

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

FORM 10-Q



Quarterly Report Pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934

For the quarterly period ended March 31, 2024

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: 001-33093



LIGAND PHARMACEUTICALS INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware

*(State or other jurisdiction of
incorporation or organization)*

555 Heritage Drive, Suite 200

Jupiter

Florida

(Address of principal executive offices)

77-0160744

*(I.R.S. Employer
Identification No.)*

33458

(Zip Code)

(858) 550-7500

(Registrant's Telephone Number, Including Area Code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class:	Trading symbol:	Name of each exchange on which registered:
Common Stock, par value \$0.001 per share	LGND	The Nasdaq Global Market

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 ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company,"

and “emerging growth company” in Rule 12b-2 of the Exchange Act. (Check one)

Large Accelerated Filer

☒

Accelerated Filer

☐

Non-Accelerated Filer

☐

Smaller Reporting Company

☐

Emerging Growth Company

☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of May 6, 2024, the registrant had 17,963,653 shares of common stock outstanding.

LIGAND PHARMACEUTICALS INCORPORATED
QUARTERLY REPORT

FORM 10-Q

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GLOSSARY OF TERMS AND ABBREVIATIONS

Abbreviation	Definition
2023 Annual Report	Annual Report on Form 10-K for the year ended December 31, 2023, filed with the SEC on February 29, 2024
2023 Notes	\$750.0 million aggregate principal amount of convertible senior unsecured notes due 2023
APAC	Avista Public Acquisition Corp. II (prior to its domestication in Delaware and change of name to OmniAb, Inc.)
ASC	Accounting Standards Codification
ASU	Accounting Standards Update
Company	Ligand Pharmaceuticals Incorporated, including subsidiaries
CVR	Contingent value right
CyDex	CyDex Pharmaceuticals, Inc.
Distribution	The separation of OmniAb Business through a spin-off of OmniAb to Ligand's shareholders of record as of October 26, 2022 on a pro rata basis
ESPP	Employee Stock Purchase Plan, as amended and restated
FASB	Financial Accounting Standards Board
FDA	Food and Drug Administration
GAAP	Generally accepted accounting principles in the United States
Ligand	Ligand Pharmaceuticals Incorporated, including subsidiaries
Merger Agreement	Agreement and Plan of Merger, dated as of March 23, 2022, among APAC, Ligand, OmniAb and Merger Sub
Merger Sub	Orwell Merger Sub, Inc., a wholly owned subsidiary of APAC
Metabasis	Metabasis Therapeutics, Inc.
NDA	New Drug Application
New OmniAb	OmniAb, Inc. (formerly known as Avista Public Acquisition Corp. II and after it domestication in Delaware)
OmniAb	OmniAb Operations, Inc. (formerly known as OmniAb, Inc. and prior to being spun off by the Company)
OmniAb Business	Ligand's antibody discovery business (prior to being spun off by the Company)
PDUFA	Prescription Drug User Fee Act
Q1 2023	The Company's fiscal quarter ended March 31, 2023
Q1 2024	The Company's fiscal quarter ended March 31, 2024
SBC	Share-based compensation expense
SEC	Securities and Exchange Commission
Separation Agreement	Separation and Distribution Agreement, dated as of March 23, 2022, among APAC, Ligand and OmniAb
Takeda	Takeda Pharmaceutical Company Limited
Traverse	Traverse Therapeutics, Inc.
Viking	Viking Therapeutics, Inc.

Cautionary Note Regarding Forward-Looking Statements:

You should read the following report together with the more detailed information regarding our company, our common stock and our financial statements and notes to those statements appearing elsewhere in this document.

This report contains forward-looking statements that involve a number of risks and uncertainties. Although our forward-looking statements reflect the good faith judgment of our management, these statements can only be based on facts and factors currently known by us. Consequently, these forward-looking statements are inherently subject to risks and uncertainties, and actual results and outcomes may differ materially from results and outcomes discussed in the forward-looking statements.

Forward-looking statements can be identified by the use of forward-looking words such as “believes,” “expects,” “may,” “will,” “plan,” “intends,” “estimates,” “would,” “continue,” “seeks,” “pro forma,” or “anticipates,” or other similar words (including their use in the negative), or by discussions of future matters such as those related to our future results of operations and financial position, royalties and milestones under license agreements, Captisol material sales, product development, and product regulatory filings and approvals, and the timing thereof. Ligand's status as a high-growth company, as well as other statements that are not historical.

The cautionary statements made in this report are intended to be applicable to all related forward-looking statements wherever they may appear in this report. We urge you not to place undue reliance on these forward-looking statements, which speak only as of the date of this report. Except as required by law, we assume no obligation to update our forward-looking statements, even if new information becomes available in the future. This caution is made under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended.

PART I - FINANCIAL INFORMATION

n 1. Condensed Consolidated Financial Statements

LIGAND PHARMACEUTICALS INCORPORATED CONDENSED CONSOLIDATED BALANCE SHEETS

(Unaudited)
(in thousands, except par value)

	March 31, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 50,093	\$ 22,954
Short-term investments	260,500	147,355
Accounts receivable, net	28,435	32,917
Inventory	21,337	23,969
Income taxes receivable	—	6,395
Prepaid expenses	1,237	1,182
Other current assets	7,311	2,657
Total current assets	368,913	237,429
Deferred income taxes, net	—	214
Intangible assets, net	291,420	299,606
Goodwill	105,250	103,370
Long-term portion of financial royalty assets, net	65,710	62,291
Property and equipment, net	15,135	15,607
Operating lease right-of-use assets	6,028	6,062
Finance lease right-of-use assets	3,219	3,393
Equity method investment in Primrose Bio	10,469	12,595
Other investments	36,500	36,726
Other assets	11,225	9,923
Total assets	\$ 913,869	\$ 787,216
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,893	\$ 2,427
Accrued liabilities	12,430	12,467
Income taxes payable	1,138	—
Deferred revenue	1,227	1,222
Current contingent liabilities	127	256
Current operating lease liabilities	1,000	403
Current finance lease liabilities	3	7
Total current liabilities	17,818	16,782
Long-term deferred revenue	3,065	1,444
Long-term contingent liabilities	2,888	2,942
Deferred income taxes, net	50,606	31,622
Long-term operating lease liabilities	5,191	5,755
Other long-term liabilities	27,780	27,758
Total liabilities	107,348	86,303
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 5,000 shares authorized; zero issued and outstanding at March 31, 2024 and December 31, 2023	—	—
Common stock, \$0.001 par value; 60,000 shares authorized; 17,924 and 17,556 shares issued and outstanding at March 31, 2024 and December 31, 2023, respectively	18	18
Additional paid-in capital	218,258	198,696
Accumulated other comprehensive loss	(910)	(817)
Retained earnings	589,155	503,016
Total stockholders' equity	806,521	700,913
Total liabilities and stockholders' equity	\$ 913,869	\$ 787,216

See accompanying notes to unaudited condensed consolidated financial statements.

LIGAND PHARMACEUTICALS INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)
(in thousands, except per share amounts)

	Three months ended March 31,	
	2024	2023
Revenues and other income:		
Revenue from intangible royalty assets	\$ 18,357	\$ 17,154
Income from financial royalty assets	738	493
Royalties	19,095	17,647
Captisol	9,212	10,622
Contract revenue and other income	2,671	15,710
Total revenues and other income	30,978	43,979
Operating costs and expenses:		
Cost of Captisol	2,882	3,717
Amortization of intangibles	8,186	8,539
Research and development	5,971	6,663
General and administrative	10,951	10,855
Total operating costs and expenses	27,990	29,774
Operating income from continuing operations	2,988	14,205
Non-operating income and expenses:		
Gain from short-term investments	110,772	39,533
Interest income	2,020	1,435
Interest expense	(141)	(240)
Gain on derivative instruments	196	—
Other non-operating income (expense), net	(2,388)	603
Total non-operating income and expenses, net	110,459	41,331
Income before income taxes from continuing operations	113,447	55,536
Income tax expense	(27,308)	(11,922)
Net income from continuing operations	86,139	43,614
Net loss from discontinued operations	—	(1,665)
Net income	\$ 86,139	\$ 41,949
Basic net income from continuing operations per share	\$ 4.86	\$ 2.56
Basic net loss from discontinued operations per share	\$ —	\$ (0.10)
Basic net income per share	\$ 4.86	\$ 2.46
Shares used in basic per share calculation	17,732	17,063
Diluted net income from continuing operations per share	\$ 4.75	\$ 2.43
Diluted net loss from discontinued operations per share	\$ —	\$ (0.09)
Diluted net income per share	\$ 4.75	\$ 2.33
Shares used in diluted per share calculation	18,122	17,974

See accompanying notes to unaudited condensed consolidated financial statements.

LIGAND PHARMACEUTICALS INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Unaudited)
(in thousands)

	Three months ended	
	March 31,	
	2024	2023
Net income	\$ 86,139	\$ 41,949
Unrealized net (loss) gain on available-for-sale securities, net of tax	(93)	49
Comprehensive income	\$ 86,046	\$ 41,998

See accompanying notes to unaudited condensed consolidated financial statements.

LIGAND PHARMACEUTICALS INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)
(in thousands)

	Common Stock		Additional paid in capital	Accumulated other comprehensive loss	Retained earnings	Total stockholders' equity
	Shares	Amount				
Balance at December 31, 2023	17,556	\$ 18	\$ 198,696	\$ (817)	\$ 503,016	\$ 700,913
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	368	—	12,228	—	—	12,228
Share-based compensation	—	—	7,334	—	—	7,334
Unrealized loss on available-for-sale securities, net of tax	—	—	—	(93)	—	(93)
Net income	—	—	—	—	86,139	86,139
Balance at March 31, 2024	17,924	\$ 18	\$ 218,258	\$ (910)	\$ 589,155	\$ 806,521

	Common Stock		Additional paid in capital	Accumulated other comprehensive income (loss)	Retained earnings	Total stockholders' equity
	Shares	Amount				
Balance at December 31, 2022	16,951	\$ 17	\$ 147,590	\$ (984)	\$ 450,862	\$ 597,485
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	183	—	(762)	—	—	(762)
Share-based compensation	—	—	5,931	—	—	5,931
Unrealized net gain on available-for-sale securities, net of tax	—	—	—	49	—	49
Final distribution of OmniAb	—	—	1,665	—	—	1,665
Net income	—	—	—	—	41,949	41,949
Balance at March 31, 2023	17,134	\$ 17	\$ 154,424	\$ (935)	\$ 492,811	\$ 646,317

See accompanying notes to unaudited condensed consolidated financial statements.

LIGAND PHARMACEUTICALS INCORPORATED
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(in thousands)

	Three months ended March 31,	
	2024	2023
Cash flows from operating activities:		
Net income	\$ 86,139	\$ 41,949
Adjustments to reconcile net income to net cash provided by operating activities:		
Change in estimated fair value of contingent liabilities	(33)	(670)
Depreciation and amortization of intangible assets	8,765	9,499
Amortization of premium on investments, net	(157)	(282)
Amortization of debt discount and issuance fees	84	95
Non-cash income from financial royalty assets	—	(379)
CECL adjustment to financial royalty assets	(2,841)	—
Gain on derivative instruments	(196)	—
Losses from equity method investment in Primrose Bio	2,352	—
Share-based compensation	7,334	5,931
Deferred income taxes	19,546	8,754
Gain from short-term investments	(110,772)	(39,533)
Lease amortization expense	478	447
Other	(210)	240
Changes in operating assets and liabilities, net of acquisition:		
Accounts receivable	3,462	1,099
Inventory	2,632	2,035
Accounts payable and accrued liabilities	(1,382)	(435)
Income tax receivable and payable	7,533	4,614
Deferred revenue	(540)	(98)
Other assets and liabilities	(3,462)	682
Net cash provided by operating activities	18,732	33,948
Cash flows from investing activities:		
Purchase of financial royalty assets	(2,443)	—
Proceeds from financial royalty assets	1,942	130
Purchase of short-term investments	(77,634)	(39,864)
Proceeds from sale of short-term investments	60,919	44,232
Proceeds from maturity of short-term investments	14,544	8,465
Cash paid for investment in Primrose Bio	(998)	—
Purchase of property and equipment	(105)	(2,414)
Net cash (used in) provided by investing activities	(3,775)	10,549
Cash flows from financing activities:		
Payments under finance lease obligations	(5)	(13)
Net proceeds from stock option exercises and ESPP	15,304	3,393
Taxes paid related to net share settlement of equity awards	(3,076)	(4,155)
Cash paid for debt issuance costs	(41)	—
Net cash provided by (used in) financing activities	12,182	(775)
Net increase in cash and cash equivalents	27,139	43,722
Cash and cash equivalents at beginning of period	22,954	45,006
Cash and cash equivalents at end of period	\$ 50,093	\$ 88,728
Supplemental disclosure of cash flow information:		
Interest paid	\$ 59	\$ —
Supplemental schedule of non-cash activity:		
Accrued financial royalty asset purchases	\$ 2,129	\$ —
Accrued fixed asset purchases	\$ 2	\$ 140
Unrealized gain (loss) on AFS investments, net of tax	\$ (93)	\$ 49

See accompanying notes to unaudited condensed consolidated financial statements.

LIGAND PHARMACEUTICALS INCORPORATED
Notes to Condensed Consolidated Financial Statements
(Unaudited)

Unless the context requires otherwise, references in this report to “Ligand,” “we,” “us,” the “Company,” and “our” refer to Ligand Pharmaceuticals Incorporated and its consolidated subsidiaries.

1. Basis of Presentation and Summary of Significant Accounting Policies

Business

We are a biopharmaceutical company enabling scientific advancement through supporting the clinical development of high-value medicines. We do this by providing financing, licensing our technologies or both. We operate in one reportable segment: development and licensing of biopharmaceutical assets.

Basis of Presentation

Our unaudited condensed consolidated financial statements include the financial statements of Ligand and its wholly-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. We have included all adjustments, consisting only of normal recurring adjustments, which we considered necessary for a fair presentation of our financial results. These unaudited condensed consolidated financial statements and accompanying notes should be read together with the audited consolidated financial statements included in our 2023 Annual Report. Interim financial results are not necessarily indicative of the results that may be expected for the full year.

Reclassification

Certain reclassifications have been made to the previously issued audited consolidated financial statements to conform with the current period presentation. Specifically, within the consolidated balance sheet as of December 31, 2023, our commercial license and other economic rights line has been reclassified to long-term portion of financial royalty assets, net, and to other assets, and a portion of other investments has been reclassified from other assets.

In addition, within the unaudited condensed consolidated statement of operations for the three months ended March 31, 2023, royalties have been reclassified to revenue from intangible royalty assets, and a portion of the contract revenue has been reclassified to income from financial royalty assets.

Discontinued Operations

The Company determined that the spin-off of the OmniAb Business in November 2022 met the criteria for classification as a discontinued operation in accordance with ASC Subtopic 205-20, *Discontinued Operations* (“ASC 205-20”). Accordingly, the accompanying condensed consolidated financial statements have been updated to present the results of all discontinued operations reported as a separate component of loss in the condensed consolidated statements of operations and comprehensive loss (see *Note 4, Spin-off of OmniAb*). All disclosures have been adjusted to reflect continuing operations.

Significant Accounting Policies

We have described our significant accounting policies in *Note 1, Basis of Presentation and Summary of Significant Accounting Policies* of the Notes to Consolidated Financial Statements in our 2023 Annual Report.

Use of Estimates

The preparation of unaudited condensed consolidated financial statements in conformity with GAAP requires the use of estimates and assumptions that affect the amounts reported in the unaudited condensed consolidated financial statements and the accompanying notes. Actual results may differ from those estimates.

Revenue and Other Income

Our revenue is generated primarily from royalties on sales of products commercialized by our partners, Captisol material sales, and contract revenue for license fees, regulatory and sales based milestone payments. Other operating income is primarily related to milestone income received for financial royalty assets that have been fully amortized or where there is no underlying asset recognized on the consolidated balance sheets.

We apply the following five-step model in accordance with ASC 606, *Revenue from Contracts with Customers*, in order to determine the revenue: (i) identification of the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations, including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when (or as) the Company satisfies each performance obligation.

Revenue from Intangible Royalty Assets

We receive royalty revenue from intangible royalty assets on sales by our partners of products covered by patents that we or our partners own under contractual agreements. We do not have future performance obligations under these license arrangements. We generally satisfy our obligation to grant intellectual property rights on the effective date of the contract. However, we apply the royalty recognition constraint required under the guidance for sales-based royalties which requires a royalty to be recorded no sooner than the underlying sale occurs. Therefore, royalties on sales of products commercialized by our partners are recognized in the quarter the product is sold. Our partners generally report sales information to us on a one quarter lag. Thus, we estimate the expected royalty proceeds based on an analysis of historical experience and interim data provided by our partners including their publicly announced sales. Differences between actual and estimated royalty revenues, which have not been material, are adjusted in the period in which they become known, typically the following quarter.

Income from Financial Royalty Assets

Effective January 1, 2024, we introduced a new line item “income from financial royalty assets”, which was included in “contract revenue” in prior periods. Accordingly, the prior year period amounts have been reclassified to align with the current period presentation.

We recognize income from financial royalty assets when there is a reasonable expectation about the timing and amount of cash flows expected to be collected. Income is calculated by multiplying the carrying value of the financial royalty asset by the periodic effective interest rate.

We account for financial royalty assets related to developmental pipeline or recently commercialized products on a non-accrual basis. Developmental pipeline products are non-commercialized, non-approved products that require FDA or other regulatory approval, and thus have uncertain cash flows. Newly commercialized products typically do not have an established reliable sales pattern, and thus have uncertain cash flows.

Captisol Sales

Revenue from Captisol sales is recognized when control of Captisol material is transferred or intellectual property license rights are granted to our customers in an amount that reflects the consideration we expect to receive from our customers in exchange for those products or rights. A performance obligation is considered distinct from other obligations in a contract when it provides a benefit to the customer either on its own or together with other resources that are readily available to the customer and is separately identified in the contract. For Captisol material or intellectual property license rights, we consider our performance obligation satisfied once we have transferred control of the product or granted the intellectual property rights, meaning the customer has the ability to use and obtain the benefit of the Captisol material or intellectual property license right. We recognize revenue for satisfied performance obligations only when we determine there are no uncertainties regarding payment terms or transfer of control. Sales tax and other taxes we collect concurrent with revenue-producing activities are excluded from revenue. We have elected to recognize the cost of freight and shipping when control over Captisol material has transferred to the customer as an expense in cost of Captisol. We expense incremental costs of obtaining a contract when incurred if the expected amortization period of the asset that we would have recognized is one year or less or the amount is immaterial. We did not incur any incremental costs of obtaining a contract during the periods reported.

Contract Revenue and Other Income

Our contracts with customers often include variable consideration in the form of contingent milestone payments. We include contingent milestone payments in the estimated transaction price when it is probable a significant reversal in the amount of cumulative revenue recognized will not occur. These estimates are based on historical experience, anticipated results and our best judgment at the time. If the contingent milestone payment is based on sales, we apply the royalty recognition constraint and record revenue when the underlying sale has taken place. Significant judgments must be made in determining the transaction price for our sales of intellectual property. Because of the risk that products in development with our partners will not reach development milestones or receive regulatory approval, we generally recognize any contingent payments that would be due to us upon the development milestone or regulatory approval.

Depending on the terms of the arrangement, we may also defer a portion of the consideration received if we have to satisfy a future obligation, which typically occurs with our contracts for R&D services. In general, for R&D services, which has not been significant, we recognize revenue over time and measure our progress using an input method. The input methods we use are based on the effort we expend or costs we incur toward the satisfaction of our performance obligation.

Some customer contracts are sublicenses which require that we make payments to an upstream licensor related to license fees, milestones and royalties which we receive from customers. In such cases, we evaluate the determination of gross revenue as a principal versus net revenue as an agent reporting based on each individual agreement.

Other income is primarily related to milestone income received for financial royalty assets that have been fully amortized or where there is no underlying asset recognized on the consolidated balance sheets.

Deferred Revenue

Depending on the terms of the arrangement, we may also defer a portion of the consideration received because we have to satisfy a future obligation. The timing of revenue recognition, billings and cash collections results in billed accounts receivable,

unbilled receivables (contract assets), and customer advances and deposits (contract liabilities) on the consolidated balance sheet. Except for royalty revenue and certain service revenue, we generally receive payment at the point we satisfy our obligation or soon after. Therefore, we do not generally carry any contract asset balance. Any fees billed in advance of being earned are recorded as deferred revenue. During the three months ended March 31, 2024 and 2023, the amount recognized as revenue that was previously deferred was \$0.5 million and \$0.1 million, respectively.

Disaggregation of Revenue

The following table represents disaggregation of royalties, Captisol and contract revenue (in thousands):

	Three months ended March 31,	
	2024	2023
Royalties		
Kyprolis	\$ 6,632	\$ 6,228
Evomela	1,397	2,550
Teriparatide injection	2,041	3,500
Rylaze	2,952	2,609
Filspari	1,772	—
Vaxneuvance	1,387	638
Other	2,176	1,629
Revenue from intangible royalty assets	18,357	17,154
Income from financial royalty assets	738	493
	<u>\$ 19,095</u>	<u>\$ 17,647</u>
Captisol	\$ 9,212	\$ 10,622
Contract revenue and other income		
Milestone and other	727	15,710
Other income	1,944	—
Contract revenue and other income	<u>\$ 2,671</u>	<u>\$ 15,710</u>
Total	<u>\$ 30,978</u>	<u>\$ 43,979</u>

Short-term Investments

Our short-term investments consist of the following at March 31, 2024 and December 31, 2023 (in thousands):

March 31, 2024	Amortized cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value
Bond fund	\$ 92,721	\$ —	\$ (474)	\$ 92,247
Bank deposits	24,584	6	(8)	24,582
Corporate bonds	23,664	14	(22)	23,656
Commercial paper	21,346	1	(12)	21,335
U.S. government securities	14,409	—	(26)	14,383
Corporate equity securities	6,551	—	(5,271)	1,280
Municipal bonds	1,018	—	(1)	1,017
	<u>\$ 184,293</u>	<u>\$ 21</u>	<u>\$ (5,814)</u>	<u>\$ 178,500</u>
Viking common stock				82,000
Total short-term investments				<u>\$ 260,500</u>

December 31, 2023	Amortized cost	Gross unrealized gains	Gross unrealized losses	Estimated fair value
Bond fund	\$ 63,763	\$ —	\$ (537)	\$ 63,226
Bank deposits	17,165	12	(1)	17,176
Corporate bonds	14,850	40	(2)	14,888
Commercial paper	11,578	9	(1)	11,586
U.S. government securities	6,736	18	(3)	6,751
Municipal bonds	1,007	—	(4)	1,003
Corporate equity securities	5,775	—	(5,235)	540
	<u>\$ 120,874</u>	<u>\$ 79</u>	<u>\$ (5,783)</u>	<u>\$ 115,170</u>
Viking common stock				32,185
Total short-term investments				<u>\$ 147,355</u>

During the three months ended March 31, 2024, we sold 0.7 million shares of Viking common stock and recognized a realized gain of \$60.0 million in total.

Gain (loss) from short-term investments in our condensed consolidated statements of operations includes both realized and unrealized gain (loss) from our short-term investments in public equity and warrant securities.

Allowances are recorded for available-for-sale debt securities with unrealized losses. This limits the amount of credit losses that can be recognized for available-for-sale debt securities to the amount by which carrying value exceeds fair value and requires the reversal of previously recognized credit losses if fair value increases. The provisions of the credit losses standard did not have a material impact on our available-for-sale debt securities during the three months ended March 31, 2024.

The following table summarizes our available-for-sale debt securities by contractual maturity (in thousands):

	March 31, 2024	
	Amortized Cost	Fair Value
Within one year	\$ 109,615	\$ 109,577
After one year through five years	18,355	18,339
Total	<u>\$ 127,970</u>	<u>\$ 127,916</u>

Our investment policy is capital preservation and we only invest in U.S.-dollar denominated investments. We held a total of 109 investments which were in an unrealized loss position with a total of \$0.1 million unrealized losses as of March 31, 2024. We believe that we will collect the principal and interest due on our debt securities that have an amortized cost in excess of fair value. The unrealized losses are largely due to changes in interest rates and not to unfavorable changes in the credit quality associated with these securities that impacted our assessment on collectability of principal and interest. We do not intend to sell these securities and it is not more-likely-than-not that we will be required to sell these securities before the recovery of the amortized cost basis. Accordingly, no credit losses were recognized for the three months ended March 31, 2024.

Accounts Receivable and Allowance for Credit Losses

Our accounts receivable arise primarily from sales on credit to customers. We establish an allowance for credit losses to present the net amount of accounts receivable expected to be collected. The allowance is determined by using the loss-rate method, which requires an estimation of loss rates based upon historical loss experience adjusted for factors that are relevant to determining the expected collectability of accounts receivable. Some of these factors include macroeconomic conditions that correlate with historical loss experience, delinquency trends, aging behavior of receivables and credit and liquidity quality indicators for industry groups, customer classes or individual customers. During the three months ended March 31, 2024 and 2023, we considered the current and expected future economic and market conditions and concluded a decrease of \$0.3 million and an increase of \$0.1 million in the allowance for credit losses, respectively.

Inventory

Inventory, which consists of finished goods, is stated at the lower of cost or net realizable value. We determine cost using the specific identification method.

We analyze our inventory levels periodically and write down inventory to net realizable value if it has become obsolete, has a cost basis in excess of its expected net realizable value or is in excess of expected requirements. There were no write-downs recorded against inventory for the three months ended March 31, 2024 and 2023. In addition to finished goods, as of March 31, 2024 and December 31, 2023, inventory included prepayments of \$4.2 million and \$4.6 million, respectively, to our supplier for Captisol.

Goodwill and Other Identifiable Intangible Assets

Goodwill and other identifiable intangible assets consist of the following (in thousands):

	March 31, 2024	December 31, 2023
Indefinite-lived intangible assets		
Goodwill	\$ 105,250	\$ 103,370
Definite lived intangible assets		
Complete technology	42,911	42,911
Less: accumulated amortization	(21,460)	(20,894)
Trade name	2,642	2,642
Less: accumulated amortization	(1,743)	(1,710)
Customer relationships	29,600	29,600
Less: accumulated amortization	(19,534)	(19,161)
Contractual relationships	360,000	360,000
Less: accumulated amortization	(100,996)	(93,782)
Total goodwill and other identifiable intangible assets, net	<u>\$ 396,670</u>	<u>\$ 402,976</u>

Financial Royalty Assets, net (formerly known as Commercial License Rights)

Financial royalty assets (formerly known as “Commercial License Rights”) represent a portfolio of future milestone and royalty payment rights acquired that are passive in nature (i.e., we do not own the intellectual property or have the right to commercialize the underlying products).

Although a financial royalty asset does not have the contractual terms typical of a loan (such as contractual principal and interest), we account for financial royalty assets under ASC 310, *Receivables*. Our financial royalty assets are classified similar to loans receivable and are measured at amortized cost using the prospective effective interest method described in ASC 835-30 *Imputation of Interest*.

The effective interest rate is calculated by forecasting the expected cash flows to be received over the life of the asset relative to the initial invested amount. The effective interest rate is recalculated in each reporting period as the difference between expected cash flows and actual cash flows are realized and as there are changes to expected future cash flows.

The gross carrying value of a financial royalty asset is made up of the opening balance, or net purchase price for a new financial royalty asset, which is increased by accrued interest income (except for assets under the non-accrual method) and decreased by cash receipts in the period to arrive at the ending balance.

We evaluate financial royalty assets for recoverability on an individual basis by comparing the effective interest rate at each reporting date to that of the prior period. If the effective interest rate is lower for the current period than the prior period, and if the gross cash flows have declined (expected and collected), we record provision expense for the change in expected cash

flows. The provision is measured as the difference between the financial royalty asset's amortized cost basis and the net present value of the expected future cash flows, calculated using the prior period's effective interest rate.

In addition to the above allowance, we recognize an allowance for current expected credit losses under ASC 326, *Financial Instruments – Credit Losses* on our financial royalty assets. The credit rating, which is primarily based on publicly available data and updated quarterly, is the primary credit quality indicator used to determine the credit loss provision.

The carrying value of financial royalty assets is presented net of the cumulative allowance for changes in expected future cash flows and expected credit losses. The initial amount and subsequent revisions in allowances for changes in expected future cash flows and expected credit losses are recorded as part of general and administrative expenses on the consolidated statements of operations.

When we are reasonably certain that a part of a financial royalty asset's net carrying value (or all of it) is not recoverable, we recognize a permanent impairment which is recorded as part of general and administrative expenses on the consolidated statements of operations. To the extent there was an allowance previously recorded for this asset, the amount of such impairment is written off against the allowance at the time that such a determination is made. Any future recoveries from such impairment are recognized when cash is collected.

The current portion of financial royalty assets represents an estimation for current quarter royalty receipts which are collected during the subsequent quarter. This portion is presented in other current assets on our consolidated balance sheets, net of the allowance for expected credit losses.

For additional information, see *Note 5, Financial Royalty Assets, net (formerly known as Commercial License Rights)*.

Equity Method Investment

Investments that we do not consolidate but in which we have significant influence over the operating and financial policies of the investee are classified as equity method investments and are accounted for using the equity method of accounting.

In applying the equity method of accounting, investments are initially recorded at cost and are subsequently adjusted based on our proportionate share of net income or loss of the investee, net of any distributions received from the investee.

Other Investments

Other investments represent our investments to equity securities of third parties in which we do not have control or significant influence. All our equity securities investments do not have a readily determinable or estimable fair values and are measured using the measurement alternative, which is cost less impairment, if any, and adjustments resulting from observable price changes in orderly transactions for the identical or similar investment of the same issuer.

Other investments consist of the following (in thousands):

	March 31, 2024	December 31, 2023
Equity securities in Primrose Bio	\$ 32,500	\$ 32,726
Neuritek warrants	3,000	3,000
Palvella Series C preferred stock	1,000	1,000
Total other investments	<u>\$ 36,500</u>	<u>\$ 36,726</u>

Other Assets

Other assets include economic rights related to 2023 expansion of our strategic partnership with Palvella to accelerate Phase 3 development of QTORIN rapamycin for the treatment of Microcystic Lymphatic Malformations ("Microcystic LMs"). According to the terms of the second amendment to the development funding and royalties agreement, Palvella received an upfront payment of \$5 million from Ligand. In return for the upfront payment, among other contractual changes, the tiered royalty payable by Palvella to Ligand was increased to between 8.0% and 9.8% based on annual aggregate worldwide net sales of QTORIN rapamycin. We are not obligated to provide additional funding to Palvella for development or commercialization of QTORIN.

We determined the economic rights related to Palvella should be characterized as a funded research and development arrangement, thus we account for them in accordance with ASC 730-20, *Research and Development Arrangement*, and reduce our asset as the funds are expended by Palvella. As of March 31, 2024, of the \$5 million upfront funding related to the second amendment with Palvella, none of the funding to Palvella was expended. Our CEO and director, Todd Davis, is a director of Palvella. Mr. Davis recused himself from all of the board's consideration of the agreement between us and Palvella, including any financial analysis, the terms of the amendment and the vote to approve the purchase agreement and the related transactions.

Other current assets primarily include Employee Retention Credit in the amount of \$2.3 million in addition to the \$2.6 million current portion of Elutia financial royalty assets which is disclosed in *Note 5, Financial Royalty Assets, net (formerly known as Commercial License Rights)*.

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	March 31, 2024	December 31, 2023
Compensation	\$ 1,904	\$ 4,682
Subcontractor	1,756	1,756
Professional fees	2,736	2,394
Customer deposit	621	621
Supplier	276	303
Royalties owed to third parties	1,252	900
Amounts owed to former licensees	—	45
Acquisition related liabilities	2,118	—
Other	1,767	1,766
Total accrued liabilities	<u>\$ 12,430</u>	<u>\$ 12,467</u>

Other Long-Term Liabilities

Other long-term liabilities consist of the following (in thousands):

	March 31, 2024	December 31, 2023
Unrecognized tax benefits	\$ 14,047	\$ 14,039
Novan contract liability	13,700	13,700
Other long-term liabilities	33	19
	<u>\$ 27,780</u>	<u>\$ 27,758</u>

Share-Based Compensation

Share-based compensation expense for awards to employees and non-employee directors is a non-cash expense and is recognized on a straight-line basis over the vesting period. The following table summarizes share-based compensation expense recorded as components of research and development expenses and general and administrative expenses for the periods indicated (in thousands):

	Three months ended March 31,	
	2024	2023
SBC - Research and development expenses	\$ 678	\$ 1,707
SBC - General and administrative expenses	6,656	4,224
	<u>\$ 7,334</u>	<u>\$ 5,931</u>

The fair-value for options that were awarded to employees and directors was estimated at the date of grant using the Black-Scholes option valuation model with the following weighted-average assumptions:

	Three months ended March 31,	
	2024	2023
Risk-free interest rate	4.3%	4.1%
Dividend yield	—	—
Expected volatility	44.6%	53.0%
Expected term (years)	4.7	5.3

A limited amount of performance-based restricted stock units (“PSUs”) contain a market condition based on our relative total shareholder return ranked on a percentile basis against the Nasdaq Biotechnology Index over a three year performance period, with a range of 0% to 200% of the target amount granted to be issued under the award. Share-based compensation cost for these PSUs is measured using the Monte-Carlo simulation valuation model and is not adjusted for the achievement, or lack thereof, of the performance conditions.

Net Income Per Share

Basic net income per share is calculated by dividing net income by the weighted average number of common shares outstanding during the period. Diluted net income per share is computed based on the sum of the weighted average number of common shares and potentially dilutive common shares outstanding during the period.

Potentially dilutive common shares consist of shares issuable under the 2023 Notes, stock options and restricted stock. Although we paid off the 2023 Notes in May 2023, it would have a dilutive impact when the average market price of our common stock exceeds the maximum conversion price during the three months ended March 31, 2023. It was our intent and policy to settle conversions through combination settlement, which involved payment in cash equal to the principal portion and delivery of shares of common stock for the excess of the conversion value over the principal portion. Potentially dilutive common shares from stock options and restricted stock are determined using the average share price for each period under the treasury stock method. In addition, the following amounts are assumed to be used to repurchase shares: proceeds from exercise of stock options and the average amount of unrecognized compensation expense for the awards. See *Note 9, Stockholders’ Equity*.

In accordance with ASC 260, *Earnings per Share*, if a company had a discontinuing operation, the company uses income from continuing operations, adjusted for preferred dividends and similar adjustments, as its control number to determine whether potential common shares are dilutive. The following table presents the calculation of weighted average shares used to calculate basic and diluted earnings per share (in thousands):

	Three months ended March 31,	
	2024	2023
Weighted average shares outstanding:	17,732	17,063
Dilutive potential common shares:		
Restricted stock	118	86
Stock options	272	341
2023 convertible senior notes	—	484
Shares used to compute diluted income per share	18,122	17,974
Potentially dilutive shares excluded from calculation due to anti-dilutive effect	2,007	4,359

Accounting Standards Not Yet Adopted

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures*. The update, among other things, requires disclosure of certain significant segment expenses. We will adopt the updated accounting guidance in our Annual Report on Form 10-K for the year ending December 31, 2024. We do not expect the adoption of the new accounting guidance will have a material impact to our consolidated financial statements.

In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures*. The update requires a public business entity to disclose, on an annual basis, a tabular rate reconciliation using both percentages and currency amounts, broken out into specified categories with certain reconciling items further broken out by nature and jurisdiction to the extent those items exceed a specified threshold. In addition, all entities are required to disclose income taxes paid, net of refunds received disaggregated by federal, state/local, and foreign and by jurisdiction if the amount is at least 5% of total income tax payments, net of refunds received. Adoption of the ASU allows for either the prospective or retrospective application of the amendment and is effective for annual periods beginning after December 15, 2024, with early adoption permitted. The Company has not yet completed its assessment of the impact of ASU 2023-09 on our consolidated financial statements.

We do not believe that any other recently issued, but not yet effective accounting pronouncements, if adopted, would have a material impact on our consolidated financial statements or disclosures.

2. Sale of Pelican Business and Investment in Primrose Bio

On September 18, 2023, we entered into a merger agreement, pursuant to which our subsidiary, Pelican Technology Holdings, Inc. (“Pelican”) became a wholly owned subsidiary of Primrose Bio. Primrose Bio is a private company focused on synthetic biology. Pelican has developed technology related to PET (protein expression technology) and PelicCRM197 (vaccine material), and has property and equipment, as well as leased property in San Diego, CA. As part of the transaction, we received 2,146,957 common shares, 4,278,293 preferred shares and 474,746 restricted shares of Primrose Bio. Simultaneous with the merger, we entered into a purchase and sale agreement with Primrose Bio and contributed \$15.0 million in exchange for 50.0% of potential development milestones and certain commercial milestones from two contracts previously entered into by Primordial Genetics. In addition, starting January 1, 2025, we will receive 25% of sales revenue of PelicCRM197 above \$3.0 million and 35% of all PelicCRM197 licensing revenue in perpetuity.

We retained contractual relationships utilizing the Pelican Expression Technology, including the commercial royalty rights to Jazz’s Rylaze, Merck’s Vaxneuvance and V116 vaccines, Alvogen’s Teriparatide, Serum Institute of India’s vaccine programs, including Pneumosil and MenFive vaccines, among others.

We determined that the sale of Pelican meets the definition of a deconsolidation of a business. Net assets sold together with allocated goodwill and cash consideration paid were as follows (in thousands):

Property and equipment, net	\$	8,250
Intangible assets		19,895
Other assets		717
Operating lease right-of-use assets		8,693
Finance lease right-of-use assets		20
Accrued liabilities		(630)
Deferred revenue		(495)
Long-term operating lease liabilities		(8,445)
Other liabilities		(74)
	Net assets sold	27,931
	Allocated goodwill	4,132
	Cash consideration paid	15,000
	\$	47,063

Fair value of the consideration received includes the following (in thousands):

Equity method investment	\$	13,706
Equity securities		32,278
Derivative assets		3,200
	\$	49,184

Goodwill allocated to the selling business based on the relative fair value of the Pelican business and Ligand that was written off was \$4.1 million, resulting in a \$2.1 million gain on sale of Pelican recorded to income (loss) from operations for the year ended December 31, 2023.

Transaction costs of \$1.2 million were allocated to the equity method investment and equity securities based on the relative fair value.

As described above, we will receive 25% of sales revenue of PelicCRM197 above \$3.0 million and 35% of all PelicCRM197 licensing revenue in perpetuity. Consideration under the loss recovery model and they will be measured based on the gain contingency model under ASC 450, *Contingencies*, and thus, will be recognized as the underlying contingencies are resolved.

In addition, we will receive 50.0% of potential development milestones and certain commercial milestones from two contracts previously entered into by Primordial Genetics. The considerations were recognized as derivative assets with a fair value of \$3.2 million, at the disposition date, which was included under other long-term asset in our condensed consolidated balance sheet. They are recognized as derivative assets under ASC 815, *Derivatives and Hedging*, as they have two underlyings (development and commercial milestones) and (i) the commercial milestones are dependent on the development milestones and (ii) the commercial milestone underlying is not determined to be predominate. The derivative assets are recorded at fair value as of September 18, 2023, and will be marketed to fair value at each reporting period going forward. During the three months ended March 31, 2024, a gain of \$0.2 million was recorded to market the derivative assets to fair value. Any change in fair

value is recorded to other non-operating income (expense) in our consolidated statement of operations. For additional information, see *Note 6, Fair Value Measurement*.

Investment in Primrose Bio

We account for our common stock investment in Primrose Bio under the equity method as we have the ability to exercise significant influence over its operating and financial results. In applying the equity method, we record the investment at fair value. Our proportionate share of net loss of Primrose Bio is recorded in our consolidated statements of operations. Our equity method investments are reviewed for indicators of impairment at each reporting period and are written down to fair value if there is evidence of a loss in value that is other-than-temporary. Our share of the net loss of Primrose Bio for three months ended March 31, 2024 was \$2.4 million, which reduced Ligand's equity method investment accordingly. Any income or loss from our equity method investments are recorded to other non-operating income (expense) in our consolidated statement of operations.

We determined that the Series A preferred stock investment in Primrose Bio did not have a readily determinable fair value and therefore elected the measurement alternative in ASC 321 to subsequently record the investment at cost, less any impairments, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer. When fair value becomes determinable, from observable price changes in orderly transactions, our investment will be marked to fair value. There have been no observable price changes or impairments identified for the three months ended March 31, 2024.

During the fourth quarter of 2023, our President and Chief Operating Officer, Matt Korenberg, became a board member of Primrose Bio.

3. Acquisition

Novan

On September 27, 2023, we closed the transaction to acquire certain assets of Novan, Inc. ("Novan") pursuant to the agreement we entered into with Novan on July 17, 2023 for \$15.0 million in cash (which agreement contemplated Novan filing for bankruptcy relief) and provide up to \$15.0 million in debtor-in-possession ("DIP") financing inclusive of a \$3.0 million bridge loan funded on the same day. Novan filed for Chapter 11 reorganization on July 17, 2023. On September 27, 2023, the bankruptcy court approved our \$12.2 million bid to purchase from Novan its lead product candidate berdazimer gel, 10.3%, all other assets related to the NITRICIL technology platform and the rights to one commercial stage asset. The remaining commercial assets of Novan will be sold to other parties. The approved \$12.2 million bid was credited to the \$15.0 million DIP financing, with the balance of \$2.8 million and accrued interest repaid to us.

The acquisition was accounted for as business combination. We recorded \$3.1 million of acquisition-related costs for legal, due diligence and other costs in connection with the acquisition within operating expenses in our condensed consolidated statement of operations for the year ended December 31, 2023.

During the three months ended March 31, 2024, we finalized purchase accounting for Novan acquisition. The following table sets forth an allocation of the purchase price to the identifiable tangible and intangible assets acquired and liabilities assumed, with the excess recorded to goodwill (in thousands):

Restricted cash	\$	583
Property and equipment, net		13,054
Operating lease right-of-use asset		3,683
Other assets		137
Deferred tax asset		1,013
Intangible assets acquired		10,700
Goodwill		3,709
Deferred revenue		(4,508)
Operating lease liabilities		(3,683)
Other liabilities		(13,700)
Cash paid for Novan, including restricted cash received		10,988
DIP loan fees and interest		1,162
Total consideration	\$	12,150

None of the goodwill is deductible for tax purposes. Acquired intangible assets of \$10.7 million related to core technology. The fair value of the core technology was based on the discounted cash flow method that estimated the present value of the potential royalties, milestones, and collaboration revenue streams derived from the licensing of the related technologies. These projected cash flows were discounted to present value using a discount rate of 29%. The fair value of the core technology is being amortized on a straight-line basis over the estimated useful life of 15 years.

Acquired other liabilities of \$13.7 million related to a royalty and milestone payments purchase agreement, entered by Novan in 2019 and assumed as part of the acquisition, which previously provided Novan \$25.0 million of funding used primarily in the clinical development of berdazimer gel, 10.3%. Pursuant to the purchase agreement, Novan will pay ongoing quarterly payments, calculated based on an applicable percentage per product of any upfront fees, milestone payments, royalty payments or equivalent payments received by Novan pursuant to any out-license agreement, net of any upfront fees, milestone payments, royalty payments or equivalent payments paid by Novan to third parties pursuant to any agreements under which Novan has in-licensed intellectual property with respect to such products. If Novan decides to commercialize any product on its own following regulatory approval, as opposed to commercializing through an out-license agreement or other third-party arrangement, Novan will be obligated to pay a low single digits royalty on net sales of such products. This contract liability was fair valued based on the discounted cash flow method that estimated the present value of the potential royalties, milestones, and collaboration revenue streams derived from the related programs mentioned above, by applying a discount rate of 14.0% (revenue risk-adjusted discount rate).

4. Spin-off of OmniAb

On March 23, 2022, we entered into the Separation Agreement to separate our OmniAb Business and the Merger Agreement, pursuant to which APAC would combine with OmniAb, and acquire Ligand's OmniAb Business, in a Reverse Morris Trust transaction (collectively, the "Transactions").

After the closing date of the Transactions on November 1, 2022, the historical financial results of OmniAb have been reflected in our consolidated financial statements as discontinued operations under GAAP for all periods presented through the date of the Distribution. Pursuant to the Transaction Agreements, Ligand contributed to OmniAb cash and certain specific assets and liabilities constituting the OmniAb Business. Pursuant to the Distribution, Ligand distributed on a pro rata basis to its shareholders as of October 26, 2022 shares of the common stock of OmniAb representing 100% of Ligand's interest in OmniAb. Immediately following the Distribution, Merger Sub merged with and into OmniAb, with OmniAb continuing as the surviving company in the merger and as a wholly owned subsidiary of New OmniAb. The entire transaction was completed on November 1, 2022, and following the merger, New OmniAb is an independent, publicly traded company whose common stock trades on Nasdaq under the symbol "OABI." After the Distribution, we do not beneficially own any shares of common stock in OmniAb and no longer consolidate OmniAb into our financial results for periods ending after November 1, 2022.

Discontinued operations

In connection with the merger, the Company determined its antibody discovery business qualified for discontinued operations accounting treatment in accordance with ASC 205-20. We recognized a \$1.7 million tax provision adjustment related to deferred taxes, during the year ended December 31, 2023, that was attributable to the discontinued operations.

5. Financial Royalty Assets, net (formerly known as Commercial License Rights)

Financial royalty assets consist of the following (in thousands):

	March 31, 2024			December 31, 2023		
	Gross carrying value ⁽²⁾	Allowance ⁽¹⁾	Net carrying value ⁽²⁾	Gross carrying value	Allowance ⁽¹⁾	Net carrying value
Elutia (CorMatrix)	\$ 12,680	\$ (4,458)	\$ 8,222	\$ 13,304	\$ (7,490)	\$ 5,814
Selexis	736	(64)	672	940	(179)	761
Ovid (Soticlestat)	30,310	(303)	30,007	30,310	(303)	30,007
Tolerance Therapeutics (TZIELD)	25,810	(101)	25,709	25,810	(101)	25,709
Ensifentrine inventors	3,827	(127)	3,700	—	—	—
Total financial royalty assets, net	\$ 73,363	\$ (5,053)	\$ 68,310	\$ 70,364	\$ (8,073)	\$ 62,291

(1) The amounts of allowance include cumulated allowance for changes in expected cash flows and cumulated allowance for current expected credit losses.

(2) The amounts include \$2.6 million current portion of Elutia financial royalty assets which represents an estimation for current quarter royalty receipts that are collected during the subsequent quarter. This portion is presented in other current assets on our condensed consolidated balance sheet as of March 31, 2024.

Financial royalty assets represent a portfolio of future milestone and royalty payment rights acquired from Selexis, S.A. (“Selexis”) in April 2013 and April 2015, CorMatrix Cardiovascular, Inc. (“CorMatrix”) in May 2016, which was later acquired by Aziyo (Aziyo changed its corporate name to Elutia Inc. (“Elutia”) in September 2023) in 2017, Ovid Therapeutics Inc. (“Ovid”) in October 2023, Tolerance Therapeutics, Inc. (“Tolerance Therapeutics”) in November 2023, and from certain ensifentrine inventors in March 2024.

There was no impairment loss for the three months ended March 31, 2024 and 2023.

Elutia Agreement

In 2016, Ligand entered into a purchase agreement to acquire certain financial royalty assets from CorMatrix. In 2017, CorMatrix sold its marketed products to Elutia where Elutia assumed the Ligand royalty obligation. In 2017, we amended the terms of the royalty agreement with Elutia where we received \$10 million to buydown the royalty rates on the products CorMatrix sold to Elutia (the “CorMatrix Asset Sale”). Per the amended agreement with Elutia, we will receive a 5% royalty, with certain annual minimum payments, on the products Elutia acquired in the CorMatrix Asset Sale and up to \$10 million of milestones tied to cumulative net sales of these products. The royalty agreement will terminate on May 31, 2027.

During 2023, due to Elutia's nonpayment of the minimum payments over several quarters, we placed the Elutia asset on the non-accrual method. During the three months ended March 31, 2024, the Company executed an amendment to our agreement with Elutia which allowed us to reliably estimate future cash flows. As such, the Elutia asset was switched from the non-accrual method to the effective interest method during the three months ended March 31, 2024. As of March 31, 2024, we further considered the current and expected future economic and market conditions, current company performance and recent payments received from Elutia, and recorded a \$3.0 million reduction to Elutia allowance of expected credit loss. This credit loss adjustment was recorded as a gain in general and administrative expense in our consolidated statement of operations for the three months ended March 31, 2024.

Soticlestat Agreement

In October 2023, we made an investment of \$30 million to acquire a 13% portion of the royalties and milestones owed to Ovid Therapeutics related to the potential approval and commercialization of soticlestat. As soticlestat is in Phase 3 clinical trials, management has placed the investment on the non-accrual method until we are able to reliably estimate future cash flows.

TZIELD Agreement

In November 2023, we acquired Tolerance Therapeutics for \$20 million in cash. Tolerance Therapeutics is a holding company, owned by the inventors of TZIELD (teplizumab), and is owed a royalty of less than 1% on worldwide net sales. TZIELD is marketed by Sanofi in 2023. Due to the early stages of TZIELD's commercialization, management has placed the investment on the non-accrual method until we are able to reliably estimate future cash flows.

Ensifentrine Inventors Agreements

In March 2024, we acquired future milestone and royalty rights related to ensifentrine from certain ensifentrine inventors for a total of \$3.8 million. Such future milestones and royalties will be due from Verona Pharma plc (Nasdaq: VRNA) who anticipates a PDUFA action date of June 26, 2024 for review of ensifentrine for the maintenance treatment of patients with chronic obstructive pulmonary disease (“COPD”). If approved, ensifentrine is planned for a commercial launch by Verona in the U.S. market in the second half of 2024. As FDA approval is not yet obtained, management has placed the investment on the non-accrual method until we are able to reliably estimate future cash flows.

6. Fair Value Measurements

Assets and Liabilities Measured on a Recurring Basis

The following table presents the hierarchy for our assets and liabilities measured at fair value (in thousands):

	March 31, 2024				December 31, 2023			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets:								
Short-term investments, excluding Viking ⁽¹⁾	\$ 15,663	\$ 162,837	\$ —	\$ 178,500	\$ 7,291	\$ 107,879	\$ —	\$ 115,170
Investment in Viking common stock	82,000	—	—	82,000	32,185	—	—	32,185
Derivative assets ⁽²⁾	—	—	3,727	3,727	—	—	3,531	3,531
Total assets	\$ 97,663	\$ 162,837	\$ 3,727	\$ 264,227	\$ 39,476	\$ 107,879	\$ 3,531	\$ 150,886
Liabilities:								
Contingent liabilities - CyDex	\$ —	\$ —	\$ 218	\$ 218	\$ —	\$ —	\$ 320	\$ 320
Contingent liabilities - Metabasis ⁽³⁾	—	2,797	—	2,797	—	2,878	—	2,878
Total liabilities	\$ —	\$ 2,797	\$ 218	\$ 3,015	\$ —	\$ 2,878	\$ 320	\$ 3,198

(1) Excluding our investment in Viking, corporate equity securities, and US government securities, our short-term investments in marketable debt and equity securities are classified as available-for-sale securities based on management's intentions and are at level 2 of the fair value hierarchy, as these investment securities are valued based upon quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market. Short-term investments in bond funds are valued at their net asset value (NAV) on the last day of the period. We have classified marketable securities with original maturities of greater than one year as short-term investments based upon our ability and intent to use any and all of those marketable securities to satisfy the liquidity needs of our current operations. In addition, we had investment in warrants resulting from Seelos Therapeutics Inc. milestone payments that were settled in shares during the first quarter of 2019 and were at level 3 of the fair value hierarchy, based on Black-Scholes value estimated by management on the last day of the period. This investment in warrants expired in January 2024.

(2) In connection with the Purchase and Sale Agreement with Primrose Bio, we will receive 50.0% of potential development milestones and certain commercial milestones from two contracts previously entered into by Primordial Genetics. The considerations were recognized as derivative assets included under other long-term asset in our condensed consolidated balance sheet. They are recognized as derivative assets under ASC 815, Derivatives and Hedging, as they have two underlyings (development and commercial milestones) and (i) the commercial milestones are dependent on the development milestones and (ii) the commercial milestone underlying is not determined to be predominate. The fair value of the derivative assets was determined using a discounted cash flow approach using a discount rate inline with the stages of the underlying contracts.

(3) In connection with our acquisition of Metabasis in January 2010, we issued Metabasis stockholders four tradable CVRs, one CVR from each of four respective series of CVR, for each Metabasis share. The CVRs entitle Metabasis stockholders to cash payments as frequently as every six months as cash is received by us from proceeds from the sale or partnering of any of the Metabasis drug development programs, among other triggering events. The liability for the CVRs is determined using quoted prices in a market that is not active for the underlying CVR. The carrying amount of the liability may fluctuate significantly based upon quoted market prices and actual amounts paid under the agreements may be materially different than the carrying amount of the liability. Several of the Metabasis drug development programs have been outlicensed to Viking, including VK2809. VK2809 is a novel selective TR- β agonist with potential in multiple indications, including hypercholesterolemia, dyslipidemia, NASH, and X-ALD. Under the terms of the agreement with Viking, we may be entitled to up to \$375 million of development, regulatory and commercial milestones and tiered royalties on potential future sales including a \$10 million payment upon initiation of a Phase 3 clinical trial. During the three months ended March 31, 2024, we adjusted the balance of the Metabasis CVR liability by decreasing \$0.1 million to mark to market.

A reconciliation of the level 3 financial instruments as of March 31, 2024 is as follows (in thousands):

Assets	
Fair value of level 3 financial instruments as of December 31, 2023	\$ 3,531
Fair value adjustments to derivative assets	196
Fair value of level 3 financial instruments as of March 31, 2024	\$ 3,727
Liabilities	
Fair value of level 3 financial instruments as of December 31, 2023	\$ 320
Payments to CVR holders and other contingent payments	(150)
Fair value adjustments to contingent liabilities	48
Fair value of level 3 financial instruments as of March 31, 2024	\$ 218

Assets Measured on a Non-Recurring Basis

We apply fair value techniques on a non-recurring basis associated with valuing potential impairment losses related to our goodwill, indefinite-lived intangible assets and long-lived assets.

We evaluate goodwill and indefinite-lived intangible assets annually for impairment and whenever circumstances occur indicating that goodwill might be impaired. We determine the fair value of our reporting unit based on a combination of inputs, including the market capitalization of Ligand, as well as Level 3 inputs such as discounted cash flows, which are not observable from the market, directly or indirectly. We determine the fair value of our indefinite-lived intangible assets using the income approach based on Level 3 inputs.

There was no impairment of our goodwill, indefinite-lived assets, or long-lived assets recorded during the three months ended March 31, 2024 and March 31, 2023.

Fair Value of Financial Instruments

Our cash and cash equivalents, accounts receivable, other current assets, financial royalty assets, accounts payable, accrued liabilities, deferred revenue, current operating lease liabilities, current finance lease liabilities and Novan other long-term liabilities are financial instruments and are recorded at cost in the consolidated balance sheets. The estimated fair value of these financial instruments approximates their carrying value due to their short-term nature.

7. Debt

Revolving Credit Facility

On October 12, 2023, we entered into a \$75.0 million revolving credit facility (the "Revolving Credit Facility") with Citibank, N.A. as the Administrative Agent (as defined in the Credit Agreement). We, our material domestic subsidiaries, as Guarantors (as defined in the Credit Agreement), and the Lenders (as defined in the Credit Agreement) entered into a credit agreement (the "Credit Agreement") with the Administrative Agent, under which the Lenders, the Swingline Lender and the L/C Issuer (each as defined in the Credit Agreement) agreed to make loans and other financial accommodations to us in an aggregate amount of up to \$75.0 million. Borrowings under the Revolving Credit Facility accrue interest at a rate equal to either Term Secured Overnight Financing Rate ("Term SOFR") or a specified base rate plus an applicable margin linked to our leverage ratio, ranging from 1.75% to 2.50% per annum for Term SOFR loans and 0.75% to 1.50% per annum for base rate loans. The Revolving Credit Facility is subject to a commitment fee payable on the unused Revolving Credit Facility commitments ranging from 0.30% to 0.45%, depending on our leverage ratio. During the term of the Revolving Credit Facility, we may borrow, repay and re-borrow amounts available under the Revolving Credit Facility, subject to voluntary reductions of the swing line, letter of credit and revolving credit commitments.

Borrowings under the Credit Agreement are secured by certain of our collateral and that of the Guarantors. In specified circumstances, additional guarantors are required to be added. The Credit Agreement contains customary affirmative and negative covenants, including certain financial maintenance covenants, and events of default applicable to us. In the event of violation of the representations, warranties and covenants made in the Credit Agreement, we may not be able to utilize the Revolving Credit Facility or repayment of amounts owed thereunder could be accelerated.

As of March 31, 2024, we had \$74.4 million in available borrowing under the Revolving Credit Facility, after utilizing \$0.6 million for letter of credit. The maturity date of the Revolving Credit Facility is October 12, 2026.

As of March 31, 2024, there were no events of default or violation of any covenants under our financing obligations.

8. Income Tax

Our effective tax rate may vary from the U.S. federal statutory tax rate due to the change in the mix of earnings in various state jurisdictions with different statutory rates, benefits related to tax credits, and the tax impact of non-deductible expenses, stock award activities and other permanent differences between income before income taxes and taxable income. The effective tax rate for continuing operations for the three months ended March 31, 2024 and 2023 was 24.1% and 21.5%, respectively. The variance from the U.S. federal statutory tax rate of 21% for the three months ended March 31, 2024 was primarily due to Internal Revenue Code Section 162(m) limitation on deduction for officer compensation, non-deductible incentive stock option (ISO) related stock compensation expense, which were partially offset by foreign derived intangible income tax benefit during the period. The variance from the U.S. federal statutory tax rate of 21% for the three months ended March 31, 2023 was primarily due to Internal Revenue Code Section 162(m) limitation on deduction for officer compensation, non-deductible ISO related stock compensation expense, which were partially offset by foreign derived intangible income tax benefit during the period. during the period.

9. Stockholders' Equity

We grant options and awards to employees and non-employee directors pursuant to a stockholder approved stock incentive plan, which is described in further detail in *Note 10, Stockholders' Equity*, of the Notes to Consolidated Financial Statements in our 2023 Annual Report.

The following is a summary of our stock option and restricted stock activity and related information:

	Stock Options		Restricted Stock Awards	
	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Grant Date Fair Value
Balance as of December 31, 2023	2,640,458	\$ 65.70	350,905	\$ 81.22
Granted	598,142	\$ 86.58	295,474	\$ 85.50
Options exercised/RsUs vested	(295,498)	\$ 51.81	(114,016)	\$ 87.27
Forfeited	(32,150)	\$ 69.28	(35,264)	\$ 65.94
Balance as of March 31, 2024	2,910,952	\$ 71.36	497,099	\$ 83.46

As of March 31, 2024, outstanding options to purchase 1.6 million shares were exercisable with a weighted average exercise price per share of \$67.37.

Employee Stock Purchase Plan

The price at which common stock is purchased under the Amended Employee Stock Purchase Plan, or ESPP, is equal to 85% of the fair market value of the common stock on the first or last day of the offering period, whichever is lower. As of March 31, 2024, 30,801 shares were available for future purchases under the ESPP.

At-the Market Equity Offering Program

On September 30, 2022, we filed a registration statement on Form S-3 (the "Shelf Registration Statement"), which became automatically effective upon filing, covering the offering of common stock, preferred stock, debt securities, warrants and units.

On September 30, 2022, we also entered into an At-The-Market Equity Offering Sales Agreement (the "Sales Agreement") with Stifel, Nicolaus & Company, Incorporated (the "Agent"), under which we may, from time to time, sell shares of our common stock having an aggregate offering price of up to \$100.0 million in "at the market" offerings through the Agent (the "ATM Offering"). The Shelf Registration Statement included a prospectus covering the offering, issuance and sale of up to \$100.0 million of our common stock from time to time through the ATM Offering. The shares to be sold under the Sales Agreement may be issued and sold pursuant to the Shelf Registration Statement. As of March 31, 2024, we have not issued any shares of common stock in the ATM Offering.

Share Repurchases

Our Board of Directors (the "Board") has approved a stock repurchase program authorizing, but not requiring, the repurchase of up to \$50.0 million of our common stock from time to time through April 2026. We expect to acquire shares, if at all, primarily through open-market transactions in accordance with all applicable requirements of Rule 10b-18 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The timing and amount of repurchase transactions will be determined by management based on our evaluation of market conditions, share price, legal requirements and other factors. Authorization to repurchase \$50.0 million of our common stock remained available as of March 31, 2024.

10. Commitment and Contingencies

Legal Proceedings

We record an estimate of a loss when the loss is considered probable and estimable. Where a liability is probable and there is a range of estimated loss and no amount in the range is more likely than any other number in the range, we record the minimum estimated liability related to the claim in accordance with ASC 450, *Contingencies*. As additional information becomes available, we assess the potential liability related to our pending litigation and revises our estimates. Revisions in our estimates of potential liability could materially impact our results of operations.

On October 31, 2019, we received three civil complaints filed in the U.S. District Court for the Northern District of Ohio on behalf of several Indian tribes. The Northern District of Ohio is the Court that the Judicial Panel on Multi-District Litigation ("JPML") has assigned more than one thousand civil cases which have been designated as a Multi-District Litigation ("MDL") and captioned In Re: National Prescription Opiate Litigation. The allegations in these complaints focus on the activities of

defendants other than the Company and no individualized factual allegations have been advanced against us in any of the 3 complaints. We reject all claims raised in the complaints and intend to vigorously defend these matters.

From time to time, we may also become subject to other legal proceedings or claims arising in the ordinary course of our business. We currently believe that none of the claims or actions pending against us is likely to have, individually or in aggregate, a material adverse effect on our business, financial condition or results of operations. Given the unpredictability inherent in litigation, however, we cannot predict the outcome of these matters.

11. Subsequent Events

On May 7, 2024, we announced a \$75 million royalty financing agreement (the “Agenus Agreement”) with Agenus Inc. (“Agenus”). Under the terms of the Agenus Agreement, we will receive (i) 18.75% of the licensed royalties and 31.875% of the future licensed milestones paid to Agenus on six-partnered oncology programs, including BMS-986442 (Bristol Myers Squibb), AGEN2373 (Gilead Sciences), INCAGN2385 and INCAGN2390 (Incyte), MK-4830 (Merck), and UGN-301 (UroGen Pharma), and (ii) a synthetic 2.625% royalty on future global net sales of Agenus’ novel immuno-oncology botensilimab in combination with balstilimab (“BOT/BAL”) program, collectively subject to certain events which will adjust the royalty and milestone percentages paid to us. In addition, we have the option to commit an additional \$25 million in the same assets on a pro rata basis. We have also agreed to allow Agenus to raise up to an additional \$125 million bringing the total syndicated purchase price up to an aggregate of \$200 million.

As part of the Agenus Agreement, Agenus will grant us security over certain assets related to the programs included in the Agenus Agreement, subject to certain customary exceptions. Closing of the transaction is subject to customary conditions, including execution of customary ancillary documents for a transaction of this type. The transaction is expected to close in May 2024.

In connection with entry into the Agenus Agreement, Agenus issued us a warrant (“Warrant”) to purchase 867,052 shares of its common stock, at an exercise price equal to \$17.30. The exercise price of the Warrant and the number of shares issuable upon exercise of the Warrant are subject to adjustments for stock splits, combinations, stock dividends or similar events. The Warrant is exercisable until May 6, 2029.

Agenus’ BOT/BAL program received Fast Track Designation from the U.S. FDA in April 2023 for patients with metastatic, refractory colorectal cancer that is not microsatellite instability high or deficient mismatch repair, who do not have liver metastases, and who failed first and second line standard of care treatments. The capital will support Agenus’ upcoming Phase 3 BOT/BAL colorectal cancer trial and other key commercialization activities.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Caution: *This discussion and analysis may contain predictions, estimates and other forward-looking statements that involve a number of risks and uncertainties, including those discussed in Part II, Item 1A. Risk Factors. This outlook represents our current judgment on the future direction of our business. These statements include those related to our future results of operations and financial position, Captisol-related revenues and Kyprolis and other product royalty revenues and milestones under license agreements, product development, and product regulatory filings and approvals, and the timing thereof. Actual events or results may differ materially from our expectations. For example, there can be no assurance that our revenues or expenses will meet any expectations or follow any trend(s), that we will be able to retain our key employees or that we will be able to enter into any strategic partnerships or other transactions. We cannot assure you that we will receive expected Kyprolis, Captisol and other product revenues to support our ongoing business or that our internal or partnered pipeline products will progress in their development, gain marketing approval or achieve success in the market. In addition, ongoing or future arbitration, litigation or disputes with third parties may have a material adverse effect on us. Such risks and uncertainties, and others, could cause actual results to differ materially from any future performance suggested. We undertake no obligation to make any revisions to these forward-looking statements to reflect events or circumstances arising after the date of this quarterly report. This caution is made under the safe harbor provisions of Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act").*

We use our trademarks, trade names and services marks in this report as well as trademarks, trade names and service marks that are the property of other organizations. Solely for convenience, trademarks and trade names referred to in this report appear without the ® and ™ symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or that the applicable owner will not assert its rights, to these trade marks and trade names.

References to "Ligand Pharmaceuticals Incorporated," "Ligand," the "Company," "we" or "our" include Ligand Pharmaceuticals Incorporated and our wholly-owned subsidiaries.

Overview

We are a biopharmaceutical company enabling scientific advancement through supporting the clinical development of high-value medicines. We do this by providing financing, licensing our technologies or both. Our business model seeks to generate value for stockholders by creating a diversified portfolio of biopharmaceutical product revenue streams that are supported by an efficient and low corporate cost structure. Our goal is to offer investors an opportunity to participate in the promise of the biotech industry in a profitable and diversified manner. Our business model focuses on funding programs in mid- to late-stage drug development in return for economic rights, purchasing royalty rights in development stage or commercial biopharmaceutical products and licensing our technology to help partners discover and develop medicines. We partner with other pharmaceutical companies to leverage what they do best (late-stage development, regulatory management and commercialization) in order to generate our revenue. Our Captisol platform technology is a chemically modified cyclodextrin with a structure designed to optimize the solubility and stability of drugs. We have established multiple alliances, licenses and other business relationships with the world's leading biopharmaceutical companies including Amgen, Merck, Pfizer, Jazz, Takeda, Gilead Sciences and Baxter International.

Our revenue is generated primarily from royalties on sales of products commercialized by our partners, Captisol material sales, and contract revenue for license fees, regulatory and sales based milestone payments. Other operating income is primarily related to milestone income received for financial royalty assets that have been fully amortized or where there is no underlying asset recognized on the consolidated balance sheets. Also, we selectively pursue acquisitions and drug development funding opportunities that address high unmet clinical needs to bring in new assets, pipelines, and technologies to aid in generating additional potential new incremental revenue streams.

Business Updates

On May 7, 2024, we announced a \$100 million royalty financing agreement with Agenus, Inc. Under the terms of the agreement, in exchange for an initial \$75 million payment, we will receive 18.75% of the royalties and 31.875% of the future milestones on six Agenus-partnered oncology programs including BMS-986442 (Bristol Myers Squibb), AGEN2373 (Gilead Sciences), INCAGN2385 and INCAGN2390 (Incyte), MK-4830 (Merck), and UGN-301 (UroGen Pharma). We will also receive a 2.625% royalty on future global net sales of Agenus' novel immuno-oncology botensilimab in combination with balstilimab ("BOT/BAL") program. Agenus' BOT/BAL program received Fast Track Designation from the U.S. FDA in April 2023 for patients with metastatic, refractory colorectal cancer that is not MSI-H/dMMR, who do not have liver metastases, and who failed first and second line standard of care treatments. The capital will support Agenus' upcoming Phase 3 BOT/BAL

colorectal cancer trial and other key commercialization activities. We have an option to invest an additional \$25 million to increase its economics on a pro rata basis for the additional investment.

On April 3, 2024, we announced the creation of Pelthos Therapeutics under the leadership of Scott Plesha as Chief Executive Officer. Pelthos is focused on the commercialization of innovative, safe, and efficacious therapeutic products for patients suffering from conditions with limited treatment options. ZELSUVMI™ (berdazimer topical gel, 10.3%), its first product, is the first and only FDA-approved prescription medicine for the treatment of the highly transmissible molluscum contagiosum (molluscum) viral skin infection in adults and pediatric patients one year of age and older. It can be applied by patients, parents, or caregivers at home, outside of a physician's office, or other medical setting. ZELSUVMI received a Novel Drug designation from the U.S. FDA in January 2024 to treat molluscum viral skin infection. ZELSUVMI was developed using Pelthos' proprietary nitric oxide-based NITRICIL™ technology platform. Commercial availability of ZELSUVMI in the United States is expected by late 2024. The rights to ZELSUVMI and all assets related to the NITRICIL technology platform were acquired from Novan, Inc. in September 2023.

Portfolio Updates

On April 24, 2024, Trave Therapeutics and CSL Vifor (ASX: CSL), Trave's commercial partner in Europe, gained European Commission conditional marketing authorization (CMA) for FILSPARI (sparsentan) for the treatment of adults with primary IgA nephropathy (IgAN). All member states of the EU, including Iceland, Liechtenstein, and Norway are included in the CMA. The European Commission's decision follows the Committee for Medicinal Products for Human Use (CHMP)'s positive opinion in February 2024, based on results from the pivotal Phase 3 PROTECT study of FILSPARI in IgAN. The PROTECT study met its primary endpoint at the pre-specified interim analysis with statistical significance.

On May 6, 2024, Trave Therapeutics announced the FDA granted Priority Review for its sNDA to convert FILSPARI® (sparsentan) from accelerated approval to full approval for the treatment of IgAN in the U.S. with a PDUFA target action date of September 5, 2024.

On April 24, 2024, Viking announced that in the first quarter this year they completed the 52-week biopsies for the Phase 2b VOYAGE study of VK2809 in biopsy-confirmed NASH and fibrosis. As we have previously mentioned, the study successfully achieved its primary endpoint after 12 weeks of treatment and affirmed VK2809's potent effect on liver fat, along with its favorable tolerability and safety profile. Viking plans to report data on histologic changes assessed after 52 weeks of treatment later in the second quarter of 2024.

On April 15, 2024, Marinus Pharmaceuticals provided an update on the Phase 3 RAISE trial evaluating the safety and efficacy of IV ganaxolone in patients with refractory status epilepticus. The trial did not meet pre-defined stopping criteria at the interim analysis; Marinus has completed RAISE enrollment at approximately 100 patients with topline results expected in the summer of 2024. Future development of IV ganaxolone in refractory status epilepticus will be assessed following review of the final RAISE results. Marinus remains blinded to the RAISE trial data.

Results of Operations

Revenue and Other Income

(Dollars in thousands)	Q1 2024	Q1 2023	Change	% Change
Revenue from intangible royalty assets	\$ 18,357	\$ 17,154	\$ 1,203	7 %
Income from financial royalty assets	738	493	245	50 %
Royalties	19,095	17,647	1,448	8 %
Captisol	9,212	10,622	(1,410)	(13)%
Contract revenue and other income	2,671	15,710	(13,039)	(83)%
Total revenue and other income	<u>\$ 30,978</u>	<u>\$ 43,979</u>	<u>\$ (13,001)</u>	<u>(30)%</u>

Total revenue and other income decreased by \$13.0 million, or 30%, to \$31.0 million in Q1 2024 compared to \$44.0 million in Q1 2023. Revenue from intangible royalty assets increased by \$1.2 million, or 7%, to \$18.4 million in Q1 2024 compared to \$17.2 million in Q1 2023. Income from financial royalty assets increased by \$0.2 million, or 50%, to \$0.7 million in Q1 2024 compared to \$0.5 million in Q1 2023. Captisol sales decreased by \$1.4 million, or 13%, to \$9.2 million in Q1 2024 primarily due to the timing of customer orders. Contract revenue and other income decreased by \$13.0 million, or 83%, to \$2.7 million in Q1 2024 compared to \$15.7 million in Q1 2023 primarily due to the milestone tied to FDA approval of Trave's FILSPARI in Q1 2023.

Revenue from intangible royalty assets is a function of our partners' product sales and the applicable royalty rate. Kyprolis royalty rates are under a tiered royalty rate structure with the highest tier being 3%. Evomela has a fixed royalty rate of 20%. Teriparatide injection has a tiered royalty between 25% and 40% on sales that have been adjusted for certain deductible items as defined in the respective license agreement. The Rylaze and Vaxneuvance royalty rates are in the low single digits. Filspari has a fixed royalty rate of 9%.

The following table represents revenue from intangible royalty assets by program (in millions):

(in millions)	Q1 2024 Estimated Partner Product Sales	Effective Royalty Rate	Q1 2024 Royalty Revenue	Q1 2023 Estimated Partner Product Sales	Effective Royalty Rate	Q1 2023 Royalty Revenue
Kyprolis	\$ 401.0	1.6 %	\$ 6.6	\$ 378.9	1.6 %	\$ 6.2
Evomela	7.0	20.0 %	1.4	13.0	20.0 %	2.6
Teriparatide injection ^(a)	7.8	25.6 %	2.0	10.5	33.3 %	3.5
Rylaze	102.8	2.9 %	3.0	83.0	3.1 %	2.6
Filspari	20.0	9.0 %	1.8	—	—	—
Vaxneuvance	219.0	0.6 %	1.4	106.0	0.6 %	0.6
Other	86.4	2.5 %	2.2	52.9	3.2 %	1.7
Total	<u>\$ 844.0</u>		<u>\$ 18.4</u>	<u>\$ 644.3</u>		<u>\$ 17.2</u>

(a) Teriparatide injection sales have been adjusted for certain deductible items as defined in the respective license agreement.

Contract revenue includes service revenue, license fees and development, regulatory and sales based milestone payments.

Operating Costs and Expenses

(Dollars in thousands)	Q1 2024	% of Revenue	Q1 2023	% of Revenue
Cost of Captisol	\$ 2,882		\$ 3,717	
Amortization of intangibles	8,186		8,539	
Research and development	5,971		6,663	
General and administrative	10,951		10,855	
Total operating costs and expenses	<u>\$ 27,990</u>	90%	<u>\$ 29,774</u>	68%

Total operating costs and expenses decreased by \$1.8 million, or 6%, to \$28.0 million in Q1 2024 compared to \$29.8 million in Q1 2023.

Cost of Captisol decreased by \$0.8 million, or 22%, to \$2.9 million in Q1 2024 compared to \$3.7 million in Q1 2023, with the decrease primarily due to the lower Captisol sales this quarter.

Amortization of intangibles decreased by \$0.4 million, or 4%, to \$8.2 million in Q1 2024 compared to \$8.5 million in Q1 2023 with the decrease primarily due to the cessation of amortization of certain Pelican intangibles resulting from the sale of the Pelican business.

At any one time, we are working on multiple R&D programs. As such, we generally do not track our R&D expenses on a specific program basis. Research and development expense was \$6.0 million for Q1 2024, compared with \$6.7 million for the same period of 2023, with the decrease primarily due to sale of the Pelican business in September 2023.

General and administrative expense was \$11.0 million for Q1 2024, compared to \$10.9 million for the same period in 2023.

Non-operating Income and Expenses

(Dollars in thousands)	Q1 2024	Q1 2023	Change
Gain from short-term investments	\$ 110,772	\$ 39,533	\$ 71,239
Interest income	2,020	1,435	585
Interest expense	(141)	(240)	99
Gain on derivative instruments	196	—	196
Other non-operating income (expense), net	(2,388)	603	(2,991)
Total non-operating income and expenses, net	\$ 110,459	\$ 41,331	\$ 69,128

The fluctuation in the gain (loss) from short-term investments is primarily driven by the changes in the fair value of our ownership in Viking common stock and other equity security investments, which contributed an unrealized gain of \$50.8 million in Q1 2024 as compared to an unrealized gain of \$19.0 million in Q1 2023. In addition, we recognized a total realized gain of \$60.0 million from the sales of 0.7 million shares of Viking common stock in Q1 2024. In Q1 2023, we sold 3.2 million shares of Viking common stock and recognized a realized gain of \$20.5 million in total.

Interest income consists primarily of interest earned on our short-term investments. The increase over the prior year was due to the increase in average investment balances in Q1 2024 compared to Q1 2023.

Interest expense consists primarily of the 0.75% coupon cash interest expense and the non-cash accretion of discount (including the amortization of debt issuance cost) on our 2023 Notes. In May 2023, the 2023 Notes matured, and we paid the remaining \$76.9 million principal amount and \$0.3 million accrued interest in cash, which contributed to the decrease in interest expense in Q1 2024 as compared to Q1 2023.

Other non-operating income (expense), net, in Q1 2024 decreased by \$3.0 million as compared to Q1 2023, primarily due to the equity method loss related to Primrose Bio in Q1 2024 and mark-to-market gains on CVRs in Q1 2023.

Income Tax Expense

(Dollars in thousands)	Q1 2024	Q1 2023	Change
Income before income taxes	\$ 113,447	\$ 55,536	\$ 57,911
Income tax expense	(27,308)	(11,922)	(15,386)
Income from operations	\$ 86,139	\$ 43,614	\$ 42,525
Effective tax rate	24.1 %	21.5 %	

We compute our income tax provision by applying the estimated annual effective tax rate to income from operations and adding the effects of any discrete income tax items specific to the period. The effective tax rate for the three months ended March 31, 2024 and 2023 was 24.1% and 21.5%, respectively. The variance from the U.S. federal statutory tax rate of 21% for the three months ended March 31, 2024 was primarily due to the Internal Revenue Code Section 162(m) limitation on deduction for officer compensation, non-deductible incentive stock option (ISO) related stock compensation expense, which were partially offset by foreign derived intangible income tax benefit during the period. The variance from the U.S. federal tax rate of 21% for the three months ended March 31, 2023 was primarily due to Internal Revenue Code Section 162(m) limitation on deduction for officer compensation, non-deductible ISO related stock compensation expense, which were partially offset by foreign derived intangible income tax benefit during the period.

Net Loss from Discontinued Operations

Net loss from discontinued operations for Q1 2024 and Q1 2023 was zero and \$1.7 million, respectively. See additional information in “Item 1. Condensed Consolidated Financial Statements—Notes to Condensed Consolidated Financial Statements—Note (4), Spin-off of OmniAb.”

Liquidity and Capital Resources

As of March 31, 2024, our cash, cash equivalents, and short-term investments totaled \$310.6 million, which increased by \$140.3 million from the end of last year due to factors described in the *Cash Flow Summary* below. Our primary source of liquidity, other than our holdings of cash, cash equivalents, and short-term investments, has been cash flows from operations.

Our ability to generate cash from operations provides us with the financial flexibility we need to meet operating, investing, and financing needs.

Historically, we have liquidated our short-term investments and/or issued debt and equity securities to finance our business needs as a supplement to cash provided by operating activities. Our short-term investments include U.S. government debt securities, investment-grade corporate debt securities, bond funds and certificates of deposit. We have established guidelines relative to diversification and maturities of our investments in order to provide both safety and liquidity. These guidelines are periodically reviewed and modified to take advantage of trends in yields and interest rates. Additionally, we own certain securities which are classified as short-term investments that we received as a result of a milestone and an upfront license payment as well as 1.0 million shares of common stock in Viking.

On September 30, 2022, we entered into an At-The-Market Equity Offering Sales Agreement (the “Sales Agreement”) with Stifel, Nicolaus & Company, Incorporated (the “Agent”), under which we may, from time to time, sell shares of our common stock having an aggregate offering price of up to \$100.0 million in “at the market” offerings through the Agent. Sales of the shares of common stock, if any, will be made at prevailing market prices at the time of sale, or as otherwise agreed with the Agent. The Agent will receive a commission from the Company of up to 3.0% of the gross proceeds of any shares of common stock sold under the Sales Agreement. Shares of our common stock may be issued and sold pursuant to the Sales Agreement under the registration statement on Form S-3 we filed on September 30, 2022. As of March 31, 2024, we have not sold any shares of common stock under the Sales Agreement.

Our Board of Directors has approved a stock repurchase program authorizing, but not requiring, the repurchase of up to \$50.0 million of our common stock from time to time through April 2026. We expect to acquire shares, if at all, primarily through open-market transactions in accordance with all applicable requirements of Rule 10b-18 of the Exchange Act. The timing and amount of repurchase transactions will be determined by management based on our evaluation of market conditions, share price, legal requirements and other factors. Authorization to repurchase \$50.0 million of our common stock remained available as of March 31, 2024.

On October 12, 2023, we entered into a \$75.0 million revolving credit facility (the “Revolving Credit Facility”) with Citibank, N.A. as the Administrative Agent. We, our material domestic subsidiaries, as Guarantors (as defined in the Credit Agreement), and the Lenders (as defined in the Credit Agreement) entered into a credit agreement (the “Credit Agreement”) with the Administrative Agent, under which the Lenders, the Swingline Lender and the L/C Issuer (each as defined in the Credit Agreement) agreed to make loans and other financial accommodations to us in an aggregate amount of up to \$75.0 million. Borrowings under the Revolving Credit Facility accrue interest at a rate equal to either Term SOFR Rate or a specified base rate plus an applicable margin linked to our leverage ratio, ranging from 1.75% to 2.50% per annum for Term SOFR Rate loans and 0.75% to 1.50% per annum for base rate loans. The Revolving Credit Facility is subject to a commitment fee payable on the unused Revolving Credit Facility commitments ranging from 0.30% to 0.45%, depending on our leverage ratio. During the term of the Revolving Credit Facility, we may borrow, repay and re-borrow amounts available under the Revolving Credit Facility, subject to voluntary reductions of the swing line, letter of credit and revolving credit commitments.

Borrowings under the Credit Agreement are secured by certain of our collateral and that of the Guarantors. In specified circumstances, additional guarantors are required to be added. The Credit Agreement contains customary affirmative and negative covenants, including certain financial maintenance covenants, and events of default applicable to us. In the event of violation of the representations, warranties and covenants made in the Credit Agreement, we may not be able to utilize the Revolving Credit Facility or repayment of amounts owed thereunder could be accelerated.

As of March 31, 2024, we had \$74.4 million in available borrowing under the Revolving Credit Facility, after utilizing \$0.6 million for letter of credit. The maturity date of the Revolving Credit Facility is October 12, 2026.

We believe that our existing funds, cash generated from operations and existing sources of and access to financing are adequate to fund our need for working capital, capital expenditures, debt service requirements, continued advancement of research and development efforts, potential stock repurchases and other business initiatives we plan to strategically pursue, including acquisitions and strategic investments.

As of March 31, 2024, we had \$3.0 million in fair value of contingent consideration liabilities associated with prior acquisitions to be settled in future periods.

Cash Flow Summary

(Dollars in thousands)

	Q1 2024		Q1 2023	
Net cash provided by (used in):				
Operating activities	\$	18,732	\$	33,948
Investing activities	\$	(3,775)	\$	10,549
Financing activities	\$	12,182	\$	(775)

During the three months ended March 31, 2024, we generated cash from operations primarily due to net income. During the three months ended March 31, 2024, we used cash in investing activities for purchases of short-term investments and financial royalty assets, partially offset by cash from sale and maturity of short-term investments, including Viking shares. During the three months ended March 31, 2024, we generated cash from financing activities primarily due to net proceeds from stock options exercises and ESPP.

During the three months ended March 31, 2023, we generated cash from operations primarily due to net income. We generated cash from investing activities primarily from sale and maturity of short-term investments including Viking shares.

Critical Accounting Policies and Estimates

Certain of our policies require the application of management judgment in making estimates and assumptions that affect the amounts reported in our consolidated financial statements and the disclosures made in the accompanying notes. Those estimates and assumptions are based on historical experience and various other factors deemed applicable and reasonable under the circumstances. The use of judgment in determining such estimates and assumptions is by nature, subject to a degree of uncertainty. Accordingly, actual results could differ materially from the estimates made. There have been no material changes in our critical accounting policies and estimates as compared to the critical accounting policies and estimates described in our 2023 Annual Report.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

There were no material changes to our market risks in the three months ended March 31, 2024, when compared to the disclosures in Item 7A of our 2023 Annual Report.

Item 4. Controls and Procedures

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures as of March 31, 2024 were effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

There were no changes in our internal control over financial reporting that occurred during the quarter ended March 31, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

For information that updates the disclosures set forth under Part I. Item 3. Legal Proceedings in our 2023 Annual Report, refer to *Note 10, Commitment and Contingencies: Legal Proceedings*, to the Condensed Consolidated Financial Statements contained in Part I. Item 1. of this report.

Item 1A. Risk Factors

We do not believe that there have been any material changes to the risk factors disclosed in Part I, Item 1A of our 2023 Annual Report. The risk factors described in our 2023 Annual Report are not the only risks we face. Factors we currently do not know, factors that we currently consider immaterial or factors that are not specific to us, such as general economic conditions, may also materially adversely affect our business or our consolidated operating results, financial condition or cash flows.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Rule 10b5-1 Trading Arrangements

From time to time, our officers (as defined in Rule 16a-1(f) of the Exchange Act) and directors may enter into Rule 10b5-1 or non-Rule 10b5-1 trading arrangements (as each such term is defined in Item 408 of Regulation S-K). During the three months ended March 31, 2024, none of our officers or directors adopted, modified or terminated any such trading arrangements.

Item 6. Exhibits

Exhibit Number	Description of Exhibit	Incorporated by Reference				Filed Herewith
		Form	File Number	Date of Filing	Exhibit Number	
3.1	Fifth Amended and Restated Bylaws of the Company	8-K	001-33093	4/19/2024	3.1	
31.1	Certification by Principal Executive Officer, Pursuant to Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification by Principal Financial Officer, Pursuant to Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certifications by Principal Executive Officer and Principal Financial Officer, Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101	The following financial information from our Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, formatted in iXBRL (inline eXtensible Business Reporting Language): (i) Consolidated Condensed Balance Sheets, (ii) Consolidated Condensed Statements of Operations, (iii) Consolidated Condensed Statement of Comprehensive Income, (iv) Consolidated Condensed Statements of Stockholders' Equity, (v) Consolidated Condensed Statements of Cash Flows, and (vi) the Notes to Consolidated Condensed Financial Statements.					X
104	The cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, formatted in Inline XBRL and contained in Exhibit 101.					X

* These certifications are deemed not filed for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of that section, nor shall they be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act.

SIGNATURES

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.

Date: May 8, 2024

By: /s/ Octavio Espinoza

Octavio Espinoza

Chief Financial Officer

Duly Authorized Officer and Principal Financial Officer

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/15d-14(a)
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Todd C. Davis, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2024

/s/ Todd C. Davis
Todd C. Davis
Chief Executive Officer
(Principal Executive Officer)

**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO EXCHANGE ACT RULE 13a-14(a)/15d-14(a)
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Octavio Espinoza, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ligand Pharmaceuticals Incorporated;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 8, 2024

/s/ Octavio Espinoza
Octavio Espinoza
Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

In connection with the Quarterly Report of Ligand Pharmaceuticals Incorporated (the “Company”) on Form 10-Q for the quarter ended March 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Todd C. Davis, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 8, 2024

/s/ Todd C. Davis

Todd C. Davis
Chief Executive Officer
(Principal Executive Officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing. A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

In connection with the Quarterly Report of Ligand Pharmaceuticals Incorporated (the “Company”) on Form 10-Q for the quarter ended March 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Octavio Espinoza, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 8, 2024

/s/ Octavio Espinoza

Octavio Espinoza
Chief Financial Officer
(Principal Financial Officer)

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing. A signed original of this written statement required

by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.