 from sales of Panretin gel and $1.7 million from sales of ONTAK, approved by the FDA in February 1999.

Contract manufacturing sales for 1999 were $931,000 as compared to $0 in 1998. These sales were generated under contract manufacturing agreements performed at the Marathon Biopharmaceuticals facility acquired in January 1999.

Collaborative research and development and other milestone revenues for 1999 were $5.6 million, an increase of $1.3 million, over 1998. The increase was primarily due to $1.7 million recognized in June 1999 related to one-time payments received from X-Ceptor, partially offset by additional payments of $475,000 received from American Home Products Corporation in 1998. The quarter-to-quarter comparison of collaborative research and development and

other milestone revenues is as follows ($,000):

<TABLE>
<CAPTION>

| | Three Months Ended June 30, | |
|---|---|---|
| | 1999 | 1998 |
| <S> | <C> | <C> |
| Eli Lilly and Company | $2,696 | $2,500 |
| X-Ceptor Therapeutics | 1,711 | -- |
| SmithKline Beecham, plc | 852 | 1,025 |
| Abbott Laboratories | 300 | 300 |
| American Home Products | -- | 475 |
| | $5,559 | $4,300 |

</TABLE>

Cost of products and services sold increased from $30,000 in 1998 to $2.4 million in 1999. The increase is due to manufacturing costs and royalty expenses of $700,000 associated with our new products as well as contract manufacturing costs of $1.7 million incurred at the Marathon Biopharmaceuticals facility acquired in January 1999.

Research and development expenses were $14.6 million in 1999, compared to $17.3 million in 1998. The decrease was primarily due to the stage of clinical trials on potential products in 1999 as compared to 1998 and the completion of the research portion of the American Home Products collaboration in September 1998. Selling, general and administrative



expenses were $8.2 million in 1999, up from $3.3 million in 1998. The increase was due primarily to increased costs associated with the expansion of our sales and marketing activities related to the launch of our new products.

Interest income declined from $838,000 in 1998 to $525,000 in 1999, reflecting lower cash balances following the use of cash to fund development and clinical programs and to support commercialization activities as well as lower interest rates on the available cash balances.

Interest expense in 1999 was $2.7 million, an increase of $755,000 over 1998. The increase is due to the accretion related to the $40.0 million in issue price of zero coupon convertible notes issued in September 1998 to entities affiliated with Elan Corporation, plc.

We have significant net operating loss carry forwards 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, 1999, AS COMPARED WITH SIX MONTHS ENDED JUNE 30, 1998

Total revenues for 1999 were $18.7 million, an increase of $9.3 million as compared to 1998. Loss from operations for 1999 was $29.4 million, an increase of $500,000 as compared to 1998. Net loss for 1999 was $33.5 million or $(.73) per share, an increase of $2.6 million from the 1998 net loss of $30.9 million or $(.80) per share. The principal factors causing these changes are discussed below.

Product sales for 1999 were $6.3 million, as compared to $179,000 in 1998. The increase is primarily due to revenues of $3.8 million from sales of Panretin gel and $2.2 million from sales of ONTAK, approved by the FDA in February 1999.

Contract manufacturing sales for 1999 were $1.2 million as compared to $0 in 1998. These sales were generated under contract manufacturing agreements performed at the Marathon Biopharmaceuticals facility acquired in January 1999.

Collaborative research and development and other milestone revenues for 1999 were $11.2 million, an increase of $1.9 million, over 1998. The increase was

primarily due to an initial payment of $1.5 million received from Ferrer in connection with the marketing and distribution agreements entered into in March 1999 and $1.7 million recognized in June 1999 related to one-time payments received from X-Ceptor, partially offset by (a) a one-time payment of $686,000 received from Cytel Corporation in 1998, and (b) additional payments of $1.0 million received from American Home Products in 1998. The quarter-to-quarter comparison of collaborative research and development and other milestone revenues is as follows ($,000):

<TABLE>
<CAPTION>

| | Six Months Ended June 30, | |
|---|---|---|
| | 1999 | 1998 |
| <S> | <C> | <C> |
| Eli Lilly and Company | $ 5,405 | $ 5,000 |
| X-Ceptor Therapeutics | 1,711 | -- |
| Ferrer Internacional S.A | 1,500 | -- |
| SmithKline Beecham, plc | 1,787 | 1,807 |
| Abbott Laboratories | 600 | 600 |
| American Home Products | 175 | 1,180 |
| Cytel Corporation | -- | 686 |
| | $11,178 | $ 9,273 |

</TABLE>

Cost of products and services sold increased from $204,000 in 1998 to $5.0 million in 1999. The increase is due to manufacturing costs and royalty expenses of $2.0 million associated with our new products as well as contract manufacturing costs of $3.0 million incurred at the Marathon Biopharmaceuticals facility acquired in January 1999.

Research and development expenses were $29.1 million in 1999, compared to $32.0 million in 1998. The decrease was primarily due to the stage of clinical trials on potential products in 1999 as compared to 1998 and the completion of the research portion of the American Home Products collaboration in September 1998. Selling, general and administrative expenses were $14.0 million in 1999, up from $6.1 million in 1998. The increase was due primarily to increased costs associated with the expansion of our sales and marketing activities related to the launch of our new products.



Interest income declined from $1.9 million in 1998 to $1.3 million in 1999, reflecting lower cash balances following the use of cash to fund development and clinical programs and to support commercialization activities as well as lower interest rates on the available cash balances.

Interest expense in 1999 was $5.4 million, an increase of $1.5 million over 1998. The increase is due to the accretion related to the $40.0 million in issue price of zero coupon convertible notes issued in September 1998 to entities affiliated with Elan Corporation, plc.

We have significant net operating loss carry forwards for federal and state income taxes which are available subject to Internal Revenue Code Sections 382 and 383 carryforward limitations.

LIQUIDITY AND CAPITAL RESOURCES

We have financed our operations through private and public offerings of our equity securities, collaborative research revenues, issuance of convertible notes, capital and operating lease transactions, investment income and product sales. From inception through June 30, 1999, we have raised cash proceeds of $239.1 million from sales of equity securities: $160.9 million from private placements and the exercise of options and warrants and $78.2 million from public offerings.

As of June 30, 1999, we had acquired a total of $43.0 million in property, laboratory and office equipment, and tenant leasehold improvements. Of this total, $7.6 million was recorded in the August 1998 merger with Seragen, while substantially all of the balance has been funded through capital lease and other equipment financing arrangements. We lease our office and laboratory facilities under an operating lease arrangement. Our current facility was occupied in December 1997. We have entered into equipment financing arrangements to finance future capital equipment purchases with $1.2 million in financing available through April 30, 2000 and an additional $2.0 million available through June 30, 2000.

Working capital decreased to $23.4 million as of June 30, 1999, from $51.1 million at the end of 1998. The decrease in working capital resulted from decreases in cash and cash equivalents of $24.4 million and short-term investments of $11.9 million used to finance operating activities offset in part by (a) an increase in accounts receivable of $2.1 million related to the sale of the recently introduced products, (b) a decrease in accounts payable of $4.8 million due to a reduction in research and development activities, and (c) lower deferred revenues of $1.0 million due to the timing of completion of collaboration agreements.

For the same reasons, cash and cash equivalents, short-term investments and restricted short-term investments decreased to $35.9 million at June 30, 1999 from $72.5 million at December 31, 1998. We primarily invest our cash in United States government and investment grade corporate debt securities.

A $37.1 million cash payment was made in August 1999 comprised of the $3.0 million for Marathon and the remainder for the obligation resulting from the 1998 merger with Seragen. For additional details on these payments, please see note 7 of the notes to consolidated financial statements.

In July 1999, we issued an additional $40.0 million of zero coupon convertible notes under the terms of our strategic alliance with Elan Corporation, plc. We used $37.1 million of these proceeds for the payments to Marathon and Seragen stakeholders described above. In addition, in August 1999, we and Elan Corporation, plc agreed to amend the existing finance arrangement to provide that the $30.0 million of additional financing available under the arrangement may be used for general corporate purposes. Under this amended arrangement, we will issue $20.0 million of zero coupon convertible notes on or before August 31, 1999. For additional details, please see Note 7 of the notes to consolidated financial statements.

We believe our available cash, cash equivalents, short-term investments and existing sources of funding will be adequate to satisfy our anticipated operating and capital requirements through 1999. Our future operating and capital requirements will depend on many factors, including: the effectiveness of our commercialization 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, and; the cost of manufacturing scale-up.

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 year 2000 requirements. The impact of the year 2000 issue may affect other systems that utilize imbedded computer chip technology, including building controls, security systems or laboratory equipment. It may also impact the ability to obtain products or services if the provider encounters and fails to resolve year 2000 related problems.

We have established an active program to identify and resolve year 2000 related issues. This program includes the review and assessment of our information technology and non-information technology systems, as well as third parties with whom we have a material relationship. This program consists of four phases: inventory, risk assessment, problem validation and problem resolution. The inventory phase identified potential risks we face. They include among others: computer software, computer hardware, telecommunications systems, laboratory equipment, and facilities systems, such as security, environment control and alarm; service providers such as contract research organizations, consultants and product distributors, and; other third parties. The risk assessment phase categorizes and prioritizes each risk by its potential impact. The problem validation phase tests each potential risk, according to priority, to determine if an action risk exists. In the case of critical third parties, this step will include a review of their year 2000 plans and activities. The problem resolution phase will, for each validated risk, determine the method/strategy for alleviating the risk. It may include anything from replacement of hardware or software to process modification to selection of alternative vendors. This step also includes the development of contingency plans.

We initiated this program in 1998. The inventory and risk assessment phases were completed in 1998 while the problem validation phase was completed in the second calendar quarter of 1999. Follow-up reviews of the progress being made by critical third parties will continue. Contingency plans are being developed and revised based upon additional information from the follow-up vendor reviews. We also expect to have those plans completed by the end of the third quarter of 1999.

To date, we have determined that some of our internal information technology and non-information technology systems are not year 2000 compliant. We are actively correcting problems as we identify them. These corrections include the replacement of hardware and software systems, the identification of alternative service providers and the creation of contingency plans. We currently estimate that the cost of identified problems will be approximately $100,000 for hardware and software upgrades or modifications. In addition, we estimate that we will incur approximately $400,000 of internal personnel costs to complete the remaining phases of the project. We do not believe that the cost of these actions will have a material adverse affect on our business. We expect that we will be able to resolve any problems we identify in the remaining phases of the project as part of normal operating expenses.

Any failure of our internal computer systems or of third-party equipment or software we use, or of systems maintained by our suppliers, to be year 2000 compliant may adversely effect our business. In addition, adverse changes in the purchasing patterns of our potential customers as a result of year 2000 issues affecting them may adversely effect our business. These expenditures by potential customers may result in reduced funds available to purchase our products, which could adversely effect our business.

## 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 and 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 REVENUES FROM THE SALE OF PRODUCTS SUFFICIENT TO BECOME PROFITABLE.

We were founded in 1987. We have incurred significant losses since our inception. At June 30, 1999, our accumulated deficit was $429.2 million. To date, we have received the majority of our revenues from our collaborative arrangements. We expect to incur additional losses as we continue our research and development, testing and regulatory activities and as we continue to build manufacturing and sales and marketing capabilities. To become profitable, we must successfully develop, clinically test, market and sell our products. Even if we 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 will require extensive additional development, including preclinical testing and human studies, as well as regulatory approvals, before we can market them. We do not expect that any products resulting from our product development efforts or the efforts of our collaborative partners other than those for which marketing approval has been received will be available for sale until the end of the 1999 calendar year at the earliest, if at all. There are many reasons that we may fail in our efforts to develop our other potential products, including the possibility that:

- we may discover during preclinical testing or human studies that they are ineffective or cause harmful side effects,

- the products may fail to receive necessary regulatory approvals from the FDA or other foreign authorities in a timely manner or at all,

- we may fail to produce the products, if approved, in commercial quantities or at reasonable costs, or

- the proprietary rights of other parties may prevent us from marketing the products.

WE NEED TO BUILD MARKETING AND SALES FORCES IN THE UNITED STATES AND EUROPE WHICH WILL BE AN EXPENSIVE AND TIME-CONSUMING PROCESS.

Developing the sales force to market and sell products is a difficult, expensive and time-consuming process. We recently developed a sales force for the U.S. market and will, at least initially, rely on another company to distribute our products. The distributor will be responsible for providing many marketing support services, including customer service, order entry, shipping and billing, and customer reimbursement assistance. In addition, in Canada we are the sole marketer of two cancer products other companies have developed. We may not be able to continue to establish and maintain the necessary sales and marketing capabilities. To the extent we enter into co-promotion or other licensing arrangements, any revenues we receive will depend on the marketing efforts of others, which may or may not be successful. Our failure to establish an effective sales force, either directly or through others, could adversely affect our business.

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 STATs technologies. Even though certain marketed drugs 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, our business could be adversely affected.

OUR DRUG DEVELOPMENT PROGRAMS WILL REQUIRE SUBSTANTIAL ADDITIONAL FUTURE CAPITAL AND WE MAY NEED MORE CAPITAL.

Our drug development programs require substantial additional capital, 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.

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.

OUR PRODUCTS MUST CLEAR SIGNIFICANT REGULATORY HURDLES PRIOR TO MARKETING.

Before we obtain the approvals necessary to sell any of our potential products, we must show through preclinical studies and clinical trials that each product is safe and effective. Our 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 post approval, 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 clinical supplies and patient enrollment. Patient enrollment is a function of many factors, including the size of the patient population, the proximity of patients to clinical sites and the eligibility criteria for the trial. Delays in patient enrollment may result in increased costs and longer development times. In addition, some of 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.

WE MAY NOT BE ABLE TO PAY AMOUNTS DUE ON OUR OUTSTANDING INDEBTEDNESS.

We and our subsidiaries may not have sufficient cash to make required payments due under our existing debt. Our subsidiary, Glycomed, is obligated to make payments under certain debentures in the total principal amount of $50.0 million. The debentures bear interest at a rate of 7 1/2% per annum and are due in 2003. Glycomed may not have the funds necessary to pay the interest on and the principal of these debentures when due. If Glycomed does not have adequate funds, it will be forced to refinance the debentures and may not be successful in doing so. In addition, in October 1997, we issued a $2.5 million convertible note to SmithKline Beecham Corporation and in November 1998 and July 1999, we issued zero coupon convertible notes with a total issue price of $80.0 million to Elan. Glycomed's failure to make payments when due under its debentures would cause us to default under these notes or other notes we may issue to Elan.

WE MAY REQUIRE ADDITIONAL STOCK OR DEBT FINANCINGS TO FUND OUR OPERATIONS WHICH MAY NOT BE AVAILABLE ON ACCEPTABLE TERMS.

We have incurred losses since our inception and do not expect to generate positive cash flow to fund our operations for the 1999 calendar year and perhaps for one or more subsequent years. As a result, we may need to complete additional equity or debt financings in the near future to fund our operations. These financings may not be available on acceptable 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, the notes we issued to Elan are convertible into common stock at the option of Elan, subject to some limitations. In addition, we may issue additional notes to Elan with up to a total issue price of $30.0 million, which also would be convertible into 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 drug development programs. 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 certain technologies or drug candidates that we would not otherwise relinquish. Our inability to obtain additional financing or to satisfy our obligations or the obligations of our subsidiaries under outstanding indebtedness could adversely affect our business.



WE FACE SUBSTANTIAL COMPETITION.

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. 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. Any of these companies, academic institutions, government agencies or research organizations may develop and introduce products and processes that compete with or are better than ours. As a result, our products may become noncompetitive or obsolete.

OUR SUCCESS WILL DEPEND ON THIRD-PARTY REIMBURSEMENT AND MAY BE IMPACTED BY HEALTH CARE REFORM.

The efforts of governments and third party payors to contain or reduce the cost of health care will continue to affect the business and financial condition of drug companies. A number of legislative and regulatory proposals to change the health care system have been discussed in recent years. 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.

Sales of prescription drugs depend significantly on the availability of reimbursement to the consumer from third party payors, such as government and private insurance plans. These third party payors 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 and reimbursement to the consumer may not be available or sufficient to allow us to sell our products on a competitive basis.

WE RELY HEAVILY ON COLLABORATIVE RELATIONSHIPS AND TERMINATION OF ANY OF THESE PROGRAMS COULD HAVE AN ADVERSE EFFECT ON OUR BUSINESS.

Our strategy for developing and commercializing many of our potential

products includes entering into collaborations with corporate partners, licensors, licensees and others. To date, we have entered into collaborations with Eli Lilly and Company, SmithKline Beecham Corporation, American Home Products, Abbott Laboratories, Sankyo Company Ltd., Glaxo-Wellcome plc, Allergan, Inc. and Pfizer Inc. 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. We cannot be certain that our collaborations will 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 certain 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. The delay or termination of any of the collaborations could adversely affect our business.

We may have disputes in the future with our collaborators, including disputes concerning who 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.

OUR SUCCESS DEPENDS ON OUR ABILITY TO OBTAIN AND MAINTAIN OUR PATENTS AND OTHER PROPRIETARY RIGHTS.

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, if we breach our licenses, we may lose rights to important technology and potential products.

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, United States patent applications are 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. 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 license 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, which would adversely affect our business.

We have had and will continue to have discussions with our current and potential collaborators regarding the scope and validity of our patent 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.

We have learned that Hoffman LaRoche, Inc. has received a United States patent and has made patent filings in foreign countries that relate to our Panretin capsules and gel products. We filed a patent application with an earlier filing date than Hoffman LaRoche's patent, which we believe is broader than, but overlaps in part with, Hoffman LaRoche's patent. We currently are investigating the scope and validity of Hoffman LaRoche's patent to determine its impact upon our products. The Patent and Trademark Office has informed us that the overlapping claims are patentable to us and has initiated a proceeding to determine whether we or Hoffman LaRoche are entitled to a patent. We may not receive a favorable outcome in the proceeding. In addition, the proceeding may delay the Patent and Trademark Office's decision regarding our earlier application. If we do not prevail, the Hoffman LaRoche patent might block our use of Panretin(R) capsules and gel in certain cancers.

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. Any of these actions might adversely affect our business.



## WE CURRENTLY HAVE LIMITED MANUFACTURING CAPABILITY AND WILL RELY ON THIRD-PARTY MANUFACTURERS.

We currently have no manufacturing facilities outside of Marathon's facility and rely on Marathon and others for clinical or commercial production of our potential products. To be successful, we will need to manufacture our products, either directly or through others, in commercial quantities, in compliance with regulatory requirements and at acceptable cost. If we are unable to develop our own facilities or contract with others for manufacturing services, our ability to conduct preclinical testing and human clinical trials will be adversely affected. This in turn could 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. Any of these events would adversely affect our business.

Our 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. Any extended and unplanned manufacturing

shutdowns could be expensive and could result in inventory and product shortages.

OUR BUSINESS EXPOSES US TO PRODUCT LIABILITY RISKS AND WE MAY NOT HAVE SUFFICIENT INSURANCE TO COVER ANY CLAIMS.

Our business exposes us to potential product liability risks. A successful product liability claim or series of claims brought against us could adversely affect our 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 have arranged to increase our product liability insurance coverage in connection with the planned launch of two of our potential products; however, 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. We expect to purchase additional insurance when more of our products progress to a later stage of development and if we license any rights to use later-stage products in the future. 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 ARE DEPENDENT ON OUR KEY EMPLOYEES, THE LOSS OF WHOSE SERVICES COULD ADVERSELY AFFECT US.

We depend on our key scientific and management staff, the loss of whose services could adversely affect our business. Furthermore, we are currently experiencing a period of rapid growth, which requires us to hire many new scientific, management and operational personnel. Accordingly, recruiting and retaining qualified management, operations and scientific personnel to perform research and development work also is critical to our success. Although we believe we will successfully attract and retain the necessary personnel, we may not be able to attract and retain such personnel on acceptable terms given the competition among numerous drug companies, universities and other research institutions for such personnel.

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. We cannot completely eliminate the risk of accidental contamination or injury from the handling and disposing of hazardous materials. In the event of any accident, we could be held liable for any damages that result, which could be significant. In addition, we may incur substantial costs to comply with environmental regulations. Any of these events could adversely affect our business.

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. Future announcements concerning us or our competitors may impact the market price of our common stock. These announcements might include:

- the results of research or development testing,
- technological innovations,
- new commercial products,
- government regulation,
- receipt of regulatory approvals by competitors,



- our failure to receive regulatory approvals,
- developments concerning proprietary rights, or
- litigation or public concern about the safety of the products.

YOU MAY NOT RECEIVE A RETURN ON YOUR SHARES OTHER THAN THROUGH THE SALE OF YOUR SHARES OF COMMON STOCK.

We have not paid any cash dividends on our common stock to date, and we do not anticipate paying cash dividends in the foreseeable future. Accordingly, other than through a sale of your shares, you may not receive a return.

OUR CHARTER DOCUMENTS AND SHAREHOLDER RIGHTS PLAN MAY PREVENT TRANSACTIONS THAT COULD BE BENEFICIAL TO YOU.

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, including transactions in which you might otherwise receive a premium for your shares over then-current market prices. These provisions also may limit your ability to approve transactions that you deem to be in your best interests. 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.

WE ARE SUBJECT TO YEAR 2000 RISKS FOR WHICH WE MAY NOT BE PREPARED AND WHICH COULD HAVE AN ADVERSE EFFECT ON OUR BUSINESS.

For a discussion of the risks associated with our year 2000 readiness, please see "Management's Discussion and Analysis of Financial Condition and Results of Operations -- Year 2000 Compliance."



PART I. FINANCIAL INFORMATION

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

At June 30, 1999, our investment portfolio includes fixed-income securities of $21.2 million. 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.

We generally conduct business, including sales to foreign customers, in 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 not have a material impact on our financial condition, results of operations or cash flows.



PART II. OTHER INFORMATION

ITEM 2 CHANGES IN SECURITIES AND USE OF PROCEEDS

On March 8, 1999, we issued to Eli Lilly and Company 434,546 shares of our common stock as payment of a $5.0 million milestone due to Lilly under an agreement with us and Seragen, Inc. covering rights to ONTAK. The shares were issued to a single entity, Lilly, under an exemption from registration under Section 4(2) of the Securities Act of 1933.

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

Our Annual Meeting of Stockholders was held on May 20, 1999. The following elections and proposals were approved at the 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 | 41,064,145 | -- | 234,539 | -- | -- |
| Alexander D. Cross, Ph.D. | 41,116,038 | -- | 182,646 | -- | -- |
| John Groom | 41,096,472 | -- | 202,212 | -- | -- |
| Irving S. Johnson, Ph.D. | 41,060,471 | -- | 238,213 | -- | -- |
| Carl C. Peck | 41,069,751 | -- | 228,933 | -- | -- |
| David E. Robinson | 41,002,091 | -- | 296,593 | -- | -- |
| Michael A. Rocca | 41,060,108 | -- | 238,576 | -- | -- |
| 2. Amendment of 1992 Stock Option/ Stock Issuance Plan to increase the authorized number of shares of Common Stock from 8,088,457 to 9,073,457. | 35,530,077 | 5,634,069 | -- | 134,538 | -- |
| 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 260,000 to 355,000. | 39,251,966 | 1,944,238 | -- | 102,480 | -- |
| 4. Ratification of the appointment of Ernst & Young LLP as the independent auditors for the fiscal year ending December 31, 1999. | 41,115,069 | 70,542 | -- | 66,528 | 46,545 |

ITEM 6 (A) EXHIBITS

| | |
|---|---|
| Exhibit 3.1 (1) | Amended and Restated Certificate of Incorporation of the Company (filed as Exhibit 3.2). |
| Exhibit 3.2 (1) | Bylaws of the Company, as amended (filed as Exhibit 3.3). |
| Exhibit 3.3 (4) | Amended Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of Ligand Pharmaceuticals Incorporated. |
| Exhibit 10.1 (2) | Amendment, dated as of November 9, 1998, between Ligand Pharmaceuticals Incorporated and ChaseMellon Shareholder Services, L.L.C., as Rights Agent (Exhibit 99.1). |
| Exhibit 10.2 (3) | Form of Second Amendment to the Preferred Share Rights Agreement and Certificate of Compliance with Section 27 thereof (Exhibit 1). |
| Exhibit 10.3 (4) | Distributorship Agreement between Ferrer Internacional S.A., Ligand Pharmaceuticals, Incorporated, and Seragen, Inc. dated March 26, 1999. |
| Exhibit 10.4 (4) | Distributorship Agreement between Ferrer Internacional S.A., Ligand Pharmaceuticals, Incorporated, and Seragen, Inc. dated March 26, 1999. |

Exhibit 27.1 Financial Data Schedule
</TABLE>

(1) 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. 333-58823) filed on July 9, 1998.

(2) 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.

(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 8-A/A Amendment No. 2 (No. 0-20720 filed on December 24, 1998.

(4) This exhibit was previously filed as part of, and is hereby incorporated by reference to the numbered exhibit filed with, the Quarterly Report on Form 10-Q for the quarter ended March 31, 1999 filed on May 14, 1999.

ITEM 6 (B) REPORTS ON FORMS 8-K

No reports on Form 8-K were filed during the quarter ended on June 30, 1999.





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: August 16, 1999 By /s/ Paul V. Maier

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, 1999 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.
(IN THOUSANDS EXCEPT EARNINGS PER SHARE)
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<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.
</FN>

</TABLE>