FORM 10-Q

Quarterly report pursuant to sections 13 or 15(d)

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FILER

LIGAND PHARMACEUTICALS INC

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SIC: **2834** Pharmaceutical preparations

Mailing Address
3911 SORRENTO VALLEY BLVD
SUITE 110
SAN DIEGO CA 92121

Business Address
3911 SORRENTO VALLEY BLVD
SUITE 110
SAN DIEGO CA 92121
858-550-7500

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 September 30, 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	**77-0160744**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
555 Heritage Drive, Suite 200	
Jupiter	
Florida	**33458**
(Address of principal executive offices)	*(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 November 5, 2024, the registrant had 18,895,373 shares of common stock outstanding.

LIGAND PHARMACEUTICALS INCORPORATED
QUARTERLY REPORT

FORM 10-Q

TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION

ITEM 1. Condensed Consolidated Financial Statements (unaudited)	4
Condensed Consolidated Balance Sheets	4
Condensed Consolidated Statements of Operations	5
Condensed Consolidated Statements of Comprehensive Income (Loss)	6
Condensed Consolidated Statements of Stockholders' Equity	7
Condensed Consolidated Statements of Cash Flows	9
Notes to Condensed Consolidated Financial Statements	11
ITEM 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	32
ITEM 3. Quantitative and Qualitative Disclosures about Market Risk	39
ITEM 4. Controls and Procedures	39

PART II. OTHER INFORMATION

ITEM 1. Legal Proceedings	39
ITEM 1A. Risk Factors	40
ITEM 2. Unregistered Sales of Equity Securities and Use of Proceeds	40
ITEM 3. Defaults Upon Senior Securities	40
ITEM 4. Mine Safety Disclosures	40
ITEM 5. Other Information	40
ITEM 6. Exhibits	42
SIGNATURE	42

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	Ligand Pharmaceuticals Incorporated Employee Stock Purchase Plan, as amended and restated, effective June 6, 2019
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
Q3 2023	The Company's fiscal quarter ended September 30, 2023
Q3 2024	The Company's fiscal quarter ended September 30, 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
Travere	Travere 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, the anticipated benefits from the Apeiron transaction, 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

Item 1. Condensed Consolidated Financial Statements

LIGAND PHARMACEUTICALS INCORPORATED

CONDENSED CONSOLIDATED BALANCE SHEETS

(Unaudited)

(in thousands, except par value)

	September 30, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 63,619	$ 22,954
Short-term investments	156,024	147,355
Accounts receivable, net	34,318	32,917
Inventory	16,740	23,969
Income taxes receivable	7,813	6,395
Current derivative assets	11,133	—
Other current assets	19,741	3,839
Total current assets	309,388	237,429
Intangible assets, net	274,905	299,606
Goodwill	105,250	103,370
Long-term portion of financial royalty assets, net	199,251	62,291
Noncurrent derivative assets	19,246	3,531
Property and equipment, net	15,094	15,607
Operating lease right-of-use assets	7,157	6,062
Finance lease right-of-use assets	2,940	3,393
Equity method investment in Primrose Bio	1,245	12,595
Other investments	11,908	36,726
Deferred income taxes, net	78	214
Other assets	8,404	6,392
Total assets	$ 954,866	$ 787,216
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 4,694	$ 2,427
Accrued liabilities	15,600	12,467
Income taxes payable	2,108	—
Deferred revenue	1,152	1,222
Current contingent liabilities	128	256
Current operating lease liabilities	1,066	403
Current finance lease liabilities	24	7
Total current liabilities	24,772	16,782
Long-term deferred revenue	2,508	1,444
Long-term contingent liabilities	3,863	2,942
Long-term operating lease liabilities	6,267	5,755
Deferred income taxes, net	46,404	31,622
Other long-term liabilities	29,874	27,758
Total liabilities	113,688	86,303
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.001 par value; 5,000 shares authorized; zero issued and outstanding at September 30, 2024 and December 31, 2023	—	—

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 September 30,		Nine months ended September 30,	
	2024	2023	2024	2023
Revenues and other income:				
Revenue from intangible royalty assets	$ 26,552	$ 23,863	$ 67,512	$ 61,447
Income from financial royalty assets	5,157	25	6,454	1,026
Royalties	31,709	23,888	73,966	62,473
Captisol	6,255	8,608	22,967	24,450
Contract revenue and other income	13,848	372	27,388	16,290
Total revenues and other income	51,812	32,868	124,321	103,213
Operating costs and expenses:				
Cost of Captisol	2,449	3,485	8,237	8,871
Amortization of intangibles	8,258	8,238	24,701	25,316
Research and development	5,675	5,532	17,000	19,049
General and administrative	24,475	14,656	53,049	36,798
Financial royalty assets impairment	—	—	26,491	—
Fair value adjustments to partner program derivatives	7,812	—	7,812	—
Total operating costs and expenses	48,669	31,911	137,290	90,034
Gain on sale of Pelican	—	(2,121)	—	(2,121)
Operating income (loss) from continuing operations	3,143	3,078	(12,969)	15,300
Non-operating income and expenses:				
Gain (loss) from short-term investments	2,407	(13,184)	98,923	30,340
Interest income	1,347	2,263	6,124	6,018
Interest expense	(741)	(1)	(2,154)	(525)
Other non-operating expense, net	(12,495)	(4,300)	(48,206)	(4,570)
Total non-operating (expenses) income, net	(9,482)	(15,222)	54,687	31,263
(Loss) income before income taxes from continuing operations	(6,339)	(12,144)	41,718	46,563
Income tax benefit (expense)	(833)	1,871	(14,662)	(10,932)
Net (loss) income from continuing operations	(7,172)	(10,273)	27,056	35,631
Net loss from discontinued operations	—	—	—	(1,665)
Net (loss) income	$ (7,172)	$ (10,273)	$ 27,056	$ 33,966
Basic net (loss) income from continuing operations per share	$ (0.39)	$ (0.59)	$ 1.50	$ 2.07
Basic net loss from discontinued operations per share	$ —	$ —	$ —	$ (0.10)
Basic net (loss) income per share	$ (0.39)	$ (0.59)	$ 1.50	$ 1.97
Shares used in basic per share calculation	18,419	17,380	18,061	17,241
Diluted net (loss) income from continuing operations per share	$ (0.39)	$ (0.59)	$ 1.46	$ 2.00
Diluted net loss from discontinued operations per share	$ —	$ —	—	$ (0.09)
Diluted net (loss) income per share	$ (0.39)	$ (0.59)	1.46	$ 1.91
Shares used in diluted per share calculation	18,419	17,380	18,574	17,784

See accompanying notes to unaudited condensed consolidated financial statements.

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

	Three months ended September 30,		Nine months ended September 30,	
	2024	**2023**	**2024**	**2023**
Net (loss) income	$ (7,172)	$ (10,273)	$ 27,056	$ 33,966
Unrealized net (loss) gain on available-for-sale securities, net of tax	121	23	3	40
Foreign currency translation adjustment, net of tax	2,560	—	2,560	—
Comprehensive (loss) income	$ (4,491)	$ (10,250)	$ 29,619	$ 34,006

See accompanying notes to unaudited condensed consolidated financial statements.

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

	Common Stock			Accumulated other		Total
	Shares	Amount	Additional paid in capital	comprehensive loss	Retained earnings	stockholders' equity
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
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	179	1	9,552	—	—	9,553
Share-based compensation	—	—	11,060	—	—	11,060
Unrealized net loss on available-for-sale securities, net of tax	—	—	—	(25)	—	(25)
Net loss	—	—	—	—	(51,911)	(51,911)
Balance at June 30, 2024	18,103	$ 19	$ 238,870	$ (935)	$ 537,244	$ 775,198
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	323	—	21,270	—	—	21,270
Issuance of common stock under ATM, net of commissions and fees	334	—	34,030	—	—	34,030
Share-based compensation	—	—	15,171	—	—	15,171
Unrealized net gain on available-for-sale securities, net of tax	—	—	—	121	—	121
Foreign currency translation adjustment, net of tax	—	—		2,560	—	2,560
Net loss	—	—	—	—	(7,172)	(7,172)
Balance at September 30, 2024	18,760	$ 19	$ 309,341	$ 1,746	$ 530,072	$ 841,178

	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
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	218	—	9,110	—	—	9,110
Share-based compensation	—	—	7,207	—	—	7,207
Unrealized net loss on available-for-sale securities, net of tax	—	—	—	(32)	—	(32)
Net income	—	—	—	—	2,290	2,290
Balance at June 30, 2023	17,352	$ 17	$ 170,741	$ (967)	$ 495,101	$ 664,892
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	69	1	3,284	—	—	3,285
Share-based compensation	—	—	6,884	—	—	6,884
Unrealized net gain on available-for-sale securities, net of tax	—	—	—	23	—	23
Tax return to provision	—	—	3,085	—	—	3,085
Net loss	—	—	—	—	(10,273)	(10,273)
Balance at September 30, 2023	17,421	$ 18	$ 183,994	$ (944)	$ 484,828	$ 667,896

See accompanying notes to unaudited condensed consolidated financial statements.

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

(in thousands)

	Nine months ended September 30,	
	2024	2023
Cash flows from operating activities:		
Net income	$ 27,056	$ 33,966
Adjustments to reconcile net income to net cash provided by operating activities:		
Change in estimated fair value of contingent liabilities	993	132
Depreciation and amortization of intangible assets	26,612	27,605
Amortization of premium on investments, net	(725)	(938)
Amortization of debt discount and issuance fees	314	159
Non-cash income from financial royalty assets	(4,687)	(883)
CECL adjustment to financial royalty assets	(3,463)	3,190
Impairment loss of financial royalty assets	26,491	924
Loss on derivative assets	14,655	—
Gain on sale of Pelican	—	(2,121)
Losses from equity method investment in Primrose Bio	11,576	—
Fair value adjustment to Primrose Bio securities investments	25,788	—
Share-based compensation	33,565	20,022
Deferred income taxes	(3,108)	6,761
Gain from short-term investments	(98,923)	(30,340)
Lease amortization expense	1,555	1,231
Other	3,123	215
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(794)	(5,436)
Inventory	7,053	(11,577)
Accounts payable and accrued liabilities	2,617	(7,461)
Income tax receivable and payable	(607)	5,818
Deferred revenue	(1,172)	226
Other assets and liabilities	657	19
Net cash provided by operating activities	68,576	41,512
Cash flows from investing activities:		
Acquisition of financial royalty assets	(17,819)	—
Proceeds from financial royalty assets	4,892	349
Purchase of short-term investments	(133,629)	(107,262)
Proceeds from sale of short-term investments	189,563	96,318
Proceeds from maturity of short-term investments	27,751	37,941
Cash paid for investment in Primrose Bio	(998)	(15,235)
Cash paid for Palvella notes receivable	(2,500)	—
Cash paid for Novan acquisition, net of restricted cash received	—	(10,405)
Cash paid for the Agenus transaction	(75,000)	—
Cash paid for Apeiron acquisition, net of cash received	(91,996)	—
Cash paid for InvIOs investment	(4,196)	—

Supplemental disclosure of cash flow information:				
Interest paid	$	262	$	288
Taxes paid	$	17,346	$	10
Restricted cash in other assets	$	—	$	583
Acquisitions:				
Fair value of tangible assets acquired, net of cash and restricted cash received	$	8,965	$	17,887
Goodwill		—		3,709
Financial royalty assets		106,156		—
Intangible assets		—		10,700
Liabilities assumed		(23,125)		(21,891)
Net cash paid for acquisitions	$	91,996	$	10,405
Supplemental schedule of non-cash activity:				
Accrued Primrose transaction costs	$	—	$	1,013
Addition of right-of-use assets and lease liabilities	$	1,769	$	—
Accrued fixed asset purchases	$	289	$	409
Accrued debt issuance costs	$	8	$	—
Unrealized gain on AFS investments, net of tax	$	3	$	40

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. Moreover, noncurrent derivative assets as of December 31, 2023, have been reclassified from other assets.

In addition, within the unaudited condensed consolidated statement of operations for the three and nine months ended September 30, 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 5, 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, income from financial royalty assets, and contract revenue for license fees, technical, 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 when 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.

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. Any fees billed in advance of being earned are recorded as deferred revenue. During the three and nine months ended September 30, 2024, the amount recognized as revenue that was previously deferred was $0.2 million and $1.2

million, respectively. During the three and nine months ended September 30, 2023, the amount recognized as revenue that was previously deferred was immaterial.

Disaggregation of Revenue

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

	Three months ended September 30,		Nine months ended September 30,	
	2024	**2023**	**2024**	**2023**
Royalties				
Kyprolis	$ 11,599	$ 10,537	$ 27,229	$ 24,862
Evomela	1,747	2,497	5,877	7,404
Teriparatide injection	2,376	2,800	6,520	9,913
Rylaze	3,886	3,678	10,070	9,315
Filspari	3,206	1,122	7,402	1,707
Vaxneuvance	1,466	1,313	3,962	2,990
Other	2,272	1,916	6,452	5,256
Revenue from intangible royalty assets	26,552	23,863	67,512	61,447
Income from financial royalty assets	5,157	25	6,454	1,026
	31,709	23,888	73,966	62,473
Captisol	6,255	8,608	22,967	24,450
Contract revenue and other income				
Milestone and other	13,848	372	25,444	16,290
Other income	—	—	1,944	—
Contract revenue and other income	13,848	372	27,388	16,290
Total	$ 51,812	$ 32,868	$ 124,321	$ 103,213

Short-term Investments

Our short-term investments consist of the following at September 30, 2024 and December 31, 2023 (in thousands):

September 30, 2024	**Amortized cost**	**Gross unrealized gains**	**Gross unrealized losses**	**Estimated fair value**
Bond fund	$ 39,512	$ —	$ (265)	$ 39,247
U.S. government securities	19,051	31	—	19,082
Bank deposits	12,280	21	—	12,301
Corporate bonds	10,969	30	(3)	10,996
Commercial paper	10,591	5	(1)	10,595
Corporate equity securities	6,551	—	(6,058)	493
	$ 98,954	$ 87	$ (6,327)	92,714
Viking common stock				63,310
Total short-term investments				$ 156,024
December 31, 2023				
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
	$ 120,874	$ 79	$ (5,783)	115,170
Viking common stock				32,185
Total short-term investments				$ 147,355

During the nine months ended September 30, 2024, we sold 0.7 million shares of Viking common stock and recognized a realized gain of $60.0 million in total. We did not sell Viking common stock during the three months ended September 30, 2024. During the nine months ended September 30, 2023, we sold 4.5 million shares of Viking common stock and recognized a realized gain of $37.2 million in total. During the three months ended September 30, 2023, there were no sales of Viking common stock.

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 and nine months ended September 30, 2024 and 2023.

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

	September 30, 2024	
	Amortized Cost	**Fair Value**
Within one year	$ 91,072	$ 91,152
After one year through five years	4,647	4,655
Total	$ 95,719	$ 95,807

Our investment policy is capital preservation and we only invest in U.S.-dollar denominated investments. We held a total of 32 investments which were in an unrealized loss position with a total of $0.01 million unrealized losses as of September 30, 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. In July 2024, we sold certain securities before the recovery of the amortized cost basis to fund the Apeiron acquisition. Accordingly, we wrote down the amortized cost of $0.05 million during the nine months ended September 30, 2024. 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 as of September 30, 2024. Accordingly, there was no credit loss recognized for the three months ended September 30, 2024. There were no credit losses recognized for the three and nine months ended September 30, 2023.

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 and nine months ended September 30, 2024, we considered the current and expected economic and market conditions and concluded a decrease of $0.01 million and a decrease of $0.13 million in the allowance for credit losses, respectively. During the three and nine months ended September 30, 2023, we considered the current and expected economic and market conditions and concluded an increase of $0.10 million and an increase of $0.14 million in the allowance for credit losses, respectively.

Inventory

Inventory, which consists of finished goods (Captisol), 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 was a $0.1 million and $0.2 million write-down recorded against inventory for the three and nine months ended September 30, 2024, respectively. There was no write-down recorded against inventory for the three and nine months ended September 30, 2023. In addition to finished goods, as of September 30, 2024 and December 31, 2023, inventory included prepayments of $3.3 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):

	September 30, 2024	December 31, 2023
Indefinite-lived intangible assets		
Goodwill	$ 105,250	$ 103,370
Definite lived intangible assets		
Complete technology	39,249	42,911
Less: accumulated amortization	(19,072)	(20,894)
Trade name	2,642	2,642
Less: accumulated amortization	(1,810)	(1,710)
Customer relationships	29,600	29,600
Less: accumulated amortization	(20,280)	(19,161)
Contractual relationships	360,000	360,000
Less: accumulated amortization	(115,424)	(93,782)
Total goodwill and other identifiable intangible assets, net	$ 380,155	$ 402,976

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

Financial royalty assets 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 condensed 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 in a financial royalty asset impairment on the condensed 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 in a respective period earnings.

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

Derivative Assets

Derivative assets include instruments used for risk-management purposes, and other instruments. Derivative assets which are not used for risk management purposes, include: (a) acquired rights in future milestone and royalty payments from Agenus Partnered Programs (as defined below), (b) Agenus Warrant (as defined below), (c) option to invest up to $25 million to milestone and royalty rights which expires on June 30, 2025 ("Upsize Option"), and (d) rights to receive from Primrose Bio 50% of milestones on two contracts previously entered into by Primordial Genetics.

In addition, we have entered into a collar arrangement to hedge against the fluctuation risk in Viking's share price (the “Viking Share Collar”). However, because the Viking stock investment is remeasured at fair value through earnings under ASC 321, the Viking Share Collar is not eligible for hedge accounting, but is considered as an economic hedge. All derivatives are measured at fair value on the consolidated balance sheets.

Derivative assets consist of the following (in thousands):

	September 30, 2024	December 31, 2023
Agenus Upsize Option (expires on 6/30/25)	$ 3,815	$ —
Viking shares collar	7,318	—
Total current derivative assets	$ 11,133	$ —
Primrose mRNA	$ 2,921	$ 3,531
Agenus Partner Programs	14,099	—
Agenus Warrant (5 years contractual term)	2,226	—
Total noncurrent derivative assets	$ 19,246	$ 3,531

A change in the fair value of the Viking Shares Collar that amounted to $(7.9) million and $7.3 million during the three and nine months ended September 30, 2024, respectively, are included in gain (loss) from short-term investments within the condensed consolidated statements of operations. A change in the fair value of Agenus Partner Programs that amounted to $(7.2) million during the three and nine months ended September 30, 2024 is included in fair value adjustments to partner program derivatives within the condensed consolidated statements of operations. A change in the fair value of other derivatives that amounted to $(8.0) million and $(6.8) million during the three and nine months ended September 30, 2024, respectively, are recognized in other non-operating expense, net within the condensed consolidated statements of operations. We acquired the Primrose mRNA derivative on September 18, 2023 with the sale of Pelican business and investment in Primrose Bio transaction. A change in the fair value of the Primrose mRNA derivative that amounted to $(0.6) million during the three and nine months ended September 30, 2024 is included in fair value adjustments to partner program derivatives within the condensed consolidated statements of operations. We did not have any other derivative instruments during the three and nine months ended September 30, 2023.

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 and any impairment.

Other Investments

Other investments represent our investments in equity securities of third parties in which we do not have control or significant influence. Our equity securities investments do not have a readily determinable or estimable fair value 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. The amount of such impairment or adjustment recognized during the period is presented in other non-operating income (expense) in our condensed consolidated statements of operations.

Other investments consist of the following (in thousands):

	September 30, 2024	December 31, 2023
Equity securities in Primrose Bio	$ 6,712	$ 32,726
InvIOs investment	4,196	—
Neuritek warrants	—	3,000
Palvella Series C preferred stock	1,000	1,000
Total other investments	$ 11,908	$ 36,726

During the three months ended September 30, 2024, we recognized a full impairment for our investment in Neuritek warrants.

Other Assets and Other Current Assets

Other assets include economic rights related to the 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 our development funding and royalties agreement with Palvella (the "Palvella Second Amendment"). 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, because the contract designated the funds usage for research and development activities, and thus we account for them in accordance with ASC 730-20, *Research and Development Arrangement*. We reduce our asset as the funds are expended by Palvella. As of September 30, 2024, of the $5 million upfront funding related to the Palvella Second Amendment, $0.7 million of the funding to Palvella was expended. Our CEO and director, Todd Davis, is a director of Palvella. Mr. Davis recused himself from both board's consideration of the agreement between us and Palvella, including any financial analysis, the terms of the Palvella Second Amendment and the vote to approve the Palvella Second Amendment and the related transactions.

In June 2024, we funded Palvella $2.5 million in exchange for a convertible note with a maturity of three years, which is included in other assets in the condensed consolidated balance sheets.

Other current assets primarily include $2.3 million Employee Retention Credit, $6.6 million current portion of financial royalty assets (disclosed in *Note 6, Financial Royalty Assets, net*), $2.2 million prepaid expenses, and inventory (raw materials and work in process related to the manufacturing of finished goods) for the preparation of commercial supplies of ZELSUVMI™ by Pelthos Therapeutics, a wholly owned subsidiary of Ligand. For additional information on ZELSUVMI, see *Note 4, Acquisitions*. Below is a summary of the inventory included in other current assets (in thousands):

	September 30, 2024	December 31, 2023
Raw materials	$ 2,495	$ 420
Work in process	260	195
Total Pelthos inventory in other current assets	$ 2,755	$ 615

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	September 30, 2024	December 31, 2023
Compensation	$ 3,830	$ 4,682
Subcontractor	1,756	1,756
Professional fees	3,296	2,394
Customer deposit	621	621
Supplier	276	303
Royalties owed to third parties	2,989	900
Amounts owed to former licensees	—	45
Other	2,832	1,766
Total accrued liabilities	$ 15,600	$ 12,467

Contingent Liabilities

In connection with the acquisition of CyDex in January 2011, we recorded a contingent liability for amounts potentially due to holders of the CyDex CVRs and former license holders. The liability is periodically assessed based on events and circumstances related to the underlying milestones, royalties and material sales.

In connection with the acquisition of Metabasis in January 2010, we issued Metabasis stockholders four tradable CVRs for each Metabasis share. The fair values of the CVRs are remeasured at each reporting date through the term of the related agreement.

Any change in fair value is recorded in other non-operating expense, net within our condensed consolidated statement of operations. For additional information, see *Note 7, Fair Value Measurements.*

Other Long-Term Liabilities

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

	September 30, 2024	December 31, 2023
Unrecognized tax benefits	$ 14,481	$ 14,039
Novan (Pelthos) contract liability	15,324	13,700
Other long-term liabilities	69	19
	$ 29,874	$ 27,758

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 September 30,		Nine months ended September 30,	
	2024	2023	2024	2023
SBC - Research and development expenses	$ 982	$ 1,639	$ 2,588	$ 5,362
SBC - General and administrative expenses	14,189	5,245	30,977	14,660
	$ 15,171	$ 6,884	$ 33,565	$ 20,022

The increase in share-based compensation for the three and nine months ended September 30, 2024 as compared to the prior periods are primarily due to the one-time stock compensation expense associated with the anticipated departure of our former President and Chief Operating Officer ("COO") during the third quarter of 2024 and the new hires in 2024.

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 September 30,		Nine months ended September 30,	
	2024	2023	2024	2023
Risk-free interest rate	4.4%	4.3%	4.3%	4.1%
Dividend yield	—	—	—	—
Expected volatility	44.7%	44.7%	44.7%	51.5%
Expected term (years)	4.7	5.2	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 (Loss) Income Per Share

Basic net (loss) income per share is calculated by dividing net (loss) 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. Diluted net loss per share is computed based on the sum of the weighted average number of 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 nine months ended September 30, 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. For additional information, see *Note 10, 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 September 30,		**Nine months ended September 30,**	
	2024	**2023**	**2024**	**2023**
Weighted average shares outstanding:	18,419	17,380	18,061	17,241
Dilutive potential common shares:				
Restricted stock	—	—	173	82
Stock options	—	—	340	302
2023 Notes	—	—	—	159
Shares used to compute diluted income (loss) per share	18,419	17,380	18,574	17,784
Potentially dilutive shares excluded from calculation due to anti-dilutive effect	1,099	4,762	1,815	4,663

For the three months ended September 30, 2024, due to the net loss for the period, the 0.7 million weighted average incremental options and restricted stock awards were anti-dilutive. For the three months ended September 30, 2023, due to the net loss for the period, the 0.3 million weighted average incremental options and restricted stock awards were anti-dilutive.

Foreign Currency Translation

The Euro is the functional currency of Apeiron and the corresponding financial statements have been translated into U.S. Dollars in accordance with ASC 830-30, *Translation of Financial Statements*. Assets and liabilities are translated at end-of-period rates while revenues and expenses are translated at average rates in effect during the period in which the activity took place. Equity is translated at historical rates and the resulting cumulative translation adjustments are included as a component of accumulated other comprehensive income (loss).

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. We have not yet completed the assessment of the impact of ASU 2023-09 on our consolidated financial statements.

In November 2024, the FASB issued ASU No. 2024-03, *Income Statement—Reporting Comprehensive Income (Subtopic 220-40): Expense Disaggregation Disclosures*. This update requires entities to disaggregate operating expenses into specific categories, such as salaries and wages, depreciation, and amortization, to provide enhanced transparency into the nature and function of expenses. ASU 2024-03 is effective for fiscal years beginning after December 15, 2026, with early adoption permitted. ASU 2024-03 may be applied retrospectively or prospectively. We are currently evaluating the new guidance to determine the impact it may have on our consolidated financial statements and related disclosures.

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. Agenus Transaction

On May 29, 2024, we closed the transactions pursuant to the $75 million purchase and sale agreement (the “Agenus Agreement”), dated May 6, 2024, among us and Agenus Inc., Agenus Royalty Fund, LLC, and Agenus Holdings 2024, LLC (collectively, “Agenus”). Under the terms of the Agenus Agreement, we received (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) (collectively referred as “Agenus Partnered Programs”), 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 may adjust the royalty and milestone percentages paid to us. In addition, we received the option to commit an additional $25 million in the same assets on a pro rata basis which expires on June 30, 2025 (“Upsize Option”). We have also agreed to allow Agenus to raise up to an additional $100 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.

In connection with entry into the Agenus Agreement, Agenus issued us a 5-year warrant (“Agenus Warrant”) to purchase 867,052 shares of its common stock, at an exercise price equal to $17.30.

We accounted for all Agenus Partnered Programs, Agenus Warrant and Upsize Option as derivative assets. Upsize Option was presented within current derivative assets line (as it expires on June 30, 2025), and the other derivatives were presented in noncurrent derivative assets line in our condensed consolidated balance sheet. Agenus Partnered Programs are recognized as derivative assets under ASC 815, *Derivatives and Hedging*, as they have different underlyings (milestone payments and royalties). The commercial milestones and royalties are dependent on the development milestones and the commercial milestone and royalties underlyings are not determined to be predominate. The derivative assets were recorded at fair value as of May 29, 2024, and are marked to fair value at each subsequent reporting period.

The fair value of Agenus Partnered Programs derivative assets is determined as a present value of expected future cash flows adjusted for the level of risk appropriate for a respective program stage. During the three months ended September 30, 2024, certain Agenus partners discontinued development of their partnered programs. These programs may be relicensed at a later date, and Ligand would retain its economic interest upon any relicense activity.

The fair value of Agenus Warrant is determined using a Black-Scholes model. The following assumptions were used as of May 29, 2024, and September 30, 2024, respectively: expected term of 4.0 years and 3.7 years, volatility of 84% and 99%, risk-free rate of 4.7% and 3.6%, Agenus Stock price of $15.03 and $5.48.

The fair value of the Upsize Option was determined using the binomial option pricing model under which we assessed and considered the possible upwards and downwards scenarios through the expiration date of the Upsize Option.

See *Note 7, Fair Value Measurements,* for additional information on the Agenus Partnered Program derivative assets, Agenus Warrant, and Upsize Option.

We accounted for the acquired BOT/BAL rights as a financial royalty asset which is currently put under the non-accrual method as management cannot reliably estimate future cash flows from this program. The amount of BOT/BAL financial royalty asset was determined as a residual value from the $75 million aggregate investment amount, less fair value of all acquired derivative assets as of May 29, 2024.

3. 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 million in exchange for 50% 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 PeliCRM197 above $3 million and 35% of all PeliCRM197 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 three and nine months ended September 30, 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 PeliCRM197 above $3 million and 35% of all PeliCRM197 licensing revenue in perpetuity. The considerations are 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% 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 in noncurrent derivative assets 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 were 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 and nine months ended September 30, 2024, a loss of $0.6 million was recorded to market the derivative assets to fair value and was included in fair value adjustments to partner program derivatives in our condensed consolidated statement of operations. For additional information, see *Note 7, Fair Value Measurements*.

Investments 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 Primrose Bio's 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 condensed 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. In June 2024, Primrose Bio received an equity investment from an equity firm. In July 2024, Primrose Bio raised additional funds from another equity firm. As a result, we recognized an impairment loss on our equity method investment in the amount of $5.8 million during the nine months ended September 30, 2024. There was no impairment to our equity method investment during the three months ended September 30, 2024. Our share of the net loss of Primrose Bio for the three and nine months ended September 30, 2024 was $1.2 million and $5.8 million, respectively, which reduced Ligand's equity method investment accordingly. Any income or loss from our equity method investments (including the impairment) is presented in other non-operating income (expense) in our condensed consolidated statement of operations.

We determined that the Series A preferred stock and reserve 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. Our investment in Series A preferred stock and reserve stock has been reduced by $0.03 million and $25.79 million during the three and nine months ended September 30, 2024 in connection with the above mentioned equity funding received by Primrose Bio in June and July 2024.

Former President and Chief Operating Officer Matt Korenberg served as a board member of Primrose Bio beginning in Q4 2023. His employment with Ligand concluded in October 2024, after which Lauren Hay, Vice President of Strategic Planning & Investment Analytics, succeeded him as a board member of Primrose Bio.

4. Acquisitions

Apeiron

On July 15, 2024, we acquired all the outstanding shares of Biologics AG ("Apeiron"), including the royalty rights to QARZIBA® (dinutuximab beta) for the treatment of high-risk neuroblastoma (the "Apeiron Acquisition") for $100.5 million base consideration. We funded the Apeiron Acquisition from our available cash on hand.

In addition to base consideration, we would also pay Apeiron shareholders an additional consideration based on future commercial and regulatory events, including up to $28.0 million if QARZIBA royalties exceed certain predetermined thresholds by either 2030 or 2034, and pay additional earn-outs on specific future events, primarily related to QARZIBA regulatory approval and commercialization in the USA.

We evaluated this acquisition in accordance with ASC 805, *Business Combinations*, to discern whether the assets and operations of Apeiron met the definition of a business. We accounted for this transaction as an asset acquisition.

We incurred $4.9 million of transaction costs related to the Apeiron Acquisition, which were included in the amount of total purchase consideration. Financial assets acquired and liabilities assumed in the Apeiron Acquisition were recognized at their fair values. The remaining assets acquired were recognized on a relative fair value basis.

The amount of purchase consideration was allocated to the acquisition date fair values of acquired assets and assumed liabilities as follows (in thousands):

Cash and cash equivalents	$	13,437
Contract assets (financial royalty assets)		106,156
Other assets		8,965
Accounts payable and accrued liabilities		(3,740)
Income tax payable		(1,276)
Deferred tax liabilities, net		(18,109)
Total fair value of net assets acquired	$	105,433

Contract assets acquired are accounted for as a financial royalty asset, similar to loans receivable and are measured at amortized cost using the prospective effective interest method described in ASC 835-30. The acquired contracts assets include QARZIBA and other development phase contract assets.

As QARZIBA is a commercial phase program, we are able to reasonably estimate future cash flows and, as such, we recognize income from QARZIBA financial royalty assets starting from the Apeiron Acquisition effective date, which is calculated by multiplying the carrying value of the financial royalty asset by the periodic effective interest rate. As described in *Note 1, Basis of Presentation and Significant Accounting Policies*, 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 differences between expected cash flows and actual cash flows are realized and as there are changes to expected future cash flows. We account for other Apeiron development phase financial royalty assets on a non-accrual basis as there is a higher level of uncertainty over the related expected cash flows.

For tax purposes this transaction is treated as a stock purchase. As a result, we will not obtain a tax stepped-up basis in Apeiron's underlying assets and will assume the carryover tax basis. As part of the tax purchase price accounting, deferred tax liabilities of $18.1 million have been recorded to reflect the difference between the book and tax basis of the acquired assets.

We account for the earnout liabilities in the Apeiron Acquisition in accordance with ASC450, *Contingencies*, and will recognize respective liability when the contingency is resolved, and the liability becomes payable. No earnout liability is recognized as of the acquisition date, and as of September 30, 2024.

In conjunction with the Apeiron Acquisition, we have also invested $4.2 million (including $0.2 million transaction costs) in InvIOs Holding AG ("InvIOs") common shares, a privately held spin-off of Apeiron. This investment was part of an €8 million (approximately $8.8 million) round with other investors which would help finance the research and development of three innovative early-stage immuno-oncology assets. Apeiron has previously outlicensed these assets to InvIOs and is entitled to future royalties and milestone payments.

As the result of this investment, we did not obtain control or significant influence in InvIOs. We determined that common stock of InvIOs 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.

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 were to be sold to other parties pursuant to the bankruptcy court's order. 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 Novan acquisition was accounted for as a 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.

We have finalized purchase accounting for the 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 are 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 were 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% (revenue risk-adjusted discount rate).

On April 3, 2024, we announced the creation of Pelthos Therapeutics to focus 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 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. ZELSUVMI received a Novel Drug designation from the FDA in January 2024 to treat molluscum viral skin infection. ZELSUVMI was developed using Pelthos' proprietary nitric oxide-based NITRICIL™ technology platform. The rights to ZELSUVMI and all assets related to the NITRICIL technology platform were acquired from Novan in September 2023 in the Novan acquisition described above.

5. 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 nine months ended September 30, 2023, that was attributable to the discontinued operations.

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

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

	September 30, 2024			December 31, 2023		
	Gross carrying value(2)	Allowance (1)	Net carrying value (2)	Gross carrying value	Allowance (1)	Net carrying value
Apeiron	$ 113,371	$ (735)	$ 112,636	$ —	$ —	$ —
Agenus (Bot/Bal)	40,815	(408)	40,407	—	—	—
Elutia (CorMatrix)	10,032	(2,607)	7,425	13,304	(7,490)	5,814
Selexis	242	(58)	184	940	(179)	761
Ovid (Soticlestat)	4,122	(41)	4,081	30,310	(303)	30,007
Tolerance Therapeutics (TZIELD)	25,698	(101)	25,597	25,810	(101)	25,709
Ensifentrine inventors	16,018	(481)	15,537	—	—	—
Total financial royalty assets, net	$ 210,298	$ (4,431)	$ 205,867	$ 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 $6.6 million current portion of 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 September 30, 2024.

Financial royalty assets represent a portfolio of future milestone and royalty payment rights acquired in the Apeiron Acquistion in July 2024, from Agenus in May 2024, Selexis, S.A. ("Selexis") in April 2013 and May 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 and August 2024.

During the nine months ended September 30, 2024, we recorded a $26.2 million impairment loss for Ovid (Soticlestat) financial royalty asset and a $0.3 million impairment loss for Selexis financial royalty asset. There was no impairment loss for the three months ended September 30, 2024. During the three and nine months ended September 30, 2023, we recorded a $0.9 million impairment loss for Selexis financial royalty asset as a result of reduced programs.

Apeiron financial royalty assets

As discussed in *Note 4, Acquisitions*, we acquired certain financial royalty assets within the Apeiron Acquisition, including QARZIBA and certain InvIOs programs. As QARZIBA is a commercial phase program, we are able to reasonably estimate future cash flows and, as such, we recognized income from QARZIBA financial royalty assets starting from the Apeiron Acquisition effective date. We accounted for the InvIOs financial royalty assets using the non-accrual method until we are able to reliably estimate future cash flows.

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 under the amended royalty agreement over several quarters, we placed the Elutia asset on the non-accrual method. In January 2024, we executed an amendment to our agreement with Elutia which will allow 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 first quarter of 2024. We further considered the current and expected future economic and market conditions, current company performance and recent payments received from Elutia. During the three and nine months ended September 30, 2024 we recorded a reduction of $0.3 million and $4.9 million, respectively, to Elutia allowance of expected credit loss. The credit loss adjustments were recorded as a gain in general and administrative expense in our condensed consolidated statement of operations for the three and nine months ended September 30, 2024. During the three and nine months ended September 30, 2023 we recorded an increase of $3.2 million to Elutia allowance of expected credit loss.

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.

In June 2024, Takeda announced topline results of the phase 3 clinical trial of soticlestat, missing its primary endpoint to reduce convulsive seizure frequency compared to placebo in patients with Dravet syndrome, and missing its primary endpoint to reduce major Motor Drop seizure frequency compared to a placebo in patients with Lennox-Gastaut syndrome. As a result, in the nine months ended September 30, 2024, we recognized an impairment over the soticlestat financial royalty asset of $26.2 million. The fair value of the soticlestat financial royalty asset was determined using a discounted cash flow approach, utilizing the mostly-likely cash flows which considered the probability of success for the underlying clinical program and discount rate of 17% which contemplates the underlying credit and business risk of the partnered program. As of September 30, 2024, management continues to account for the soticlestat financial royalty asset using 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 of TZIELD. TZIELD is marketed by Sanofi, starting in 2023. For tax purposes this transaction was treated as a stock deal, so there is no step-up in basis and tax attributes. Therefore, a deferred tax liability (DTL) of $5.5 million was recognized on the book basis and tax basis difference and recorded to the book value of the Tolerance financial royalty asset. 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 and August 2024, we acquired future milestone and royalty rights related to ensifentrine from certain ensifentrine inventors for a total of $3.8 million and $13.6 million, respectively. On June 26, 2024, Verona Pharma plc (Nasdaq: VRNA) received FDA approval for ensifentrine for the maintenance treatment of patients with chronic obstructive pulmonary disease (“COPD”). During three months ended September 30, 2024, Verona started commercial sales of ensifentrine (marketed as Ohtuvayre™) in the U.S. Due to the early stages of Ohtuvayre's commercialization, management has placed the investment on the non-accrual method until we are able to reliably estimate future cash flows.

7. 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):

	September 30, 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]	$19,575	$73,139	$ —	$92,714	$7,291	$107,879	$ —	$115,170
Investment in Viking common stock	63,310	—	—	63,310	32,185	—	—	32,185
Derivative assets[2]	—	—	30,379	30,379	—	—	3,531	3,531
Total assets	$82,885	$73,139	$30,379	$186,403	$39,476	$107,879	$3,531	$150,886
Liabilities:								
Contingent liabilities - CyDex	$ —	$ —	$ 223	$ 223	$ —	$ —	$ 320	$ 320
Contingent liabilities - Metabasis[3]	—	3,768	—	3,768	—	2,878	—	2,878
Total liabilities	$ —	$3,768	$ 223	$3,991	$ —	$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) Derivative assets include instruments used for risk-management purposes, and other instruments. Derivative assets which are not used for risk management purposes include: (a) acquired rights in future milestone and royalty payments from Agenus Partnered Programs, (b) Agenus Warrant, (c) Upsize Option, (d) Viking Share Collar (e) and rights to receive from Primrose Bio 50% of milestones on two contracts previously entered into by Primordial Genetics. The considerations were recognized as derivative assets included under current derivative assets and noncurrent derivative assets in our condensed consolidated balance sheet. They are recognized as derivative assets under ASC 815, Derivatives and Hedging. The fair value of the Agenus Partnered Programs and the Primrose Bio derivative assets was determined using a discounted cash flow approach, utilizing the mostly-likely cash flows which considered the probability of success for the underlying clinical programs. The discount rate used contemplates the underlying credit and business risk of the partnered programs. At

September 30, 2024, the discount rates used range between 15% and 25%. At December 31, 2023, the discount rate used was 25%. The fair value of the Agenus Warrant and Viking Share Collar was determined using a Black-Scholes-Merton model. The fair value of the Upsize Option was determined using a binomial option pricing model.

(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 and nine months ended September 30, 2024, we adjusted the balance of the Metabasis CVR liability by decreasing $0.2 million and increasing $0.9 million, respectively, to mark to market. During the three and nine months ended September 30, 2023, we adjusted the balance of the Metabasis CVR liability by decreasing $0.1 million and increasing $0.002 million, respectively, to mark to market.

A reconciliation of the level 3 financial instruments as of September 30, 2024 is as follows (in thousands):

Assets		
Fair value of level 3 financial instruments as of December 31, 2023	$	3,531
Additions to derivative assets		34,185
Fair value adjustments to derivative assets		(7,337)
Fair value of level 3 financial instruments as of September 30, 2024	$	30,379
Liabilities		
Fair value of level 3 financial instruments as of December 31, 2023	$	320
Payments to CVR holders and other contingent payments		(200)
Fair value adjustments to contingent liabilities		103
Fair value of level 3 financial instruments as of September 30, 2024	$	223

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, intangible assets with estimated useful lives and long-lived assets.

We evaluate goodwill 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 evaluate intangible assets with estimated useful lives whenever circumstances occur indicating that intangible assets may not be recoverable An impairment evaluation is based on an undiscounted cash flow analysis at the lowest level at which cash flows of the long-lived assets are largely independent of other groups of assets and liabilities.

There was no impairment of our goodwill, intangible assets, or long-lived assets recorded during the three and nine months ended September 30, 2024 and 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 (Pelthos) 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.

8. Debt

Revolving Credit Facility

On October 12, 2023, we entered into a $75 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 revolving loans, swingline loans and other financial accommodations to us (including the issuance of letters of credit) in an aggregate amount of up to $75 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 Revolving Credit Facility are secured by certain of our collateral and that of the Guarantors. In specified circumstances, additional guarantors are required to be added to the Credit Agreement. 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.

Amendment to Revolving Credit Facility

On July 8, 2024, we entered into the first amendment (the "Amendment") to the Credit Agreement, which amends the Credit Agreement to, among other things, increase the aggregate revolving credit facility amount from $75 million to $125 million.

As of September 30, 2024, we had $124.4 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, as amended, is October 12, 2026.

As of September 30, 2024, there were no events of default or violation of any covenants under our financing obligations.

9. 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 foreign and state jurisdictions with different statutory rates, the use of previously unbenefited tax loss carryforwards to reduce foreign taxes, 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 the three months ended September 30, 2024 and 2023 was (13.1)% and 15.4%, respectively, and the nine months ended September 30, 2024 and 2023 was 35.1% and 23.5%, respectively. The variance from the U.S. federal statutory tax rate of 21% for the three and nine months ended September 30, 2024 was primarily due to Internal Revenue Code Section 162(m) limitation on deduction for officer compensation, other non-deductible items, and income from foreign operations, which were partially offset by the foreign derived intangible income tax benefit. The variance from the U.S. federal statutory tax rate of 21% for the three and nine months ended September 30, 2023 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.

10. 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.

In June 2024, our stockholders approved the amendment and restatement of the Ligand Pharmaceuticals Incorporated 2002 Stock Incentive Plan, which increased the shares available for issuance by 1.3 million.

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	743,117	$ 85.71	318,588	$ 85.23
Options exercised/RSUs vested	(784,467)	$ 59.07	(126,793)	$ 85.55
Forfeited	(57,161)	$ 70.71	(42,870)	$ 72.32
Balance as of September 30, 2024	2,541,947	$ 73.48	499,830	$ 83.44

As of September 30, 2024, outstanding options to purchase 1.4 million shares were exercisable with a weighted average exercise price per share of $70.27.

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 September 30, 2024, 26,244 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 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 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. During the three and nine months ended September 30, 2024, we issued 334,325 shares of common stock in the ATM Offering, generating proceeds of $34.3 million, net of commissions and other transaction costs.

Share Repurchases

In April 2023, our Board of Directors (the “Board”) has approved a stock repurchase program authorizing, but not requiring, the repurchase of up to $50 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 million of our common stock remained available as of September 30, 2024.

11. 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 us and no individualized factual allegations have been advanced against us in any of the three filed complaints. We reject all claims raised in the complaints and intend to vigorously defend against 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.

Operating Leases

During the nine months ended September 30, 2024, we entered into a lease agreement for our office located in Boston, Massachusetts, which resulted in a $1.6 million increase in both operating lease assets and operating lease liabilities at lease commencement.

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, Baxter International and Agenus.

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

We will host an investor and analyst day in Boston on December 10, 2024. CEO Todd Davis and other members of Ligand's senior management team will provide an overview of our business model and investment selection process, review the progress of the portfolio including near-term partner milestones, and introduce 2025 guidance.

During Q3 2024, we sold 334,325 shares of our common stock pursuant to an At-The-Market (ATM) Equity Offering, generating net proceeds of $34.3 million. We have the ability to issue an additional $65 million under the current ATM plan.

Portfolio Updates

FILSPARI

On September 5, 2024, Travere Therapeutics announced it received full FDA approval for FILSPARI for the treatment of IgA Nephropathy (IgAN) in adults. The FDA decision expands patient access to the first and only non-immunosuppressive therapy approved for the treatment of this rare progressive kidney disease.

On October 17, 2024, Travere Therapeutics and CSL Vifor announced that Swissmedic granted temporary marketing authorization for FILSPARI for the treatment of adults with primary IgAN with a urine protein excretion ≥1.0 g/day (or urine protein-to-creatinine ratio ≥0.75 g/g). The Swissmedic approval was supported by results from the pivotal Phase 3 PROTECT Study of FILSPARI in IgA nephropathy (IgAN) and follows full marketing approval by the U.S. FDA in September 2024 and conditional marketing authorization by the European Medicines Agency in April 2024.

On October 26, 2024, Travere Therapeutics presented new data further demonstrating the clinical benefit of FILSPARI in IgAN and reinforcing its potential in focal segmental glomerulosclerosis (FSGS) at the American Society of Nephrology Kidney Week 2024. Presentations included new data from the SPARTAN Study which showed that nearly 60% of patients with IgAN achieved complete remission when using FILSPARI as a first-line treatment. In addition, presentations took place on the SPARTACUS Study, PROTECT open-label extension, and real-world evidence highlighting the initial safety and efficacy data of FILSPARI in IgAN in combination treatment with a SGLT2 inhibitor. A late-breaking presentation demonstrated sparsentan delivered rapid and sustained proteinuria reduction and long-term kidney health benefits in a subset of patients with genetic, often treatment resistant, FSGS.

Ohtuvayre

On November 4, 2024, Verona Pharma provided an update on the commercial launch of Ohtuvayre in the U.S. reporting net sales of $5.6 million and October net sales that exceeded total third quarter sales. Additionally, through October Verona Pharma reported more than 2,200 unique prescribers and more than 5,000 prescriptions were filled across a broad COPD population.

In September, 2024, Verona's Pharma development partner in Greater China, Nuance Pharma (private), completed enrollment in its pivotal Phase 3 clinical trial evaluating Ohtuvayre for the maintenance treatment of COPD in China. Results from the trial are expected in 2025.

Other Portfolio Updates

On October 23, 2024, Merck (NYSE: MRK) announced that the U.S. Centers for Disease Control and Prevention’s Advisory Committee on Immunization Practices (ACIP) voted to update the adult age-based pneumococcal vaccination guidelines and has recommended CAPVAXIVE (Pneumococcal 21-valent Conjugate Vaccine) for pneumococcal vaccination in adults 50 years of age and older. Additionally, ACIP shared clinical decision-making has also recommended a supplemental dose of CAPVAXIVE for adults 65 years of age and older who have completed their vaccine series with both PCV13 (pneumococcal 13-valent conjugate vaccine) and PPSV23 (pneumococcal 23-valent polysaccharide vaccine).

On October 9, 2024, Viking Therapeutics announced positive data from the company's Phase 1b clinical trial of VK0214, a novel small molecule agonist of the thyroid hormone receptor beta (TRβ), in patients with X-linked adrenoleukodystrophy. Results from this study showed VK0214 to be safe and well-tolerated following once-daily dosing over the 28-day study period. In addition, significant reductions were observed in plasma levels of very long-chain fatty acids (VLCFAs) and other lipids, as compared to placebo. Ligand is entitled to a 3.5-7.5% royalty on future net sales of VK0214, as well as clinical, regulatory, and commercial milestones.

On July 1, 2024, Palvella Therapeutics (private) initiated SELVA, a 24-week, pivotal Phase 3, single-arm, baseline-controlled clinical trial of QTORIN™ rapamycin for the treatment of microcystic lymphatic malformations (MLM). The study’s primary and key secondary endpoints are clinician-reported outcomes and the study will enroll 40 subjects at leading vascular anomaly centers across the U.S.

Results of Operations

Revenue and Other Income

(Dollars in thousands)	Q3 2024	Q3 2023	Change	% Change	YTD 2024	YTD 2023	Change	% Change
Revenue from intangible royalty assets	$26,552	$23,863	$2,689	11 %	$67,512	$61,447	$6,065	10 %
Income from financial royalty assets	5,157	25	5,132	20,528 %	6,454	1,026	5,428	529 %
Royalties	31,709	23,888	7,821	33 %	73,966	62,473	11,493	18 %
Captisol	6,255	8,608	(2,353)	(27) %	22,967	24,450	(1,483)	(6) %
Contract revenue and other income	13,848	372	13,476	3,623 %	27,388	16,290	11,098	68 %
Total revenue and other income	$51,812	$32,868	$18,944	58 %	$124,321	$103,213	$21,108	20 %

Q3 2024 vs. Q3 2023

Total revenue and other income increased by $18.9 million, or 58%, to $51.8 million in Q3 2024 compared to $32.9 million in Q3 2023. Royalties increased by $7.8 million, or 33%, to $31.7 million in Q3 2024 compared to $23.9 million in Q3 2023, primarily due to income from QARZIBA financial royalty asset acquired in Q324 and an increase in FILSPARI sales. Captisol sales decreased by $2.4 million, or 27%, to $6.3 million in Q3 2024 compared to $8.6 million in Q3 2023, primarily due to the timing of customer orders. Contract revenue and other income increased by $13.5 million, or 3,623%, to $13.8 million in Q3 2024 compared to $0.4 million in Q3 2023, primarily due to a commercial milestone tied to Verona's Ohtuvayre in Q3 2024.

YTD 2024 vs. YTD 2023

Total revenue and other income increased by $21.1 million, or 20%, to $124.3 million in YTD 2024 compared to $103.2 million in YTD 2023. Royalties increased by $11.5 million, or 18%, to $74.0 million in YTD 2024 compared to $62.5 million in YTD 2023, primarily due to income from QARZIBA financial royalty asset acquired in Q324 and an increase in FILSPARI sales. Captisol sales decreased by $1.5 million, or 6%, to $23.0 million in YTD 2024 compared to $24.5 million in YTD 2023, primarily due to the timing of customer orders. Contract revenue and other income increased by $11.1 million, or 68%, to $27.4 million in YTD 2024 compared to $16.3 million in YTD 2023, primarily due to a commercial milestone tied to Verona's Ohtuvayre in Q3 2024.

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)	Q3 2024 Estimated Partner Product Sales	Effective Royalty Rate	Q3 2024 Royalty Revenue	Q3 2023 Estimated Partner Product Sales	Effective Royalty Rate	Q3 2023 Royalty Revenue
Kyprolis	**$ 405.4**	**2.9 %**	**$ 11.6**	$ 375.9	2.8 %	$ 10.5
Evomela	**8.5**	**20.0 %**	**1.7**	12.5	20.0 %	2.5
Teriparatide injection[(a)]	**8.6**	**27.9 %**	**2.4**	11.0	25.5 %	2.8
Rylaze	**98.8**	**3.9 %**	**3.9**	104.9	3.5 %	3.7
Filspari	**35.6**	**9.0 %**	**3.2**	12.2	9.0 %	1.1
Vaxneuvance	**239.0**	**0.6 %**	**1.5**	214.0	0.6 %	1.3
Other	**145.9**	**1.6 %**	**2.3**	75.2	2.7 %	2.0
Total	**$ 941.8**		**$ 26.6**	$ 805.7		$ 23.9

(in millions)	YTD 2024 Estimated Partner Product Sales	Effective Royalty Rate	YTD 2024 Royalty Revenue	YTD 2023 Estimated Partner Product Sales	Effective Royalty Rate	YTD 2023 Royalty Revenue
Kyprolis	**$ 1,213.7**	**2.2 %**	**$ 27.2**	$ 1,123.3	2.2 %	$ 24.9
Evomela	**29.5**	**20.0 %**	**5.9**	37.0	20.0 %	7.4
Teriparatide injection[(a)]	**24.3**	**26.7 %**	**6.5**	34.2	28.9 %	9.9
Rylaze	**309.4**	**3.3 %**	**10.1**	292.5	3.2 %	9.3
Filspari	**82.2**	**9.0 %**	**7.4**	18.9	9.0 %	1.7
Vaxneuvance	**636.9**	**0.6 %**	**4.0**	482.4	0.6 %	3.0
Other	**322.5**	**2.0 %**	**6.4**	210.1	2.5 %	5.3
Total	**$ 2,618.5**		**$ 67.5**	$ 2,198.4		$ 61.5

(a) We receive tiered profit sharing of 25% on quarterly profits less than $3.75 million, 35% on quarterly profits greater than $3.75 million but less than $7.5 million and 40% on quarterly profits greater than $7.5 million.

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

Operating Costs and Expenses

(Dollars in thousands)	Q3 2024	% of Revenue	Q3 2023	% of Revenue	YTD 2024	% of Revenue	YTD 2023	% of Revenue
Cost of Captisol	**$2,449**		$3,485		**$8,237**		$8,871	
Amortization of intangibles	**8,258**		8,238		**24,701**		25,316	
Research and development	**5,675**		5,532		**17,000**		19,049	
General and administrative	**24,475**		14,656		**53,049**		36,798	
Financial royalty assets impairment	**—**		—		**26,491**		—	
Fair value adjustments to partner program derivatives	**7,812**		—		**7,812**		—	
Total operating costs and expenses	**$48,669**	**94%**	$31,911	97%	**$137,290**	**110%**	$90,034	87%

Q3 2024 vs. Q3 2023

Total operating costs and expenses increased by $16.8 million, or 53%, to $48.7 million in Q3 2024 compared to $31.9 million in Q3 2023, primarily due to the fair value adjustment to partner program derivatives and a Q3 2024 stock compensation award modification.

Cost of Captisol decreased by $1.0 million, or 30%, to $2.4 million in Q3 2024 compared to $3.5 million in Q3 2023, with the decrease primarily due to the lower Captisol sales this quarter.

Amortization of intangibles remained steady at $8.3 million in Q3 2024 compared to $8.2 million in Q3 2023.

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 $5.7 million for Q3 2024, compared with $5.5 million for Q3 2023.

General and administrative expense was $24.5 million for Q3 2024, compared to $14.7 million for Q3 2023, with the increase primarily due to a one-time stock compensation expense associated with the anticipated departure of our former President and COO and an increase in G&A expenses related to the acquisition of Novan (Pelthos) in September 2023.

Fair value adjustment to partner program derivatives was $7.8 million for Q3 2024 primarily due to certain Agenus partners discontinuing development of their partnered programs. These programs may be relicensed at a later date, and Ligand would retain its economic interest upon any relicense activity.

YTD 2024 vs. YTD 2023

Total operating costs and expenses increased by $47.3 million, or 52%, to $137.3 million in YTD 2024 compared to $90.0 million in YTD 2023, primarily due to the increase in financial royalty asset impairment of $26.5 million, the stock compensation award modifications, and the fair value adjustment to partner program derivatives.

Cost of Captisol decreased by $0.6 million, or 7%, to $8.2 million in YTD 2024 compared to $8.9 million in YTD 2023, with the decrease primarily due to the lower Captisol sales in YTD 2024.

Amortization of intangibles decreased slightly by $0.6 million, or 2%, to $24.7 million in YTD 2024 compared to $25.3 million in YTD 2023.

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 $17.0 million for YTD 2024, compared with $19.0 million for YTD 2023, with the decrease primarily due to the sale of the Pelican business in September 2023, partially offset by the increase in R&D expenses related to the acquisition of Novan (Pelthos) in September 2023.

General and administrative expense was $53.0 million for YTD 2024, compared to $36.8 million for YTD 2023, with the increase primarily due to a one-time stock compensation expense associated with the anticipated departure of our former President and COO and an increase in G&A expenses related to the acquisition of Novan (Pelthos) in September 2023.

Financial royalty asset impairment was $26.5 million for YTD 2024 primarily due to the impairment loss related to Takeda's soticlestat missing its phase 3 clinical trial primary endpoint of reducing the frequency of convulsive seizures for patients with Dravet Syndrome.

Fair value adjustment to partner program derivatives was $7.8 million for YTD 2024 primarily due to certain Agenus partners discontinuing development of their partnered programs. These programs may be relicensed at a later date, and Ligand would retain its economic interest upon any relicense activity.

Gain on Sale of Pelican

The gain on sale of Pelican in amount of $2.1 million for the three and nine months ended September 30, 2023 represents the excess of the fair value of 1) our investments in Primrose Bio and other economic rights; and 2) the carrying amount of Pelican business assets and liabilities together with allocated goodwill as of September 18, 2023, the date of sale; and 3) $15 million cash consideration paid.

Non-operating Income and Expenses

(Dollars in thousands)	**Q3 2024**	**Q3 2023**	**Change**	**YTD 2024**	**YTD 2023**	**Change**
Gain (loss) from short-term investments	**$ 2,407**	$(13,184)	$15,591	**$98,923**	$30,340	$68,583
Interest income	**1,347**	2,263	(916)	**6,124**	6,018	106
Interest expense	**(741)**	(1)	(740)	**(2,154)**	(525)	(1,629)
Other non-operating expense, net	**(12,495)**	(4,300)	(8,195)	**(48,206)**	(4,570)	(43,636)
Total non-operating income and expenses, net	**$(9,482)**	$(15,222)	$ 5,740	**$54,687**	$31,263	$23,424

Q3 2024 vs. Q3 2023

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, the collar arrangement we executed in Q2 2024 to hedge against the fluctuation in Viking's share price, and other equity security investments. The gain from short-term investments was $2.4 million in Q3 2024 as compared to the loss from short-term investments of $13.2 million in Q3 2023. In Q3 2024, we recorded an unrealized gain on Viking shares of $10.3 million compared to an unrealized loss of $11.5 million in Q3 2023. In Q3 2024, the fair value adjustment to the collar agreement was a loss of $7.9 million. We did not have a comparable collar agreement in Q3 2023.

Interest income consists primarily of interest earned on our short-term investments. The decrease over the prior year was due to the decrease in average investment balances in Q3 2024 compared to Q3 2023.

In Q3 2024, interest expense consists primarily of a royalty and milestone payments purchase agreement, entered by Novan (Pelthos) in 2019, and assumed as part of the acquisition in September 2023. The increase in interest expense in Q3 2024 was primarily driven by the $0.5 million interest expense related to the Novan (Pelthos) royalty and milestone payments purchase agreement.

Other non-operating expense, net, primarily consists of mark-to-market adjustments on derivatives (other than the collar arrangement and the partner program derivatives) and CVRs. Other non-operating expense, net, in Q3 2024 increased by $8.2 million as compared to Q3 2023, primarily due to the loss from change in fair value of derivative assets in Q3 2024.

YTD 2024 vs. YTD 2023

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, the collar arrangement we executed in Q2 2024 to hedge against the fluctuation in Viking's share price, and other equity security investments. The gain from short-term investments was $98.9 million in YTD 2024 as compared to $30.3 million in YTD 2023. In YTD 2024, we recorded a realized gain on the sales of Viking shares of $60.0 million compared to $37.2 million in YTD 2023. Additionally, we recorded an unrealized gain on Viking shares of $32.1 million in YTD 2024 compared to an unrealized loss of $6.3 million in YTD 2023. In YTD 2024, the fair value adjustment to the collar agreement was a net gain of $7.3 million. We did not have a comparable collar agreement in YTD 2023.

Interest income consists primarily of interest earned on our short-term investments.

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 along with a royalty and milestone payments purchase agreement, entered by Novan (Pelthos) in 2019, and assumed as part of the acquisition in September 2023. In May 2023, the 2023 Notes matured and we repaid the remaining $76.9 million principal amount upon maturity of the 2023 Notes and $0.3 million accrued interest in cash. The increase in interest expense in YTD 2024 was primarily driven by the $1.6 million interest expense related to the Novan (Pelthos) royalty and milestone payments purchase agreement.

Other non-operating expense, net, primarily consists of fair value adjustments to Primrose Bio investments, equity method loss related to Primrose Bio, and mark-to-market adjustments on derivatives (other than the collar arrangement and the partner program derivatives) and CVRs. Other non-operating expense, net, in YTD 2024 increased by $43.6 million as compared to YTD 2023, primarily due to the revaluation of Primrose investments, the equity method loss related to Primrose Bio, and the loss from change in fair value of derivative assets in YTD 2024.

Income Tax Expense

(Dollars in thousands)	Q3 2024	Q3 2023	Change	YTD 2024	YTD 2023	Change
Loss (income) before income taxes	**$(6,339)**	$(12,144)	$ 5,805	**$41,718**	$46,563	$(4,845)
Income tax benefit (expense)	**(833)**	1,871	(2,704)	**(14,662)**	(10,932)	(3,730)
Loss (income) from operations	**$(7,172)**	$(10,273)	$ 3,101	**$27,056**	$35,631	$(8,575)
Effective tax rate	**(13.1) %**	15.4 %		**35.1 %**	23.5 %	

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 September 30, 2024 and 2023 was (13.1)% and 15.4%, respectively. The effective tax rate for the nine months ended September 30, 2024 and 2023 was 35.1% and 23.5%, respectively. The variance from the U.S. federal statutory tax rate of 21% for the three and nine months ended September 30, 2024 was primarily due to section162(m) limitation on deduction for officer compensation, other non-deductible items, and income from foreign operations, which were partially offset by the foreign derived intangible income deduction. The variance from the U.S. federal tax rate of 21% for the three and nine months ended September 30, 2023 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.

Net Loss from Discontinued Operations

Net loss from discontinued operations for Q3 2024 and Q3 2023 was zero. Net loss from discontinued operations for YTD 2024 and YTD 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 5, Spin-off of OmniAb*."

Liquidity and Capital Resources

As of September 30, 2024, our cash, cash equivalents, and short-term investments totaled $219.6 million, which increased by $49.3 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 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. 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. During the three and nine months ended September 30, 2024, we issued 334,325 shares of common stock in the ATM Offering, generating proceeds of $34.3 million, net of commissions and other transaction costs.

Our Board has approved a stock repurchase program authorizing, but not requiring, the repurchase of up to $50 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 million of our common stock remained available as of September 30, 2024.

On October 12, 2023, we entered into the $75 million Revolving Credit Facility, 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 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.

On July 8, 2024, we entered into the first Amendment to the Revolving Credit Facility which amends the Credit Agreement to, among other things, increase the aggregate revolving credit facility amount from $75 million to $125 million.

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 September 30, 2024, we had $124.4 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 September 30, 2024, we had $4.0 million in fair value of contingent consideration liabilities associated with prior acquisitions to be settled in future periods.

Cash Flow Summary

(Dollars in thousands)	YTD 2024	YTD 2023
Net cash provided by (used in):		
Operating activities	$ 68,576	$ 41,512
Investing activities	$ (105,041)	$ (1,398)
Financing activities	$ 76,753	$ (65,262)

During the nine months ended September 30, 2024, we generated cash from operations primarily due to net income. We used cash in investing activities primarily for Apeiron acquisition, Agenus acquisition, and purchases of short-term investments, financial royalty assets and Palvella notes receivable, partially offset by cash from sale and maturity of short-term investments including Viking shares. We generated cash from financing activities primarily due to net proceeds from the sales of shares of common stock in the ATM Offering, and net proceeds from stock options exercises and ESPP.

During the nine months ended September 30, 2023, we generated cash from operations primarily due to net income. We used cash in investing activities primarily for Novan acquisition and investment in Primrose Bio, partially offset by cash from sale and maturity of short-term investments including Viking shares. We used cash in financing activities primarily for repayment of the 2023 Notes upon maturity, partially offset by net proceeds from stock options exercises and ESPP.

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 nine months ended September 30, 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 September 30, 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 September 30, 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

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 us and no individualized factual allegations have been advanced against us in any of the three filed complaints. We reject all claims raised in the complaints and intend to vigorously defend against these matters.

On August 22, 2024, CyDex Pharmaceuticals, Inc. filed a Verified Complaint in the Delaware Court of Chancery against Bexson Biomedical, Inc. (Bexson), asserting claims for declaratory relief and breach of contract arising out of a Captisol In Vivo Agreement (In

Vivo Agreement) between the parties, pursuant to which CyDex provided Bexson with research-grade Captisol and related confidential and proprietary information for a potential new formulation of ketamine being developed by Bexson. CyDex alleges that Bexson breached its obligations under the In Vivo Agreement, including by misusing confidential information and materials provided by CyDex and by using CyDex's confidential information and materials to file patent applications that purport to cover formulations that are "not ketamine." CyDex also asserts that Bexson failed to return and destroy Cydex's confidential information and materials as required by the Agreement. CyDex seeks relief including specific performance of certain co-ownership provisions of the Agreement and disgorgement from Bexson for any benefits obtained in violation of the In Vivo Agreement. On September 27, 2024, Bexson moved to dismiss the Verified Complaint.

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.

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 and political 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 September 30, 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	
2.1†	Agreement on the Acquisition of Stocks in Apeiron Biologics AG entered on July 8, 2024, between Ligand Pharmaceuticals Incorporated and the sellers.	10-Q	001-33093	8/07/2024	2.1	
3.1	Fifth Amended and Restated Bylaws of the Company	8-K	001-33093	4/19/2024	3.1	
10.1	First Amendment to Credit Agreement, dated as of July 8, 2024, among Ligand Pharmaceuticals Incorporated, certain of its subsidiaries, as Guarantors, the Lenders, and Citibank, N.A., as Administrative Agent, Swingline Lender and L/C Issuer.	10-Q	001-33093	8/07/2024	10.1	
10.2	Severance Agreement and General Release dated as of August 2, 2024, between Ligand Pharmaceuticals Incorporated and Mr. Korenberg.					X
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 September 30, 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 September 30, 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.

† Certain portions of this exhibit (indicated by asterisks) have been omitted because they are both not material and are the type that Ligand treats as private or confidential.

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:	November 8, 2024	By:	/s/ Octavio Espinoza
			Octavio Espinoza
			Chief Financial Officer
			Duly Authorized Officer and Principal Financial Officer

SEVERANCE AGREEMENT AND GENERAL RELEASE

THIS SEVERANCE AGREEMENT AND GENERAL RELEASE (hereinafter this "AGREEMENT") is made effective as of the 2nd day of August, 2024 by and between Matthew Korenberg (hereinafter "Korenberg") and LIGAND PHARMACEUTICALS INCORPORATED (hereinafter "LIGAND") and inures to the benefit of each of LIGAND's parents, subsidiaries, related entities, predecessors, successors, officers, directors, shareholders, agents, employees and assigns.

RECITALS

A. Korenberg was for a period of time an employee of LIGAND.

B. Korenberg wishes for his employment with LIGAND to terminate effective upon the earlier of (i) October 31, 2024 and (ii) such date that Korenberg informs LIGAND in writing will be his final day of employment with LIGAND (the "Termination Date");

C. Korenberg and LIGAND wish permanently to resolve any and all disputes arising out of the termination of Korenberg's employment with LIGAND.

NOW, THEREFORE, for and in consideration of the execution of this AGREEMENT and the mutual covenants contained in the following paragraphs, LIGAND and Korenberg agree as follows:

1. LIGAND agrees to pay Korenberg his regular base salary and to continue to maintain Korenberg's participation in LIGAND's medical and dental plans through the Termination Date.
2. Subject to the occurrence of the Effective Date (as defined below), on or before the Termination Date, LIGAND and Korenberg will enter into the consulting agreement attached hereto as Exhibit A.
3. On the Termination Date, LIGAND shall issue to Korenberg his final paycheck, reflecting (i) Korenberg's fully earned but unpaid base salary, through the Termination Date at the rate then in effect, (ii) all accrued, unused paid time off or vacation due Korenberg through the Termination Date, (iii) Korenberg's regular base salary for the period between the Termination Date and October 31, 2024, and (iv) 50% of his 2024 target bonus. Korenberg acknowledges that, with his final paycheck, he has been paid for all of his compensation, bonuses, commissions, expense reimbursements, paid time off or vacation, or other

compensation he earned or was due during his employment by LIGAND. Korenberg understands and acknowledges that he is will not be eligible to receive any severance benefits from LIGAND. For the avoidance of doubt, any consulting fees owed to Korenberg will be paid through standard procedures for the period from October 31, 2024 through the Consulting End Date.

4. Subject to the occurrence of the Effective Date, LIGAND agrees to pay Korenberg on the Termination Date, a one-time payment of the product of $3,639.18 multiplied by the number of full months remaining between the Termination Date and December 31, 2024 less applicable withholding taxes to cover the cost of COBRA for the remainder of 2024. Pursuant to the terms of the Consolidated Omnibus Budget Reconciliation Act ("COBRA"), continued participation shall be at Korenberg's expense. Nothing herein shall limit the right of LIGAND to change the provider and/or the terms of its group health insurance plan at any time hereafter.
5. Subject to the occurrence of the Effective Date, vesting of all stock awards currently held by Korenberg shall continue through the Consulting End Date. Subject to the occurrence of the Effective Date, provided that Korenberg does not voluntarily terminate the consulting agreement prior to December 31, 2024, on the Consulting End Date LIGAND will accelerate the vesting of all stock awards currently held by Korenberg which would have vested through December 31, 2025 but for the termination of his employment, and Korenberg shall have the ability exercise any stock awards through March 1, 2026. For the avoidance of doubt, the two Performance Stock Unit awards that have measuring periods ending 12/31/2024 will be vested and delivered at the performance level deemed achieved by the Human Capital and Compensation Committee for all holders of the Performance Stock Unit. All other Performance Stock Units will be vested and delivered at target payout.
6. Korenberg for himself his heirs, executors, administrators, assigns and successors, fully and forever releases and discharges LIGAND and each of its present and former parents, subsidiaries, affiliates, benefit plans, benefit plan fiduciaries, predecessors, successors, officers, directors, shareholders, agents, employees and assigns, with respect to any and all claims, liabilities and causes of action, of every nature, kind and description, in law, equity or otherwise, which heretofore have existed or now exist, including, without limitation, any and all claims, liabilities and causes of action arising out of or relating to Korenberg's employment with LIGAND or the termination of that employment.
7. Korenberg understands and agrees that he is waiving any and all rights he may have had, now has, or in the future may have, to pursue any and all remedies available to his under any employment-related causes of action, including without limitation, claims of wrongful discharge, breach of contract, breach of the

covenant of good faith and fair dealing, fraud, violation of public policy, defamation, discrimination, physical injury, emotional distress, claims under Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act, the Americans with Disabilities Act, the Family Medical Leave Act, the Federal Rehabilitation Act, the California Fair Employment and Housing Act, the Equal Pay Act of 1963 and any other federal, state or local laws and regulations relating to employment and/or employment discrimination.

Notwithstanding the generality of the foregoing, Korenberg does not release any claims that cannot be released under applicable law, including the following: (i) claims for unemployment compensation or any state disability insurance benefits pursuant to the terms of applicable state law; (ii) claims for workers' compensation insurance benefits under the terms of any worker's compensation insurance policy or fund of LIGAND; (iii) claims pursuant to the terms and conditions of the federal law known as COBRA; (iv) claims for indemnity under the bylaws of LIGAND, as provided for by California law (including California Labor Code Section 2802) or under any applicable insurance policy with respect to Korenberg's liability as an employee of LIGAND; (v) Korenberg's right to bring to the attention of the Equal Employment Opportunity Commission or the California Department of Fair Employment and Housing claims or any other federal, state or local government agency of discrimination, harassment, retaliation or failure to accommodate, or from participating in an investigation or proceeding conducted by the Equal Employment Opportunity Commission or any other federal, state or local government agency; provided, however, that Korenberg does release his right to secure any damages for any such alleged treatment; and (vi) Korenberg's right to communicate or cooperate with any government agency.

8. Korenberg promises and agrees that he will never sue LIGAND or otherwise institute or participate in any legal or administrative proceedings against LIGAND with respect to Korenberg employment with LIGAND or the termination of that employment, unless Korenberg is compelled by legal process to do so.

9. Korenberg expressly waives any and all rights and benefits conferred upon his by statute, if any, to the effect that general releases do not extend to unsuspected claims, including statutory language similar to Section 1542 of the Civil Code of the State of California, which states as follows:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR his **FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HIS SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."**

10. Korenberg expressly agrees and understands that the Release given by his pursuant to this AGREEMENT applies to all unknown, unsuspected and unanticipated claims, liabilities and causes of action which he may have against LIGAND.

11. Korenberg promises and agrees that, unless compelled by legal process, he will not disclose to others and will keep confidential both the fact and the terms of this settlement, including the amounts referred to in this AGREEMENT, except that he may disclose this information to his spouse and to his attorneys, accountants and other professional advisors to whom the disclosure is necessary to accomplish the purposes for which Korenberg has consulted such professional advisors. Korenberg expressly promises and agrees that, unless compelled by legal process, he will not disclose to any present or former employees of LIGAND the facts or the terms of this settlement.

12. Korenberg acknowledges that due to the position he has occupied and the responsibilities he has had at LIGAND, he has received confidential information concerning LIGAND's products, procedures, customers, sales, prices, contracts, and the like. Korenberg hereby promises and agrees that, unless compelled by legal process, he will not disclose to others and will keep confidential all information he has received while employed by LIGAND concerning LIGAND's products and procedures, the identities of LIGAND's customers, LIGAND's sales, LIGAND's prices, the terms of any of LIGAND's contracts with third parties, and the like. Korenberg acknowledges that Korenberg continues to be bound by the Proprietary Information and Inventions Agreement (the "PIIA") attached hereto as Exhibit B, in accordance with the terms thereof, which is incorporated herein by reference. Korenberg agrees that his obligations under the PIIA shall survive any termination of his employment or services to LIGAND.

13. Korenberg agrees that Korenberg shall not disparage or otherwise communicate negative statements or opinions about LIGAND or its affiliates, the members of its board of directors, or their respective officers, employees, shareholders or agents. LIGAND agrees that it shall not, and it shall instruct its officers and the members of its board of directors not to disparage or otherwise communicate negative statements or opinions about Korenberg. Nothing in this Section 13 shall have application to any evidence or testimony required by any court, arbitrator or government agency.

14. Notwithstanding anything to the contrary contained in this AGREEMENT or the PIIA, (i) Korenberg will not be prevented from reporting possible violations of federal law or regulation to any United States governmental agency or entity in accordance with the provisions of and rules promulgated under Section 21F of the Securities Exchange Act of 1934 or Section 806 of the Sarbanes-Oxley Act of 2002, or any other whistleblower protection provisions of state or federal law or

regulation (including the right to receive an award for information provided to any such government agencies), and (ii) Korenberg acknowledges that he will not be held criminally or civilly liable for (A) the disclosure of confidential or proprietary information that is made in confidence to a government official or to an attorney solely for the purpose of reporting or investigating a suspected violation of law, or (B) disclosure of confidential or proprietary information that is made in a complaint or other document filed in a lawsuit or other proceeding under seal or pursuant to court order.

15. Korenberg shall, promptly upon LIGAND's request, surrender to LIGAND all company equipment, lists, books and records of, or in connection with, LIGAND's business, and all other property belonging to LIGAND, it being distinctly understood that all such equipment, lists, books and records, and other documents, are the property of LIGAND and shall be returned with all stored data and files intact.

16. Korenberg acknowledges and agrees that no promises or representations were made to his which do not appear written herein and that this AGREEMENT contains the entire agreement of the parties on the subject matter thereof.

17. Korenberg hereby acknowledges that he has read and understands this AGREEMENT and that he signs this AGREEMENT voluntarily and without coercion. Korenberg further acknowledges that he has been encouraged by LIGAND to obtain independent legal advice regarding the matters contained in this AGREEMENT. Korenberg further acknowledges that the waivers he has made in this AGREEMENT are knowing, conscious and voluntary and are made with full appreciation that he is forever foreclosed from pursuing any of the rights so waived.

18. Korenberg acknowledges that Korenberg was provided with this AGREEMENT on July 19, 2024 Korenberg acknowledges that Korenberg has been provided at least twenty-one (21) days' time in which to consider this AGREEMENT after LIGAND's delivery of such Agreement to Korenberg. further acknowledges that LIGAND has advised Korenberg that he is waiving all rights under the Age Discrimination in Employment Act, and that he should consult with an attorney of Korenberg's choice before signing this AGREEMENT, and Korenberg has had sufficient time to consider the terms of this AGREEMENT. Korenberg represents and acknowledges that if he executes this AGREEMENT before twenty-one (21) days have elapsed, he does so knowingly, voluntarily, and upon the advice and with the approval of Korenberg's legal counsel (if any), and that he voluntarily waives any remaining consideration period. Korenberg acknowledges and agrees that any material or immaterial changes to the AGREEMENT shall not extend the foregoing review period.

19. Korenberg understands that after executing this AGREEMENT, he has the right to revoke it within seven (7) days after Korenberg's execution of it. Korenberg understands that this AGREEMENT will not become effective and enforceable unless the seven (7) day revocation period passes and he does not revoke the AGREEMENT in writing. Korenberg understands that this AGREEMENT may not be revoked after the seven (7) day revocation period has passed. Korenberg also understands that any revocation of this AGREEMENT must be made in writing and delivered to the Human Resources department of LIGAND, within the seven (7) day period.

20. Korenberg understands that this AGREEMENT shall become effective, irrevocable, and binding upon Korenberg on the eighth (8^{th}) day after Korenberg's execution of it (the "Effective Date"), so long as he has executed and provided the AGREEMENT to LIGAND on or before that date, and so long as he has not revoked it within the time period and in the manner specified in Section 19 above. Korenberg further understands that he will not be given any severance benefits.

21. The covenants, agreements, representations and warranties contained in or made in this AGREEMENT survive Korenberg's termination of employment or any termination of this AGREEMENT.

22. In the event any provision of this AGREEMENT is found to be unenforceable by an arbitrator or court of competent jurisdiction, such provision shall be deemed modified to the extent necessary to allow enforceability of the provision as so limited, it being intended that the parties shall receive the benefit contemplated herein to the fullest extent permitted by law. If a deemed modification is not satisfactory in the judgment of such arbitrator or court, the unenforceable provision shall be deemed deleted, and the validity and enforceability of the remaining provisions shall not be affected thereby.

23. The headings set forth in this AGREEMENT are for convenience only and shall not be used in interpreting this AGREEMENT. This shall not be construed against either party.

24. This AGREEMENT is to be governed by and construed in accordance with the laws of the United States of America and the State of California applicable to contracts made and to be performed wholly within such State, and without regard to the conflicts of laws principles thereof. All disputes arising hereunder will be adjudicated in accordance with Section 27 below.

25. This AGREEMENT, including exhibits, sets forth the entire understanding of the parties with respect to the subject matter hereof and supersede all existing agreements between them concerning such subject matter, including without limitation, any offer letter between Korenberg and LIGAND or any of its subsidiaries. Korenberg expressly acknowledges and agrees that he is not eligible

for any severance or termination benefits under such offer letter, which is hereby terminated. This AGREEMENT may be amended or modified only with the written consent of Korenberg and an authorized representative of LIGAND. No oral waiver, amendment or modification will be effective under any circumstances whatsoever.

26. This AGREEMENT may be executed in any number of counterparts, each of which when so executed and delivered will be deemed an original, and all of which together shall constitute one and the same agreement. This AGREEMENT may be executed and delivered by facsimile or by .pdf file and upon such delivery the facsimile or .pdf signature will be deemed to have the same effect as if the original signature had been delivered to the other party.

27. Dispute Resolution.

(a) In the event of any dispute, claim or controversy based on, arising out of or relating to Korenberg's employment or this AGREEMENT (a "Dispute"), the parties shall attempt to resolve the dispute in non-binding mediation in accordance with the National Rules for the Resolution of Employment Disputes (the "Rules") of the American Arbitration Association ("AAA"). The Rules may be found online at www.aaa.org or will be provided upon request to LIGAND. If the parties are unable to agree upon a mediator, one shall be appointed by the AAA in accordance with its Rules. Each party shall pay the fees of its own attorneys and all other expenses connected with presenting its case. Other costs of the mediation, including the cost of any record or transcripts of the mediation, AAA's administrative fees, the fee of the mediator, and all other fees and costs, shall be borne by LIGAND. If the matter has not been resolved pursuant to the aforesaid mediation procedure within thirty (30) days of the commencement of such procedure, or such other period as the parties agree, either party may submit the dispute to arbitration pursuant to Section 27(b) below.

(b) Any Dispute not settled pursuant to Section 27(a) above shall be settled by final and binding arbitration in San Diego, California, before a single neutral arbitrator in accordance with the Rules of the AAA, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction. Arbitration may be compelled pursuant to the California Arbitration Act (Code of Civil Procedure §§ 1280 et seq.). If the parties are unable to agree upon an arbitrator, one shall be appointed by the AAA in accordance with its Rules. Each party shall pay the fees of its own attorneys, the expenses of its witnesses and all other expenses connected with presenting its case; *however*, Korenberg and LIGAND agree that, to the extent permitted by law, the arbitrator shall award reasonable attorneys' fees to the prevailing party. Other costs of the arbitration, including the cost of any record or transcripts of the arbitration, AAA's administrative fees, the fee of the arbitrator, and all other fees and costs, shall be borne by LIGAND.

(c) This Section 27 is intended to be the exclusive method for resolving any and all claims by the parties against each other for payment of damages under this AGREEMENT or relating to Korenberg employment; *provided*, however, that Korenberg shall retain the right to file administrative charges with or seek relief through any government agency of competent jurisdiction, and to participate in any government investigation, including but not limited to (i) claims for workers' compensation, state disability insurance or unemployment insurance; (ii) claims for unpaid wages or waiting time penalties brought before the California Division of Labor Standards Enforcement; *provided* that any appeal from an award or from denial of an award of wages and/or waiting time penalties shall be arbitrated pursuant to the terms of this AGREEMENT; and (iii) claims for administrative relief from the United States Equal Employment Opportunity Commission and/or the California Department of Fair Employment and Housing (or any similar agency in any applicable jurisdiction other than California); *provided*, *further*, that, except as otherwise provided by law, Korenberg will not be entitled to obtain any monetary relief through such agencies other than workers' compensation benefits or unemployment insurance benefits. Neither this AGREEMENT nor the submission to mediation or arbitration shall limit the parties' right to seek provisional relief, including without limitation injunctive relief, in any court of competent jurisdiction pursuant to California Code of Civil Procedure § 1281.8 or any similar statute of an applicable jurisdiction. Seeking any such relief shall not be deemed to be a waiver of such party's right to compel arbitration. Both Korenberg and LIGAND expressly waive their right to a jury trial. Korenberg further waives his right to pursue claims against LIGAND on a class basis; *provided*, *however*, that Korenberg does not waive his right, to the extent preserved by law, to pursue representative claims against LIGAND under the California Private Attorney General Act.

8/2/2024 /s/ Todd Davis
Dated: ______________ ____________________________________

Todd Davis , Chief Executive Officer
LIGAND PHARMACEUTICALS INCORPORATED

8/2/2024 /s/ Matthew Korenberg
Dated: ______________ ____________________________________

Matthew Korenberg

Exhibit 31.1

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:	November 8, 2024	/s/ Todd C. Davis
		Todd C. Davis
		Chief Executive Officer
		(Principal Executive Officer)

Exhibit 31.2

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: November 8, 2024

/s/ Octavio Espinoza

Octavio Espinoza
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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 September 30, 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: November 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 September 30, 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: November 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.

Cover - shares	9 Months Ended Sep. 30, 2024	Nov. 05, 2024
Cover [Abstract]		
Document Type	10-Q	
Document Quarterly Report	true	
Document Period End Date	Sep. 30, 2024	
Document Transition Report	false	
Entity File Number	001-33093	
Entity Registrant Name	LIGAND PHARMACEUTICALS INCORPORATED	
Entity Incorporation, State or Country Code	DE	
Entity Tax Identification Number	77-0160744	
Entity Address, Address Line One	555 Heritage Drive, Suite 200	
Entity Address, City or Town	Jupiter	
Entity Address, State or Province	FL	
Entity Address, Postal Zip Code	33458	
City Area Code	858	
Local Phone Number	550-7500	
Title of 12(b) Security	Common Stock, par value $0.001 per share	
Trading Symbol	LGND	
Security Exchange Name	NASDAQ	
Entity Current Reporting Status	Yes	
Entity Interactive Data Current	Yes	
Entity Filer Category	Large Accelerated Filer	
Entity Small Business	false	
Entity Emerging Growth Company	false	
Entity Shell Company	false	
Entity Common Stock, Shares Outstanding		18,895,373
Amendment Flag	false	
Document Fiscal Year Focus	2024	
Document Fiscal Period Focus	Q3	
Entity Central Index Key	0000886163	
Current Fiscal Year End Date	--12-31	

CONDENSED CONSOLIDATED BALANCE SHEETS - USD ($) $ in Thousands	Sep. 30, 2024	Dec. 31, 2023
Current assets:		
Cash and cash equivalents	$ 63,619	$ 22,954
Short-term investments	156,024	147,355
Accounts receivable, net	34,318	32,917
Inventory	16,740	23,969
Income taxes receivable	7,813	6,395
Current derivative assets	11,133	0
Other current assets	19,741	3,839
Total current assets	309,388	237,429
Intangible assets, net	274,905	299,606
Goodwill	105,250	103,370
Long-term portion of financial royalty assets, net	199,251	62,291
Noncurrent derivative assets	19,246	3,531
Property and equipment, net	15,094	15,607
Operating lease right-of-use assets	7,157	6,062
Finance lease right-of-use assets	2,940	3,393
Equity method investment in Primrose Bio	1,245	12,595
Other investments	11,908	36,726
Deferred income taxes, net	78	214
Other assets	8,404	6,392
Total assets	954,866	787,216
Current liabilities:		
Accounts payable	4,694	2,427
Accrued liabilities	15,600	12,467
Income taxes payable	2,108	0
Deferred revenue	1,152	1,222
Current contingent liabilities	128	256
Current operating lease liabilities	1,066	403
Current finance lease liabilities	24	7
Total current liabilities	24,772	16,782
Long-term deferred revenue	2,508	1,444
Long-term contingent liabilities	3,863	2,942
Long-term operating lease liabilities	6,267	5,755
Deferred income taxes, net	46,404	31,622
Other long-term liabilities	29,874	27,758
Total liabilities	113,688	86,303
Commitments and contingencies		
Stockholders' equity:		

Preferred stock, $0.001 par value; 5,000 shares authorized; zero issued and outstanding at September 30, 2024 and December 31, 2023	0	0
Common stock, $0.001 par value; 60,000 shares authorized; 18,760 and 17,556 shares issued and outstanding at September 30, 2024 and December 31, 2023, respectively	19	18
Additional paid-in capital	309,341	198,696
Accumulated other comprehensive loss	1,746	(817)
Retained earnings	530,072	503,016
Total stockholders' equity	841,178	700,913
Total liabilities and stockholders' equity	$ 954,866	$ 787,216

CONDENSED CONSOLIDATED BALANCE SHEETS (Parenthetical) - $ / shares shares in Thousands	Sep. 30, 2024	Dec. 31, 2023
Statement of Financial Position [Abstract]		
Preferred stock, par value (in USD per share)	$ 0.001	$ 0.001
Preferred stock authorized (in shares)	5,000	5,000
Preferred stock issued (in shares)	0	0
Preferred stock outstanding (in shares)	0	0
Common stock, par value (in USD per share)	$ 0.001	$ 0.001
Common stock authorized (in shares)	60,000	60,000
Common stock issued (in shares)	18,760	17,556
Common stock outstanding (in shares)	18,760	17,556

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS - USD ($) shares in Thousands, $ in Thousands	3 Months Ended		9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023	Sep. 30, 2024	Sep. 30, 2023
Revenues and other income:				
Total revenues and other income	$ 51,812	$ 32,868	$ 124,321	$ 103,213
Operating costs and expenses:				
Cost of Captisol	2,449	3,485	8,237	8,871
Amortization of intangibles	8,258	8,238	24,701	25,316
Research and development	5,675	5,532	17,000	19,049
General and administrative	24,475	14,656	53,049	36,798
Financial royalty assets impairment	0	0	26,491	0
Fair value adjustments to partner program derivatives	7,812	0	7,812	0
Total operating costs and expenses	48,669	31,911	137,290	90,034
Gain on sale of Pelican	0	(2,121)	0	(2,121)
Operating income (loss) from continuing operations	3,143	3,078	(12,969)	15,300
Non-operating income and expenses:				
Gain (loss) from short-term investments	2,407	(13,184)	98,923	30,340
Interest income	1,347	2,263	6,124	6,018
Interest expense	(741)	(1)	(2,154)	(525)
Other non-operating expense, net	(12,495)	(4,300)	(48,206)	(4,570)
Total non-operating (expenses) income, net	(9,482)	(15,222)	54,687	31,263
(Loss) income before income taxes from continuing operations	(6,339)	(12,144)	41,718	46,563
Income tax benefit (expense)	(833)	1,871	(14,662)	(10,932)
Net (loss) income from continuing operations	(7,172)	(10,273)	27,056	35,631
Net loss from discontinued operations	0	0	0	(1,665)
Net (loss) income	$ (7,172)	$ (10,273)	$ 27,056	$ 33,966
Earnings per share				
Basic net (loss) income from continuing operations per share (in USD per share)	$ (0.39)	$ (0.59)	$ 1.50	$ 2.07
Basic net loss from discontinued operations per share (in USD per share)	0	0	0	(0.10)
Basic net (loss) income per share (in USD per share)	$ (0.39)	$ (0.59)	$ 1.50	$ 1.97
Shares used in basic per share calculation (in shares)	18,419	17,380	18,061	17,241
Diluted net (loss) income from continuing operations per share (in USD per share)	$ (0.39)	$ (0.59)	$ 1.46	$ 2.00
Diluted net loss from discontinued operations per share (in USD per share)	0	0	0	(0.09)
Diluted net (loss) income per share (in USD per share)	$ (0.39)	$ (0.59)	$ 1.46	$ 1.91
Shares used in diluted per share calculation (in shares)	18,419	17,380	18,574	17,784
Royalties				
Revenues and other income:				

Total revenues and other income	$ 31,709	$ 23,888	$ 73,966	$ 62,473
Revenue from intangible royalty assets				
Revenues and other income:				
Total revenues and other income	26,552	23,863	67,512	61,447
Income from financial royalty assets				
Revenues and other income:				
Total revenues and other income	5,157	25	6,454	1,026
Captisol				
Revenues and other income:				
Total revenues and other income	6,255	8,608	22,967	24,450
Contract revenue and other income				
Revenues and other income:				
Total revenues and other income	$ 13,848	$ 372	$ 27,388	$ 16,290

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME - USD ($) $ in Thousands	3 Months Ended		9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023	Sep. 30, 2024	Sep. 30, 2023
Statement of Comprehensive Income [Abstract]				
Net (loss) income	$ (7,172)	$ (10,273)	$ 27,056	$ 33,966
Unrealized net (loss) gain on available-for-sale securities, net of tax	121	23	3	40
Foreign currency translation adjustment, net of tax	2,560	0	2,560	0
Comprehensive (loss) income	$ (4,491)	$ (10,250)	$ 29,619	$ 34,006

CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY - USD ($) shares in Thousands, $ in Thousands	Total	Common Stock	Additional paid in capital	Accumulated other comprehensive income (loss)	Retained earnings
Balance at beginning of period at Dec. 31, 2022	$ 597,485	$ 17	$ 147,590	$ (984)	$ 450,862
Balance at beginning of period (in shares) at Dec. 31, 2022		16,951			
Increase (Decrease) in Stockholders' Equity					
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	(762)		(762)		
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes (in shares)		183			
Share-based compensation	5,931		5,931		
Unrealized net (loss) gain on available-for-sale securities, net of tax	49			49	
Final distribution of OmniAb	1,665		1,665		
Net income (loss)	41,949				41,949
Balance at end of period at Mar. 31, 2023	646,317	$ 17	154,424	(935)	492,811
Balance at end of period (in shares) at Mar. 31, 2023		17,134			
Balance at beginning of period at Dec. 31, 2022	597,485	$ 17	147,590	(984)	450,862
Balance at beginning of period (in shares) at Dec. 31, 2022		16,951			
Increase (Decrease) in Stockholders' Equity					
Unrealized net (loss) gain on available-for-sale securities, net of tax	40				
Foreign currency translation adjustment, net of tax	0				
Net income (loss)	33,966				
Balance at end of period at Sep. 30, 2023	667,896	$ 18	183,994	(944)	484,828
Balance at end of period (in shares) at Sep. 30, 2023		17,421			
Balance at beginning of period at Mar. 31, 2023	646,317	$ 17	154,424	(935)	492,811
Balance at beginning of period (in shares) at Mar. 31, 2023		17,134			
Increase (Decrease) in Stockholders' Equity					
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	9,110		9,110		

Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes (in shares)		218			
Share-based compensation	7,207		7,207		
Unrealized net (loss) gain on available-for-sale securities, net of tax	(32)			(32)	
Net income (loss)	2,290				2,290
Balance at end of period at Jun. 30, 2023	664,892	$ 17	170,741	(967)	495,101
Balance at end of period (in shares) at Jun. 30, 2023		17,352			
Increase (Decrease) in Stockholders' Equity					
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	3,285	$ 1	3,284		
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes (in shares)		69			
Share-based compensation	6,884		6,884		
Unrealized net (loss) gain on available-for-sale securities, net of tax	23			23	
Foreign currency translation adjustment, net of tax	0				
Tax return to provision	3,085		3,085		
Net income (loss)	(10,273)				(10,273)
Balance at end of period at Sep. 30, 2023	667,896	$ 18	183,994	(944)	484,828
Balance at end of period (in shares) at Sep. 30, 2023		17,421			
Balance at beginning of period at Dec. 31, 2023	$ 700,913	$ 18	198,696	(817)	503,016
Balance at beginning of period (in shares) at Dec. 31, 2023	17,556	17,556			
Increase (Decrease) in Stockholders' Equity					
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	$ 12,228		12,228		
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes (in shares)		368			
Share-based compensation	7,334		7,334		
Unrealized net (loss) gain on available-for-sale securities, net of tax	(93)			(93)	
Net income (loss)	86,139				86,139
Balance at end of period at Mar. 31, 2024	806,521	$ 18	218,258	(910)	589,155
Balance at end of period (in shares) at Mar. 31, 2024		17,924			
Balance at beginning of period at Dec. 31, 2023	$ 700,913	$ 18	198,696	(817)	503,016

Balance at beginning of period (in shares) at Dec. 31, 2023	17,556	17,556			
Increase (Decrease) in Stockholders' Equity					
Unrealized net (loss) gain on available-for-sale securities, net of tax	$ 3				
Foreign currency translation adjustment, net of tax	2,560				
Net income (loss)	27,056				
Balance at end of period at Sep. 30, 2024	$ 841,178	$ 19	309,341	1,746	530,072
Balance at end of period (in shares) at Sep. 30, 2024	18,760	18,760			
Balance at beginning of period at Mar. 31, 2024	$ 806,521	$ 18	218,258	(910)	589,155
Balance at beginning of period (in shares) at Mar. 31, 2024		17,924			
Increase (Decrease) in Stockholders' Equity					
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	9,553	$ 1	9,552		
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes (in shares)		179			
Share-based compensation	11,060		11,060		
Unrealized net (loss) gain on available-for-sale securities, net of tax	(25)			(25)	
Net income (loss)	(51,911)				(51,911)
Balance at end of period at Jun. 30, 2024	775,198	$ 19	238,870	(935)	537,244
Balance at end of period (in shares) at Jun. 30, 2024		18,103			
Increase (Decrease) in Stockholders' Equity					
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes	21,270	$ 0	21,270		
Issuance of common stock under employee stock compensation plans, net of shares withheld for payroll taxes (in shares)		323			
Issuance of common stock under ATM, net of commissions and fees	34,030		34,030		
Issuance of common stock under ATM, net of commissions and fees (in shares)		334			
Share-based compensation	15,171		15,171		
Unrealized net (loss) gain on available-for-sale securities, net of tax	121			121	
Foreign currency translation adjustment, net of tax	2,560			2,560	
Net income (loss)	(7,172)				(7,172)

Balance at end of period at Sep. 30, 2024	$ 841,178	$ 19	$ 309,341	$ 1,746		$ 530,072
Balance at end of period (in shares) at Sep. 30, 2024	18,760	18,760				

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS - USD ($)	9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023
Cash flows from operating activities:		
Net income	$ 27,056,000	$ 33,966,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Change in estimated fair value of contingent liabilities	993,000	132,000
Depreciation and amortization of intangible assets	26,612,000	27,605,000
Amortization of premium on investments, net	(725,000)	(938,000)
Amortization of debt discount and issuance fees	314,000	159,000
Non-cash income from financial royalty assets	(4,687,000)	(883,000)
CECL adjustment to financial royalty assets	(3,463,000)	3,190,000
Impairment loss of financial royalty assets	26,491,000	924,000
Loss on derivative assets	14,655,000	0
Gain on sale of Pelican	0	(2,121,000)
Losses from equity method investment in Primrose Bio	11,576,000	0
Fair value adjustment to Primrose Bio securities investments	25,788,000	0
Share-based compensation	33,565,000	20,022,000
Deferred income taxes	(3,108,000)	6,761,000
Gain from short-term investments	(98,923,000)	(30,340,000)
Lease amortization expense	1,555,000	1,231,000
Other	3,123,000	215,000
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	(794,000)	(5,436,000)
Inventory	7,053,000	(11,577,000)
Accounts payable and accrued liabilities	2,617,000	(7,461,000)
Income tax receivable and payable	(607,000)	5,818,000
Deferred revenue	(1,172,000)	226,000
Other assets and liabilities	657,000	19,000
Net cash provided by operating activities	68,576,000	41,512,000
Cash flows from investing activities:		
Acquisition of financial royalty assets	(17,819,000)	0
Proceeds from financial royalty assets	4,892,000	349,000
Purchase of short-term investments	(133,629,000)	(107,262,000)
Proceeds from sale of short-term investments	189,563,000	96,318,000
Proceeds from maturity of short-term investments	27,751,000	37,941,000
Cash paid for investment in Primrose Bio	(998,000)	(15,235,000)
Cash paid for Palvella notes receivable	(2,500,000)	0
Cash paid for Novan acquisition, net of restricted cash received	0	(10,405,000)
Cash paid for the Agenus transaction	(75,000,000)	0
Cash paid for Apeiron acquisition, net of cash received	(91,996,000)	0
Cash paid for InvIOs investment	(4,196,000)	0

Purchase of property and equipment	(1,109,000)	(3,104,000)
Net cash (used in) provided by investing activities	(105,041,000)	(1,398,000)
Cash flows from financing activities:		
Proceeds from ATM sales, net of commissions and fees	34,030,000	0
Repayment at maturity/repurchase of 2023 Notes	0	(76,854,000)
Payments under finance lease obligations	(19,000)	(40,000)
Net proceeds from stock option exercises and ESPP	46,251,000	15,922,000
Taxes paid related to net share settlement of equity awards	(3,201,000)	(4,290,000)
Cash paid for debt issuance costs	(308,000)	0
Net cash provided by (used in) financing activities	76,753,000	(65,262,000)
Effect of exchange rate changes on cash and cash equivalents	377,000	0
Net increase in cash and cash equivalents	40,665,000	(25,148,000)
Cash and cash equivalents at beginning of period	22,954,000	45,006,000
Cash and cash equivalents at end of period	63,619,000	19,858,000
Supplemental disclosure of cash flow information:		
Interest paid	262,000	288,000
Taxes paid	17,346,000	10,000
Restricted cash in other assets	0	583,000
Acquisitions:		
Goodwill	105,250,000	
Net cash paid for acquisitions	0	10,405,000
Supplemental schedule of non-cash activity:		
Accrued Primrose transaction costs	0	1,013,000
Addition of right-of-use assets and lease liabilities	1,769,000	0
Accrued fixed asset purchases	289,000	409,000
Accrued debt issuance costs	8,000	0
Unrealized gain on AFS investments, net of tax	3,000	40,000
Novan, Inc.		
Cash flows from investing activities:		
Cash paid for Novan acquisition, net of restricted cash received		(10,405,000)
Acquisitions:		
Fair value of tangible assets acquired, net of cash and restricted cash received		17,887,000
Goodwill		3,709,000
Financial royalty assets		0
Intangible assets		10,700,000
Liabilities assumed		(21,891,000)
Net cash paid for acquisitions		$ 10,405,000
APEIRON		
Cash flows from investing activities:		
Cash paid for Novan acquisition, net of restricted cash received	(91,996,000)	
Acquisitions:		
Fair value of tangible assets acquired, net of cash and restricted cash received	8,965,000	
Goodwill	0	
Financial royalty assets	106,156,000	

Intangible assets	0
Liabilities assumed	(23,125,000)
Net cash paid for acquisitions	$ 91,996,000

Basis of Presentation and Summary of Significant Accounting Policies	9 Months Ended
	Sep. 30, 2024
Organization, Consolidation and Presentation of Financial Statements [Abstract]	
Basis of Presentation and Summary of Significant Accounting Policies	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 medicine 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. A intercompany accounts and transactions have been eliminated in consolidation. We have included all adjustments, consisting only of normal recur we considered necessary for a fair presentation of our financial results. These unaudited condensed consolidated financial statements and accompa read together with the audited consolidated financial statements included in our 2023 Annual Report. Interim financial results are not necessarily i 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 per Specifically, within the consolidated balance sheet as of December 31, 2023, our commercial license and other economic rights line has been recla portion of financial royalty assets, net, and to other assets, and a portion of other investments has been reclassified from other assets. Moreover, n as of December 31, 2023, have been reclassified from other assets.

In addition, within the unaudited condensed consolidated statement of operations for the three and nine months ended September 30, 2023, reclassified to revenue from intangible royalty assets, and a portion of the contract revenue has been reclassified to income from financial royalty

Discontinued Operations

The Company determined that the spin-off of the OmniAb Business in November 2022 met the criteria for classification as a discontinued with ASC Subtopic 205-20, *Discontinued Operations* ("ASC 205-20"). Accordingly, the accompanying condensed consolidated financial stateme present the results of all discontinued operations reported as a separate component of loss in the condensed consolidated statements of operations (see *Note 5, 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 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 assu amounts reported in the unaudited condensed consolidated financial statements and the accompanying notes. Actual results may differ from those

Revenue and Other Income

Our revenue is generated primarily from royalties on sales of products commercialized by our partners, Captisol material sales, income fro and contract revenue for license fees, technical, regulatory and sales-based milestone payments. Other operating income is primarily related to mi 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 re the promised goods or services in the contract; (ii) determination of whether the promised goods or services are performance obligations, includin in the context of the contract; (iii) measurement of the transaction price, including the constraint on variable consideration; (iv) allocation of the tr 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 ov agreements. We do not have future performance obligations under these license arrangements. We generally satisfy our obligation to grant intelle effective date of the contract. However, we apply the royalty recognition constraint required under the guidance for sales-based royalties which re recorded no sooner than when the underlying sale occurs. Therefore, royalties on sales of products commercialized by our partners are recognized 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 an experience and interim data provided by our partners including their publicly announced sales. Differences between actual and estimated royalty r 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” 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 expec 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. Deve products are non-commercialized, non-approved products that require FDA or other regulatory approval, and thus have uncertain cash flows. New 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 amount that reflects the consideration we expect to receive from our customers in exchange for those products or rights. A performance obligation 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 av and is separately identified in the contract. For Captisol material or intellectual property license rights, we consider our performance obligation sa transferred control of the product or granted the intellectual property rights, meaning the customer has the ability to use and obtain the benefit of t intellectual property license right. We recognize revenue for satisfied performance obligations only when we determine there are no uncertainties or transfer of control. Sales tax and other taxes we collect concurrent with revenue-producing activities are excluded from revenue. We have elect freight and shipping when control over Captisol material has transferred to the customer as an expense in cost of Captisol. We expense incrementa 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 immate 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 mi estimated transaction price when it is probable a significant reversal in the amount of cumulative revenue recognized will not occur. These estima experience, anticipated results and our best judgment at the time. If the contingent milestone payment is based on sales, we apply the royalty recog record revenue when the underlying sale has taken place. Significant judgments must be made in determining the transaction price for our sales of Because of the risk that products in development with our partners will not reach development milestones or receive regulatory approval, we gene contingent payments that would be due to us upon the development milestone or regulatory approval.

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

Other income is primarily related to milestone income received for financial royalty assets that have been fully amortized or where there is 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 o revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets), and customer advanc liabilities) on the consolidated balance sheet. Except for royalty revenue and certain service revenue, we generally receive payment at the point w soon after. Any fees billed in advance of being earned are recorded as deferred revenue. During the three and nine months ended September 30, 2 recognized as revenue that was previously deferred was $0.2 million and $1.2

million, respectively. During the three and nine months ended September 30, 2023, the amount recognized as revenue that was previously deferre

Disaggregation of Revenue

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

	Three months ended September 30,		Nine m Sept
	2024	2023	2024
Royalties			
Kyprolis	$ 11,599	$ 10,537	$ 27,22
Evomela	1,747	2,497	5,87
Teriparatide injection	2,376	2,800	6,52
Rylaze	3,886	3,678	10,07
Filspari	3,206	1,122	7,40
Vaxneuvance	1,466	1,313	3,96
Other	2,272	1,916	6,45
Revenue from intangible royalty assets	26,552	23,863	67,51
Income from financial royalty assets	5,157	25	6,45
	31,709	23,888	73,96
Captisol	6,255	8,608	22,96
Contract revenue and other income			
Milestone and other	13,848	372	25,44
Other income	—	—	1,94
Contract revenue and other income	13,848	372	27,38
Total	$ 51,812	$ 32,868	$ 124,32

Short-term Investments

Our short-term investments consist of the following at September 30, 2024 and December 31, 2023 (in thousands):

September 30, 2024	Amortized cost	Gross unrealized gains	Gross unrealized losses
Bond fund	$ 39,512	$ —	$ (265)
U.S. government securities	19,051	31	—
Bank deposits	12,280	21	—
Corporate bonds	10,969	30	(3)
Commercial paper	10,591	5	(1)
Corporate equity securities	6,551	—	(6,058)
	$ 98,954	$ 87	$ (6,327)
Viking common stock			
Total short-term investments			
December 31, 2023			
Bond fund	$ 63,763	$ —	$ (537)
Bank deposits	17,165	12	(1)
Corporate bonds	14,850	40	(2)
Commercial paper	11,578	9	(1)
U.S. government securities	6,736	18	(3)
Municipal bonds	1,007	—	(4)
Corporate equity securities	5,775	—	(5,235)
	$ 120,874	$ 79	$ (5,783)
Viking common stock			
Total short-term investments			

During the nine months ended September 30, 2024, we sold 0.7 million shares of Viking common stock and recognized a realized gain of $
did not sell Viking common stock during the three months ended September 30, 2024. During the nine months ended September 30, 2023, we sol
Viking common stock and recognized a realized gain of $37.2 million in total. During the three months ended September 30, 2023, there were no
stock.

Gain (loss) from short-term investments in our condensed consolidated statements of operations includes both realized and unrealized gain
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 rec
sale debt securities to the amount by which carrying value exceeds fair value and requires the reversal of previously recognized credit losses if fai
provisions of the credit losses standard did not have a material impact on our available-for-sale debt securities during the three and nine months e
and 2023.

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

	Septem	
	Amortized Cost	
Within one year	$	91,07
After one year through five years		4,64
Total	$	95,71

Our investment policy is capital preservation and we only invest in U.S.-dollar denominated investments. We held a total of 32 investment
unrealized loss position with a total of $0.01 million unrealized losses as of September 30, 2024. We believe that we will collect the principal and
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 unfavora
quality associated with these securities that impacted our assessment on collectability of principal and interest. In July 2024, we sold certain secur
the amortized cost basis to fund the Apeiron acquisition. Accordingly, we wrote down the amortized cost of $0.05 million during the nine months
2024. 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 recover
basis as of September 30, 2024. Accordingly, there was no credit loss recognized for the three months ended September 30, 2024. There were no
the three and nine months ended September 30, 2023.

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 am
expected to be collected. The allowance is determined by using the loss-rate method, which requires an estimation of loss rates based upon histori
adjusted for factors that are relevant to determining the expected collectability of accounts receivable. Some of these factors include macroeconon
correlate with historical loss experience, delinquency trends, aging behavior of receivables and credit and liquidity quality indicators for industry
individual customers. During the three and nine months ended September 30, 2024, we considered the current and expected economic and marke
a decrease of $0.01 million and a decrease of $0.13 million in the allowance for credit losses, respectively. During the three and nine months end
considered the current and expected economic and market conditions and concluded an increase of $0.10 million and an increase of $0.14 million
losses, respectively.

Inventory

Inventory, which consists of finished goods (Captisol), is stated at the lower of cost or net realizable value. We determine cost using the sp
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
realizable value or is in excess of expected requirements. There was a $0.1 million and $0.2 million write-down recorded against inventory for th
ended September 30, 2024, respectively. There was no write-down recorded against inventory for the three and nine months ended September 30,
finished goods, as of September 30, 2024 and December 31, 2023, inventory included prepayments of $3.3 million and $4.6 million, respectively
Captisol.

Goodwill and Other Identifiable Intangible Assets

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

	September 30, 2024
Indefinite-lived intangible assets	
Goodwill	$ 105,250
Definite lived intangible assets	
Complete technology	39,249
Less: accumulated amortization	(19,072
Trade name	2,642
Less: accumulated amortization	(1,810
Customer relationships	29,600
Less: accumulated amortization	(20,280
Contractual relationships	360,000
Less: accumulated amortization	(115,424
Total goodwill and other identifiable intangible assets, net	$ 380,155

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

Financial royalty assets represent a portfolio of future milestone and royalty payment rights acquired that are passive in nature (i.e., we do r 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 acco assets under ASC 310, *Receivables*. Our financial royalty assets are classified similar to loans receivable and are measured at amortized cost using 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 i effective interest rate is recalculated in each reporting period as the difference between expected cash flows and actual cash flows are realized and 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 ass accrued interest income (except for assets under the non-accrual method) and decreased by cash receipts in the period to arrive at the ending balan

We evaluate financial royalty assets for recoverability on an individual basis by comparing the effective interest rate at each reporting date 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) expense for the change in expected cash flows. The provision is measured as the difference between the financial royalty asset's amortized cost ba 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 –* financial royalty assets. The credit rating, which is primarily based on publicly available data and updated quarterly, is the primary credit quality i 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 ex initial amount and subsequent revisions in allowances for changes in expected future cash flows and expected credit losses are recorded as part of expenses on the condensed 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 p which is recorded in a financial royalty asset impairment on the condensed consolidated statements of operations. To the extent there was an allow 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 recove are recognized when cash is collected in a respective period earnings.

The current portion of financial royalty assets represents an estimation for current quarter royalty receipts which are collected during the su 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 6, Financial Royalty Assets, net (formerly known as Commercial License Rights).*

Derivative Assets

Derivative assets include instruments used for risk-management purposes, and other instruments. Derivative assets which are not used for r include: (a) acquired rights in future milestone and royalty payments from Agenus Partnered Programs (as defined below), (b) Agenus Warrant (a option to invest up to $25 million to milestone and royalty rights which expires on June 30, 2025 ("Upsize Option"), and (d) rights to receive from milestones on two contracts previously entered into by Primordial Genetics.

In addition, we have entered into a collar arrangement to hedge against the fluctuation risk in Viking's share price (the "Viking Share Colla Viking stock investment is remeasured at fair value through earnings under ASC 321, the Viking Share Collar is not eligible for hedge accounting economic hedge. All derivatives are measured at fair value on the consolidated balance sheets.

Derivative assets consist of the following (in thousands):

		September 30, 2024
Agenus Upsize Option (expires on 6/30/25)	$	3,815
Viking shares collar		7,318
Total current derivative assets	$	11,133
Primrose mRNA	$	2,921
Agenus Partner Programs		14,099
Agenus Warrant (5 years contractual term)		2,226
Total noncurrent derivative assets	$	19,246

A change in the fair value of the Viking Shares Collar that amounted to $(7.9) million and $7.3 million during the three and nine months en respectively, are included in gain (loss) from short-term investments within the condensed consolidated statements of operations. A change in the Partner Programs that amounted to $(7.2) million during the three and nine months ended September 30, 2024 is included in fair value adjustment derivatives within the condensed consolidated statements of operations. A change in the fair value of other derivatives that amounted to $(8.0) mi during the three and nine months ended September 30, 2024, respectively, are recognized in other non-operating expense, net within the condense of operations. We acquired the Primrose mRNA derivative on September 18, 2023 with the sale of Pelican business and investment in Primrose B the fair value of the Primrose mRNA derivative that amounted to $(0.6) million during the three and nine months ended September 30, 2024 is in adjustments to partner program derivatives within the condensed consolidated statements of operations. We did not have any other derivative inst and nine months ended September 30, 2023.

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 a 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 proporti or loss of the investee, net of any distributions received from the investee and any impairment.

Other Investments

Other investments represent our investments in equity securities of third parties in which we do not have control or significant influence. O investments do not have a readily determinable or estimable fair value and are measured using the measurement alternative, which is cost less imp adjustments resulting from observable price changes in orderly transactions for the identical or similar investment of the same issuer. The amount adjustment recognized during the period is presented in other non-operating income (expense) in our condensed consolidated statements of operat

Other investments consist of the following (in thousands):

		September 30, 2024
Equity securities in Primrose Bio	$	6,712
InvIOs investment		4,196
Neuritek warrants		—
Palvella Series C preferred stock		1,000
Total other investments	$	11,908

During the three months ended September 30, 2024, we recognized a full impairment for our investment in Neuritek warrants.

Other Assets and Other Current Assets

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

We determined the economic rights related to Palvella should be characterized as a funded research and development arrangement, because the funds usage for research and development activities, and thus we account for them in accordance with ASC 730-20, *Research and Developme* reduce our asset as the funds are expended by Palvella. As of September 30, 2024, of the $5 million upfront funding related to the Palvella Secon of the funding to Palvella was expended. Our CEO and director, Todd Davis, is a director of Palvella. Mr. Davis recused himself from both board' agreement between us and Palvella, including any financial analysis, the terms of the Palvella Second Amendment and the vote to approve the Pa and the related transactions.

In June 2024, we funded Palvella $2.5 million in exchange for a convertible note with a maturity of three years, which is included in other consolidated balance sheets.

Other current assets primarily include $2.3 million Employee Retention Credit, $6.6 million current portion of financial royalty assets (disc *Royalty Assets, net*), $2.2 million prepaid expenses, and inventory (raw materials and work in process related to the manufacturing of finished goo commercial supplies of ZELSUVMI™ by Pelthos Therapeutics, a wholly owned subsidiary of Ligand. For additional information on ZELSUVM Below is a summary of the inventory included in other current assets (in thousands):

	September 30, 2024
Raw materials	$ 2,495
Work in process	260
Total Pelthos inventory in other current assets	$ 2,755

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	September 30, 2024
Compensation	$ 3,830
Subcontractor	1,756
Professional fees	3,296
Customer deposit	621
Supplier	276
Royalties owed to third parties	2,989
Amounts owed to former licensees	—
Other	2,832
Total accrued liabilities	$ 15,600

Contingent Liabilities

In connection with the acquisition of CyDex in January 2011, we recorded a contingent liability for amounts potentially due to holders of tl former license holders. The liability is periodically assessed based on events and circumstances related to the underlying milestones, royalties and

In connection with the acquisition of Metabasis in January 2010, we issued Metabasis stockholders four tradable CVRs for each Metabasis the CVRs are remeasured at each reporting date through the term of the related agreement.

Any change in fair value is recorded in other non-operating expense, net within our condensed consolidated statement of operations. For ac *Note 7, Fair Value Measurements.*

Other Long-Term Liabilities

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

	September 30, 2024
Unrecognized tax benefits	$ 14,48
Novan (Pelthos) contract liability	15,32
Other long-term liabilities	(
	$ 29,8

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 strai vesting period. The following table summarizes share-based compensation expense recorded as components of research and development expense administrative expenses for the periods indicated (in thousands):

	Three months ended September 30,		Nine Se
	2024	2023	2024
SBC - Research and development expenses	$ 982	$ 1,639	$ 2,
SBC - General and administrative expenses	14,189	5,245	30,
	$ 15,171	$ 6,884	$ 33,

The increase in share-based compensation for the three and nine months ended September 30, 2024 as compared to the prior periods are pr
stock compensation expense associated with the anticipated departure of our former President and Chief Operating Officer ("COO") during the th
new hires in 2024.

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

	Three months ended September 30,		Nine Se
	2024	2023	2024
Risk-free interest rate	4.4%	4.3%	4.3%
Dividend yield	—	—	—
Expected volatility	44.7%	44.7%	44.7%
Expected term (years)	4.7	5.2	4.7

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

Net (Loss) Income Per Share

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

Potentially dilutive common shares consist of shares issuable under the 2023 Notes, stock options and restricted stock. Although we paid o
2023, it would have a dilutive impact when the average market price of our common stock exceeds the maximum conversion price during the nin
September 30, 2023. It was our intent and policy to settle conversions through combination settlement, which involved payment in cash equal to t
delivery of shares of common stock for the excess of the conversion value over the principal portion. Potentially dilutive common shares from sto
stock are determined using the average share price for each period under the treasury stock method. In addition, the following amounts are assume
shares: proceeds from exercise of stock options and the average amount of unrecognized compensation expense for the awards. For additional inf
Stockholders' Equity.

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

	Three months ended September 30,		Nine m Sept
	2024	2023	2024
Weighted average shares outstanding:	18,419	17,380	18,06
Dilutive potential common shares:			
Restricted stock	—	—	17
Stock options	—	—	34
2023 Notes	—	—	–
Shares used to compute diluted income (loss) per share	18,419	17,380	18,57
Potentially dilutive shares excluded from calculation due to anti-dilutive effect	1,099	4,762	1,81

For the three months ended September 30, 2024, due to the net loss for the period, the 0.7 million weighted average incremental options an
were anti-dilutive. For the three months ended September 30, 2023, due to the net loss for the period, the 0.3 million weighted average incrementa
stock awards were anti-dilutive.

Foreign Currency Translation

The Euro is the functional currency of Apeiron and the corresponding financial statements have been translated into U.S. Dollars in accord
Translation of Financial Statements. Assets and liabilities are translated at end-of-period rates while revenues and expenses are translated at avera
the period in which the activity took place. Equity is translated at historical rates and the resulting cumulative translation adjustments are included
accumulated other comprehensive income (loss).

Accounting Standards Not Yet Adopted

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

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

In November 2024, the FASB issued ASU No. 2024-03, *Income Statement—Reporting Comprehensive Income (Subtopic 220-40): Expens Disclosures*. This update requires entities to disaggregate operating expenses into specific categories, such as salaries and wages, depreciation, an enhanced transparency into the nature and

function of expenses. ASU 2024-03 is effective for fiscal years beginning after December 15, 2026, with early adoption permitted. ASU 2024-03 retrospectively or prospectively. We are currently evaluating the new guidance to determine the impact it may have on our consolidated financial disclosures.

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

Agenus Transaction	9 Months Ended Sep. 30, 2024
Business Combination, Asset Acquisition, and Joint Venture Formation [Abstract]	
Agenus Transaction	Agenus Transaction On May 29, 2024, we closed the transactions pursuant to the $75 million purchase and sale agreement (the "Agenus Agreement"), dated May 6, 2024, among us and Agenus Inc., Agenus Royalty Fund, LLC, and Agenus Holdings 2024, LLC (collectively, "Agenus"). Under the terms of the Agenus Agreement, we received (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) (collectively referred as "Agenus Partnered Programs"), 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 may adjust the royalty and milestone percentages paid to us. In addition, we received the option to commit an additional $25 million in the same assets on a pro rata basis which expires on June 30, 2025 ("Upsize Option"). We have also agreed to allow Agenus to raise up to an additional $100 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. In connection with entry into the Agenus Agreement, Agenus issued us a 5-year warrant ("Agenus Warrant") to purchase 867,052 shares of its common stock, at an exercise price equal to $17.30. We accounted for all Agenus Partnered Programs, Agenus Warrant and Upsize Option as derivative assets. Upsize Option was presented within current derivative assets line (as it expires on June 30, 2025), and the other derivatives were presented in noncurrent derivative assets line in our condensed consolidated balance sheet. Agenus Partnered Programs are recognized as derivative assets under ASC 815, *Derivatives and Hedging*, as they have different underlyings (milestone payments and royalties). The commercial milestones and royalties are dependent on the development milestones and the commercial milestone and royalties underlyings are not determined to be predominate. The derivative assets were recorded at fair value as of May 29, 2024, and are marked to fair value at each subsequent reporting period. The fair value of Agenus Partnered Programs derivative assets is determined as a present value of expected future cash flows adjusted for the level of risk appropriate for a respective program stage. During the three months ended September 30, 2024, certain Agenus partners discontinued development of their partnered programs. These programs may be relicensed at a later date, and Ligand would retain its economic interest upon any relicense activity. The fair value of Agenus Warrant is determined using a Black-Scholes model. The following assumptions were used as of May 29, 2024, and September 30, 2024, respectively: expected term of 4.0 years and 3.7 years, volatility of 84% and 99%, risk-free rate of 4.7% and 3.6%, Agenus Stock price of $15.03 and $5.48.

The fair value of the Upsize Option was determined using the binomial option pricing model under which we assessed and considered the possible upwards and downwards scenarios through the expiration date of the Upsize Option.

See *Note 7, Fair Value Measurements,* for additional information on the Agenus Partnered Program derivative assets, Agenus Warrant, and Upsize Option.

We accounted for the acquired BOT/BAL rights as a financial royalty asset which is currently put under the non-accrual method as management cannot reliably estimate future cash flows from this program. The amount of BOT/BAL financial royalty asset was determined as a residual value from the $75 million aggregate investment amount, less fair value of all acquired derivative assets as of May 29, 2024.

Sale of Pelican Business and Investment in Primrose Bio	9 Months Ended Sep. 30, 2024
Discontinued Operations and Disposal Groups [Abstract]	
Sale of Pelican Business and Investment in Primrose Bio	

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. ("Pelica
owned subsidiary of Primrose Bio. Primrose Bio is a private company focused on synthetic biology. Pelican has developed technology related to I
technology) and PelicCRM197 (vaccine material), and has property and equipment, as well as leased property in San Diego, CA. As part of the tr
2,146,957 common shares, 4,278,293 preferred shares and 474,746 restricted shares of Primrose Bio. Simultaneous with the merger, we entered in
agreement with Primrose Bio and contributed $15 million in exchange for 50% of potential development milestones and certain commercial miles
previously entered into by Primordial Genetics. In addition, starting January 1, 2025, we will receive 25% of sales revenue of PeliCRM197 above
PeliCRM197 licensing revenue in perpetuity.

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

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

Property and equipment, net	
Intangible assets	
Other assets	
Operating lease right-of-use assets	
Finance lease right-of-use assets	
Accrued liabilities	
Deferred revenue	
Long-term operating lease liabilities	
Other liabilities	
Net assets so	
Allocated goodw	
Cash consideration pa	

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

Equity method investment	
Equity securities	
Derivative assets	

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
$2.1 million gain on sale of Pelican recorded to income (loss) from operations for the three and nine months ended September 30, 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 PeliCRM197 above $3 million and 35% of all PeliCRM197 licensing revenue
considerations are under the loss recovery model and they will be measured based on the gain contingency model under ASC 450, *Contingencies,*
recognized as the underlying contingencies are resolved.

In addition, we will receive 50% of potential development milestones and certain commercial milestones from two contracts previously ent
Genetics. The considerations were recognized as derivative assets with a fair value of $3.2 million, at the disposition date, which was included in
assets in our condensed consolidated balance sheet. They are recognized as derivative assets under ASC 815, *Derivatives and Hedging*, as they ha
(development and commercial milestones) and (i) the commercial milestones are dependent on the development milestones and (ii) the commerci
not determined to be predominate. The derivative assets were recorded at fair value as of September 18, 2023, and will be marketed to fair value a
going forward. During the three and nine months ended September 30, 2024, a loss of $0.6 million was recorded to market the derivative assets to
included in fair value adjustments to partner program derivatives in our condensed consolidated statement of operations. For additional informatio
Measurements.

Investments 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 influe operating and financial results. In applying the equity method, we record the investment at fair value. Our proportionate share of net loss of Primr condensed consolidated statements of operations. Our equity method investments are reviewed for indicators of impairment at each reporting peri fair value if there is evidence of a loss in value that is other-than-temporary. In June 2024, Primrose Bio received an equity investment from an eq Primrose Bio raised additional funds from another equity firm. As a result, we recognized an impairment loss on our equity method investment in during the nine months ended September 30, 2024. There was no impairment to our equity method investment during the three months ended Sep share of the net loss of Primrose Bio for the three and nine months ended September 30, 2024 was $1.2 million and $5.8 million, respectively, wh equity method investment accordingly. Any income or loss

from our equity method investments (including the impairment) is presented in other non-operating income (expense) in our condensed consolida operations.

We determined that the Series A preferred stock and reserve stock investment in Primrose Bio did not have a readily determinable fair valu measurement alternative in ASC 321 to subsequently record the investment at cost, less any impairments, plus or minus changes resulting from ob orderly transactions for identical or similar investments of the same issuer. When fair value becomes determinable, from observable price changes our investment will be marked to fair value. Our investment in Series A preferred stock and reserve stock has been reduced by $0.03 million and $ three and nine months ended September 30, 2024 in connection with the above mentioned equity funding received by Primrose Bio in June and Ju

Former President and Chief Operating Officer Matt Korenberg served as a board member of Primrose Bio beginning in Q4 2023. His empl concluded in October 2024, after which Lauren Hay, Vice President of Strategic Planning & Investment Analytics, succeeded him as a board mem

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 w 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 conso statements as discontinued operations under GAAP for all periods presented through the date of the Distribution. Pursuant to the Transaction Agre contributed to OmniAb cash and certain specific assets and liabilities constituting the OmniAb Business. Pursuant to the Distribution, Ligand dist to its shareholders as of October 26, 2022 shares of the common stock of OmniAb representing 100% of Ligand’s interest in OmniAb. Immediate Distribution, Merger Sub merged with and into OmniAb, with OmniAb continuing as the surviving company in the merger and as a wholly owne OmniAb. The entire transaction was completed on November 1, 2022, and following the merger, New OmniAb is an independent, publicly traded stock trades on Nasdaq under the symbol “OABI.” After the Distribution, we do not beneficially own any shares of common stock in OmniAb an 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 operat treatment in accordance with ASC 205-20. We recognized a $1.7 million tax provision adjustment related to deferred taxe months ended September 30, 2023, that was attributable to the discontinued operations.

Acquisitions	9 Months Ended Sep. 30, 2024

Business Combination, Asset Acquisition, and Joint Venture Formation [Abstract]

Acquisitions

Acquisitions

Apeiron

On July 15, 2024, we acquired all the outstanding shares of Biologics AG (“Apeiron”), including the royalty rights to QARZIBA® (dinutu
treatment of high-risk neuroblastoma (the “Apeiron Acquisition”) for $100.5 million base consideration. We funded the Apeiron Acquisition fron
hand.

In addition to base consideration, we would also pay Apeiron shareholders an additional consideration based on future commercial and reg
up to $28.0 million if QARZIBA royalties exceed certain predetermined thresholds by either 2030 or 2034, and pay additional earn-outs on specif
related to QARZIBA regulatory approval and commercialization in the USA.

We evaluated this acquisition in accordance with ASC 805, *Business Combinations*, to discern whether the assets and operations of Apeiror
business. We accounted for this transaction as an asset acquisition.

We incurred $4.9 million of transaction costs related to the Apeiron Acquisition, which were included in the amount of total purchase cons
acquired and liabilities assumed in the Apeiron Acquisition were recognized at their fair values. The remaining assets acquired were recognized o
basis.

The amount of purchase consideration was allocated to the acquisition date fair values of acquired assets and assumed liabilities as follows

Cash and cash equivalents	$
Contract assets (financial royalty assets)	
Other assets	
Accounts payable and accrued liabilities	
Income tax payable	
Deferred tax liabilities, net	
Total fair value of net assets acquired	$

Contract assets acquired are accounted for as a financial royalty asset, similar to loans receivable and are measured at amortized cost using
interest method described in ASC 835-30. The acquired contracts assets include QARZIBA and other development phase contract assets.

As QARZIBA is a commercial phase program, we are able to reasonably estimate future cash flows and, as such, we recognize income fron
royalty assets starting from the Apeiron Acquisition effective date, which is calculated by multiplying the carrying value of the financial royalty a
effective interest rate. As described in *Note 1, Basis of Presentation and Significant Accounting Policies*, the effective interest rate is calculated by
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 reportin
between expected cash flows and actual cash flows are realized and as there are changes to expected future cash flows. We account for other Apei
financial royalty assets on a non-accrual basis as there is a higher level of uncertainty over the related expected cash flows.

For tax purposes this transaction is treated as a stock purchase. As a result, we will not obtain a tax stepped-up basis in Apeiron’s underlyi
the carryover tax basis. As part of the tax purchase price accounting, deferred tax liabilities of $18.1 million have been recorded to reflect the diff
and tax basis of the acquired assets.

We account for the earnout liabilities in the Apeiron Acquisition in accordance with ASC450, *Contingencies*, and will recognize respective
contingency is resolved, and the liability becomes payable. No earnout liability is recognized as of the acquisition date, and as of September 30, 2

In conjunction with the Apeiron Acquisition, we have also invested $4.2 million (including $0.2 million transaction costs) in InvIOs Holdi
shares, a privately held spin-off of Apeiron. This investment was part of an €8 million (approximately $8.8 million) round with other investors wh
research and development of three innovative early-stage immuno-oncology assets. Apeiron has previously outlicensed these assets to InvIOs and
royalties and milestone payments.

As the result of this investment, we did not obtain control or significant influence in InvIOs. We determined that common stock of InvIOs
determinable fair value and therefore elected the measurement alternative in ASC 321 to subsequently record the investment at cost, less any impa
changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer. When fair value be
observable price changes in orderly transactions, our investment will be marked to fair value.

Novan

On September 27, 2023, we closed the transaction to acquire certain assets of Novan, Inc. (“Novan”) pursuant to the agreement we entered
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-i
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 Septem

bankruptcy court approved our $12.2 million bid to purchase from Novan its lead product candidate berdazimer gel, 10.3%, all other assets relatec technology platform and the rights to one commercial stage asset. The remaining commercial assets of Novan were to be sold to other parties purs court's order. The approved $12.2 million bid was credited to the $15.0 million DIP financing, with the balance of $2.8 million and accrued intere

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

We have finalized purchase accounting for the Novan acquisition. The following table sets forth an allocation of the purchase price to the id intangible assets acquired and liabilities assumed, with the excess recorded to goodwill (in thousands):

Restricted cash
Property and equipment, net
Operating lease right-of-use asset
Other assets
Deferred tax asset
Intangible assets acquired
Goodwill
Deferred revenue
Operating lease liabilities
Other liabilities
Cash paid for Novan, including restricted cash received
DIP loan fees and interest
Total consideration

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

Acquired other liabilities of $13.7 million were related to a royalty and milestone payments purchase agreement, entered by Novan in 2019 acquisition, which previously provided Novan $25.0 million of funding used primarily in the clinical development of berdazimer gel, 10.3%. Purs agreement, Novan will pay ongoing quarterly payments, calculated based on an applicable percentage per product of any upfront fees, milestone p payments or equivalent payments received by Novan pursuant to any out-license agreement, net of any upfront fees, milestone payments, royalty payments paid by Novan to third parties pursuant to any agreements under which Novan has in-licensed intellectual property with respect to such to commercialize any product on its own following regulatory approval, as opposed to commercializing through an out-license agreement or other 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 discou estimated the present value of the potential royalties, milestones, and collaboration revenue streams derived from the related programs mentioned discount rate of 14% (revenue risk-adjusted discount rate).

On April 3, 2024, we announced the creation of Pelthos Therapeutics to focus on the commercialization of innovative, safe, and efficaciou patients suffering from conditions with limited treatment options. ZELSUVMI (berdazimer topical gel, 10.3%), its first product, is the FDA-appro for the treatment of the highly transmissible molluscum contagiosum (molluscum) viral skin infection in adults and pediatric patients one year of received a Novel Drug designation from the FDA in January 2024 to treat molluscum viral skin infection. ZELSUVMI was developed using Pelth oxide-based NITRICIL™ technology platform. The rights to ZELSUVMI and all assets related to the NITRICIL technology platform were acqui September 2023 in the Novan acquisition described above.

Spin-off of OmniAb	9 Months Ended Sep. 30, 2024
Discontinued Operations and Disposal Groups [Abstract]	
Spin-off of OmniAb	

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. (“Pelica owned subsidiary of Primrose Bio. Primrose Bio is a private company focused on synthetic biology. Pelican has developed technology related to I technology) and PelicCRM197 (vaccine material), and has property and equipment, as well as leased property in San Diego, CA. As part of the tr 2,146,957 common shares, 4,278,293 preferred shares and 474,746 restricted shares of Primrose Bio. Simultaneous with the merger, we entered in agreement with Primrose Bio and contributed $15 million in exchange for 50% of potential development milestones and certain commercial miles previously entered into by Primordial Genetics. In addition, starting January 1, 2025, we will receive 25% of sales revenue of PeliCRM197 above PeliCRM197 licensing revenue in perpetuity.

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

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

Property and equipment, net	
Intangible assets	
Other assets	
Operating lease right-of-use assets	
Finance lease right-of-use assets	
Accrued liabilities	
Deferred revenue	
Long-term operating lease liabilities	
Other liabilities	
Net assets so	
Allocated goodw	
Cash consideration pa	

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

Equity method investment	
Equity securities	
Derivative assets	

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 $2.1 million gain on sale of Pelican recorded to income (loss) from operations for the three and nine months ended September 30, 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 PeliCRM197 above $3 million and 35% of all PeliCRM197 licensing revenue considerations are under the loss recovery model and they will be measured based on the gain contingency model under ASC 450, *Contingencies*, recognized as the underlying contingencies are resolved.

In addition, we will receive 50% of potential development milestones and certain commercial milestones from two contracts previously ent Genetics. The considerations were recognized as derivative assets with a fair value of $3.2 million, at the disposition date, which was included in assets in our condensed consolidated balance sheet. They are recognized as derivative assets under ASC 815, *Derivatives and Hedging*, as they ha (development and commercial milestones) and (i) the commercial milestones are dependent on the development milestones and (ii) the commerci not determined to be predominate. The derivative assets were recorded at fair value as of September 18, 2023, and will be marketed to fair value a going forward. During the three and nine months ended September 30, 2024, a loss of $0.6 million was recorded to market the derivative assets to included in fair value adjustments to partner program derivatives in our condensed consolidated statement of operations. For additional informatio *Measurements*.

Investments 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 influe operating and financial results. In applying the equity method, we record the investment at fair value. Our proportionate share of net loss of Primr condensed consolidated statements of operations. Our equity method investments are reviewed for indicators of impairment at each reporting peri fair value if there is evidence of a loss in value that is other-than-temporary. In June 2024, Primrose Bio received an equity investment from an eq Primrose Bio raised additional funds from another equity firm. As a result, we recognized an impairment loss on our equity method investment in during the nine months ended September 30, 2024. There was no impairment to our equity method investment during the three months ended Sep share of the net loss of Primrose Bio for the three and nine months ended September 30, 2024 was $1.2 million and $5.8 million, respectively, wh equity method investment accordingly. Any income or loss

from our equity method investments (including the impairment) is presented in other non-operating income (expense) in our condensed consolida operations.

We determined that the Series A preferred stock and reserve stock investment in Primrose Bio did not have a readily determinable fair valu measurement alternative in ASC 321 to subsequently record the investment at cost, less any impairments, plus or minus changes resulting from ob orderly transactions for identical or similar investments of the same issuer. When fair value becomes determinable, from observable price changes our investment will be marked to fair value. Our investment in Series A preferred stock and reserve stock has been reduced by $0.03 million and three and nine months ended September 30, 2024 in connection with the above mentioned equity funding received by Primrose Bio in June and J

Former President and Chief Operating Officer Matt Korenberg served as a board member of Primrose Bio beginning in Q4 2023. His empl concluded in October 2024, after which Lauren Hay, Vice President of Strategic Planning & Investment Analytics, succeeded him as a board mem

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 w 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 conso statements as discontinued operations under GAAP for all periods presented through the date of the Distribution. Pursuant to the Transaction Agr contributed to OmniAb cash and certain specific assets and liabilities constituting the OmniAb Business. Pursuant to the Distribution, Ligand dist to its shareholders as of October 26, 2022 shares of the common stock of OmniAb representing 100% of Ligand’s interest in OmniAb. Immediate Distribution, Merger Sub merged with and into OmniAb, with OmniAb continuing as the surviving company in the merger and as a wholly owne OmniAb. The entire transaction was completed on November 1, 2022, and following the merger, New OmniAb is an independent, publicly trade stock trades on Nasdaq under the symbol “OABI.” After the Distribution, we do not beneficially own any shares of common stock in OmniAb an 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 operat treatment in accordance with ASC 205-20. We recognized a $1.7 million tax provision adjustment related to deferred taxe months ended September 30, 2023, that was attributable to the discontinued operations.

Financial Royalty Assets, net (formerly known as Commercial License Rights)	**9 Months Ended**
	Sep. 30, 2024
Organization, Consolidation and Presentation of Financial Statements [Abstract]	
Financial Royalty Assets, net (formerly known as Commercial License Rights)	

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

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

	September 30, 2024						December		
	Gross carrying value[(2)]		Allowance [(1)]		Net carrying value [(2)]		Gross carrying value		Allowa
Apeiron	$	113,371	$	(735)	$	112,636	$	—	$
Agenus (Bot/Bal)		40,815		(408)		40,407		—	
Elutia (CorMatrix)		10,032		(2,607)		7,425		13,304	
Selexis		242		(58)		184		940	
Ovid (Soticlestat)		4,122		(41)		4,081		30,310	
Tolerance Therapeutics (TZIELD)		25,698		(101)		25,597		25,810	
Ensifentrine inventors		16,018		(481)		15,537		—	
Total financial royalty assets, net	$	210,298	$	(4,431)	$	205,867	$	70,364	$

(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 $6.6 million current portion of financial royalty assets which represents an estimation for current quarter royalty receipts that are collected during the subseq presented in other current assets on our condensed consolidated balance sheet as of September 30, 2024.

Financial royalty assets represent a portfolio of future milestone and royalty payment rights acquired in the Apeiron Acquistion in July 202 2024, Selexis, S.A. ("Selexis") in April 2013 and May 2015, CorMatrix Cardiovascular, Inc. ("CorMatrix") in May 2016, which was later acquire changed its corporate name to Elutia Inc. ("Elutia") in September 2023) in 2017, Ovid Therapeutics Inc. ("Ovid") in October 2023, Tolerance The Therapeutics") in November 2023, and from certain ensifentrine inventors in March and August 2024.

During the nine months ended September 30, 2024, we recorded a $26.2 million impairment loss for Ovid (Soticlestat) financial royalty as impairment loss for Selexis financial royalty asset. There was no impairment loss for the three months ended September 30, 2024. During the thre September 30, 2023, we recorded a $0.9 million impairment loss for Selexis financial royalty asset as a result of reduced programs.

Apeiron financial royalty assets

As discussed in *Note 4, Acquisitions*, we acquired certain financial royalty assets within the Apeiron Acquisition, including QARZIBA and As QARZIBA is a commercial phase program, we are able to reasonably estimate future cash flows and, as such, we recognized income from QA assets starting from the Apeiron Acquisition effective date. We accounted for the InvIOs financial royalty assets using the non-accrual method un estimate future cash flows.

Elutia Agreement

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

During 2023, due to Elutia's nonpayment of the minimum payments under the amended royalty agreement over several quarters, we placed non-accrual method. In January 2024, we executed an amendment to our agreement with Elutia which will allow us to reliably estimate future cas Elutia asset was switched from the non-accrual method to the effective interest method during the first quarter of 2024. We further considered the future economic and market conditions, current company performance and recent payments received from Elutia. During the three and nine mont 2024 we recorded a reduction of $0.3 million and $4.9 million, respectively, to Elutia allowance of expected credit loss. The credit loss adjustme in general and administrative expense in our condensed consolidated statement of operations for the three and nine months ended September 30, nine months ended September 30, 2023 we recorded an increase of $3.2 million to Elutia allowance of expected credit loss.

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 Therapeuti approval and commercialization of soticlestat.

In June 2024, Takeda announced topline results of the phase 3 clinical trial of soticlestat, missing its primary endpoint to reduce convulsive compared to placebo in patients with Dravet syndrome, and missing its primary endpoint to reduce major Motor Drop seizure frequency compare with Lennox-Gastaut syndrome. As a result, in the nine months ended September 30, 2024, we recognized an impairment over the soticlestat fina million. The fair value of the soticlestat financial royalty asset was determined using a discounted cash flow approach, utilizing the mostly-likely considered the probability of success for the underlying clinical program and discount rate of 17% which contemplates the underlying credit and b partnered program. As of September 30, 2024, management continues to account for the soticlestat financial royalty asset using the non-accrual m 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 th (teplizumab), and is owed a royalty of less than 1% on worldwide net sales of TZIELD. TZIELD is marketed by Sanofi, starting in 2023. For tax was treated as a stock deal, so there is no step-up in basis and tax attributes. Therefore, a deferred tax liability (DTL) of $5.5 million was recogniz tax basis difference and recorded to the book value of the Tolerance financial royalty asset. Due to the early stages of TZIELD's commercializatio the investment on the non-accrual method until we are able to reliably estimate future cash flows.

Ensifentrine Inventors Agreements

In March and August 2024, we acquired future milestone and royalty rights related to ensifentrine from certain ensifentrine inventors for a $13.6 million, respectively. On June 26, 2024, Verona Pharma plc (Nasdaq: VRNA) received FDA approval for ensifentrine for the maintenance t chronic obstructive pulmonary disease ("COPD"). During three months ended September 30, 2024, Verona started commercial sales of ensifentrin Ohtuvayre™) in the U.S. Due to the early stages of Ohtuvayre's commercialization, management has placed the investment on the non-accrual m reliably estimate future cash flows.

Fair Value Measurements

9 Months Ended
Sep. 30, 2024

Fair Value Disclosures [Abstract]

Fair Value Measurements

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):

	September 30, 2024				December 3	
	Level 1	Level 2	Level 3	Total	Level 1	Level 2
Assets:						
Short-term investments, excluding Viking[(1)]	$ 19,575	$ 73,139	$ —	$ 92,714	$ 7,291	$ 107,879
Investment in Viking common stock	63,310	—	—	63,310	32,185	—
Derivative assets[(2)]	—	—	30,379	30,379	—	—
Total assets	$ 82,885	$ 73,139	$ 30,379	$ 186,403	$ 39,476	$ 107,879
Liabilities:						
Contingent liabilities - CyDex	$ —	$ —	$ 223	$ 223	$ —	$ —
Contingent liabilities - Metabasis[(3)]	—	3,768	—	3,768	—	2,878
Total liabilities	$ —	$ 3,768	$ 223	$ 3,991	$ —	$ 2,878

(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 a 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 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) 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 marketabl 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 qua 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) Derivative assets include instruments used for risk-management purposes, and other instruments. Derivative assets which are not used for risk management purposes include: (a) a and royalty payments from Agenus Partnered Programs, (b) Agenus Warrant, (c) Upsize Option, (d) Viking Share Collar (e) and rights to receive from Primrose Bio 50% of mileston entered into by Primordial Genetics. The considerations were recognized as derivative assets included under current derivative assets and noncurrent derivative assets in our condense They are recognized as derivative assets under ASC 815, Derivatives and Hedging. The fair value of the Agenus Partnered Programs and the Primrose Bio derivative assets was deter flow approach, utilizing the mostly-likely cash flows which considered the probability of success for the underlying clinical programs. The discount rate used contemplates the underl the partnered programs. At

September 30, 2024, the discount rates used range between 15% and 25%. At December 31, 2023, the discount rate used was 25%. The fair value of the Agenus Warrant and Viking S a Black-Scholes-Merton model. The fair value of the Upsize Option was determined using a binomial option pricing model.

(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 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 de 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 fluctuat 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 program Viking, including VK2809. VK2809 is a novel selective TR-β agonist with potential in multiple indications, including hypercholesterolemia, dyslipidemia, NASH, and X-ALD. Unde 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 clinical trial. During the three and nine months ended September 30, 2024, we adjusted the balance of the Metabasis CVR liability by decreasing $0.2 million and increasing $0.9 mil market. During the three and nine months ended September 30, 2023, we adjusted the balance of the Metabasis CVR liability by decreasing $0.1 million and increasing $0.002 millio

A reconciliation of the level 3 financial instruments as of September 30, 2024 is as follows (in thousands):

Assets
Fair value of level 3 financial instruments as of December 31, 2023
Additions to derivative assets
Fair value adjustments to derivative assets
Fair value of level 3 financial instruments as of September 30, 2024

Liabilities
Fair value of level 3 financial instruments as of December 31, 2023
Payments to CVR holders and other contingent payments
Fair value adjustments to contingent liabilities
Fair value of level 3 financial instruments as of September 30, 2024

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, intang useful lives and long-lived assets.

We evaluate goodwill annually for impairment and whenever circumstances occur indicating that goodwill might be impaired. We determi reporting unit based on a combination of inputs, including the market capitalization of Ligand, as well as Level 3 inputs such as discounted cash f observable from the market, directly or indirectly.

We evaluate intangible assets with estimated useful lives whenever circumstances occur indicating that intangible assets may not be recove evaluation is based on an undiscounted cash flow analysis at the lowest level at which cash flows of the long-lived assets are largely independent and liabilities.

There was no impairment of our goodwill, intangible assets, or long-lived assets recorded during the three and nine months ended Septemb

Fair Value of Financial Instruments

Our cash and cash equivalents, accounts receivable, other current assets, financial royalty assets, accounts payable, accrued liabilities, defe operating lease liabilities, current finance lease liabilities and Novan (Pelthos) other long-term liabilities are financial instruments and are recorde consolidated balance sheets. The estimated fair value of these financial instruments approximates their carrying value.

Debt	9 Months Ended Sep. 30, 2024
Debt Disclosure [Abstract]	
Debt	Debt

Revolving Credit Facility

On October 12, 2023, we entered into a $75 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 revolving loans, swingline loans and other financial accommodations to us (including the issuance of letters of credit) in an aggregate amount of up to $75 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 Revolving Credit Facility are secured by certain of our collateral and that of the Guarantors. In specified circumstances, additional guarantors are required to be added to the Credit Agreement. 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.

Amendment to Revolving Credit Facility

On July 8, 2024, we entered into the first amendment (the “Amendment”) to the Credit Agreement, which amends the Credit Agreement to, among other things, increase the aggregate revolving credit facility amount from $75 million to $125 million.

As of September 30, 2024, we had $124.4 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, as amended, is October 12, 2026.

As of September 30, 2024, there were no events of default or violation of any covenants under our financing obligations.

Income Tax	9 Months Ended Sep. 30, 2024
Income Tax Disclosure [Abstract]	
Income Tax	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 foreign and state jurisdictions with different statutory rates, the use of previously unbenefited tax loss carryforwards to reduce foreign taxes, 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 the three months ended September 30, 2024 and 2023 was (13.1)% and 15.4%, respectively, and the nine months ended September 30, 2024 and 2023 was 35.1% and 23.5%, respectively. The variance from the U.S. federal statutory tax rate of 21% for the three and nine months ended September 30, 2024 was primarily due to Internal Revenue Code Section 162(m) limitation on deduction for officer compensation, other non-deductible items, and income from foreign operations, which were partially offset by the foreign derived intangible income tax benefit. The variance from the U.S. federal statutory tax rate of 21% for the three and nine months ended September 30, 2023 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.

Stockholders' Equity

9 Months Ended
Sep. 30, 2024

Equity [Abstract]

Stockholders' Equity

Stockholders’ Equity

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

In June 2024, our stockholders approved the amendment and restatement of the Ligand Pharmaceuticals Incorporated 2002 Stock Incentive
shares available for issuance by 1.3 million.

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

	Stock Options			Restri
	Shares	Weighted-Average Exercise Price		Shares
Balance as of December 31, 2023	2,640,458	$	65.70	350,90
Granted	743,117	$	85.71	318,58
Options exercised/RSUs vested	(784,467)	$	59.07	(126,79
Forfeited	(57,161)	$	70.71	(42,87
Balance as of September 30, 2024	2,541,947	$	73.48	499,83

As of September 30, 2024, outstanding options to purchase 1.4 million shares were exercisable with a weighted average exercise price per

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 ma
stock on the first or last day of the offering period, whichever is lower. As of September 30, 2024, 26,244 shares were available for future purchas

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 e
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, Nic
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
market” offerings through the Agent (the “ATM Offering”). The Shelf Registration Statement included a prospectus covering the offering, issuanc
$100 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
Shelf Registration Statement. During the three and nine months ended September 30, 2024, we issued 334,325 shares of common stock in the AT
proceeds of $34.3 million, net of commissions and other transaction costs.

Share Repurchases

In April 2023, our Board of Directors (the “Board”) has approved a stock repurchase program authorizing, but not requiring, the repurchase
our common stock from time to time through April 2026. We expect to acquire shares, if at all, primarily through open-market transactions in acc
requirements of Rule 10b-18 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). The timing and amount of repurchase
determined by management based on our evaluation of market conditions, share price, legal requirements and other factors. Authorization to repu
common stock remained available as of September 30, 2024.

Commitment and Contingencies	9 Months Ended Sep. 30, 2024
Commitments and Contingencies Disclosure [Abstract]	
Commitment and Contingencies	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 us and no individualized factual allegations have been advanced against us in any of the three filed complaints. We reject all claims raised in the complaints and intend to vigorously defend against 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. ***Operating Leases*** During the nine months ended September 30, 2024, we entered into a lease agreement for our office located in Boston, Massachusetts, which resulted in a $1.6 million increase in both operating lease assets and operating lease liabilities at lease commencement.

Pay vs Performance Disclosure - USD ($) $ in Thousands	3 Months Ended						9 Months Ended	
	Sep. 30, 2024	Jun. 30, 2024	Mar. 31, 2024	Sep. 30, 2023	Jun. 30, 2023	Mar. 31, 2023	Sep. 30, 2024	Sep. 30, 2023
Pay vs Performance Disclosure								
Net income (loss)	$ (7,172)	$ (51,911)	$ 86,139	$ (10,273)	$ 2,290	$ 41,949	$ 27,056	$ 33,966

Insider Trading Arrangements	3 Months Ended Sep. 30, 2024
Trading Arrangements, by Individual	
Rule 10b5-1 Arrangement Adopted	false
Non-Rule 10b5-1 Arrangement Adopted	false
Rule 10b5-1 Arrangement Terminated	false
Non-Rule 10b5-1 Arrangement Terminated	false

Basis of Presentation and Summary of Significant Accounting Policies (Policies)	9 Months Ended Sep. 30, 2024
Organization, Consolidation and Presentation of Financial Statements [Abstract]	
Business	***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	***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	***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. Moreover, noncurrent derivative assets as of December 31, 2023, have been reclassified from other assets. In addition, within the unaudited condensed consolidated statement of operations for the three and nine months ended September 30, 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	***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 5, Spin-off of OmniAb*). All disclosures have been adjusted to reflect continuing operations.
Use of Estimates	***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

Revenue and Other Income

Our revenue is generated primarily from royalties on sales of products commercialized by our partners, Captisol material sales, income from financial royalty assets, and contract revenue for license fees, technical, 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 when 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.

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. Any fees billed in advance of being earned are recorded as deferred revenue.

Short-term Investments

Short-term Investments

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 and nine months ended September 30, 2024 and 2023.

Our investment policy is capital preservation and we only invest in U.S.-dollar denominated investments.

Accounts Receivable and Allowance for Credit Losses

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.

Inventory

Inventory

Inventory, which consists of finished goods (Captisol), 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.

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

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

Financial royalty assets 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 condensed 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 in a financial royalty asset impairment on the condensed 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 in a respective period earnings.

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.

Derivative Assets

Derivative Assets

Derivative assets include instruments used for risk-management purposes, and other instruments. Derivative assets which are not used for risk management purposes, include: (a) acquired rights in future milestone and royalty payments from Agenus Partnered Programs (as defined below), (b) Agenus Warrant (as defined below), (c) option to invest up to $25 million to milestone and royalty rights which expires on June 30, 2025 ("Upsize Option"), and (d) rights to receive from Primrose Bio 50% of milestones on two contracts previously entered into by Primordial Genetics.

Equity Method Investment

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 and any impairment.

Other Investments

Other Investments

Other investments represent our investments in equity securities of third parties in which we do not have control or significant influence. Our equity securities investments do not have a readily determinable or estimable fair value 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. The amount of such impairment or adjustment recognized during the period is presented in other non-operating income (expense) in our condensed consolidated statements of operations.

Share-Based Compensation

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.

Net (Loss) Income Per Share

Net (Loss) Income Per Share

Basic net (loss) income per share is calculated by dividing net (loss) 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. Diluted net loss per share is computed based on the sum of the weighted average number of 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 nine months ended September 30, 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.

Foreign Currency Translation

Foreign Currency Translation

The Euro is the functional currency of Apeiron and the corresponding financial statements have been translated into U.S. Dollars in accordance with ASC 830-30, *Translation of Financial Statements*. Assets and liabilities are translated at end-of-period rates while revenues and expenses are translated at average rates in effect during the period in which the activity took place. Equity is translated at historical rates and the resulting cumulative translation adjustments are included as a component of accumulated other comprehensive income (loss).

Accounting Standards Not Yet Adopted

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. We have not yet completed the assessment of the impact of ASU 2023-09 on our consolidated financial statements.

In November 2024, the FASB issued ASU No. 2024-03, *Income Statement—Reporting Comprehensive Income (Subtopic 220-40): Expense Disaggregation Disclosures*. This update requires entities to disaggregate operating expenses into specific categories, such as salaries and wages, depreciation, and amortization, to provide enhanced transparency into the nature and function of expenses. ASU 2024-03 is effective for fiscal years beginning after December 15, 2026, with early adoption permitted. ASU 2024-03 may be applied retrospectively or prospectively. We are currently evaluating the new guidance to determine the impact it may have on our consolidated financial statements and related disclosures.

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.

Basis of Presentation and Summary of Significant Accounting Policies (Tables)	9 Months Ended
	Sep. 30, 2024
Organization, Consolidation and Presentation of Financial Statements [Abstract]	
Schedule of Revenue by Source	The following table represents disaggregation of royalties, Captisol and contract revenue and other income (in thousands):

	Three months ended September 30,		Nine m Septe
	2024	2023	2024
Royalties			
Kyprolis	$ 11,599	$ 10,537	$ 27,22
Evomela	1,747	2,497	5,87
Teriparatide injection	2,376	2,800	6,52
Rylaze	3,886	3,678	10,07
Filspari	3,206	1,122	7,40
Vaxneuvance	1,466	1,313	3,96
Other	2,272	1,916	6,45
Revenue from intangible royalty assets	26,552	23,863	67,51
Income from financial royalty assets	5,157	25	6,45
	31,709	23,888	73,96
Captisol	6,255	8,608	22,96
Contract revenue and other income			
Milestone and other	13,848	372	25,44
Other income	—	—	1,94
Contract revenue and other income	13,848	372	27,38
Total	$ 51,812	$ 32,868	$ 124,32

Schedule of Short-Term Investments

Our short-term investments consist of the following at September 30, 2024 and December 31, 2023 (in thousands):

September 30, 2024	Amortized cost		Gross unrealized gains		Gross unrealized losses
Bond fund	$	39,512	$	—	$ (265)
U.S. government securities		19,051		31	—
Bank deposits		12,280		21	—
Corporate bonds		10,969		30	(3)
Commercial paper		10,591		5	(1)
Corporate equity securities		6,551		—	(6,058)
	$	98,954	$	87	$ (6,327)
Viking common stock					
Total short-term investments					
December 31, 2023					
Bond fund	$	63,763	$	—	$ (537)
Bank deposits		17,165		12	(1)
Corporate bonds		14,850		40	(2)
Commercial paper		11,578		9	(1)
U.S. government securities		6,736		18	(3)
Municipal bonds		1,007		—	(4)
Corporate equity securities		5,775		—	(5,235)
	$	120,874	$	79	$ (5,783)
Viking common stock					
Total short-term investments					

Schedule of Available-for-Sale Debt Securities

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

	Septeml
	Amortized Cost
Within one year	$ 91,072
After one year through five years	4,647
Total	$ 95,719

Schedule of Goodwill and Other Identifiable Intangible Assets

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

	September 30, 2024
Indefinite-lived intangible assets	
Goodwill	$ 105,250
Definite lived intangible assets	
Complete technology	39,249
Less: accumulated amortization	(19,072
Trade name	2,642
Less: accumulated amortization	(1,810
Customer relationships	29,600
Less: accumulated amortization	(20,280
Contractual relationships	360,000
Less: accumulated amortization	(115,424
Total goodwill and other identifiable intangible assets, net	$ 380,155

Schedule of Derivative Assets

Derivative assets consist of the following (in thousands):

		September 30, 2024
Agenus Upsize Option (expires on 6/30/25)	$	3,815
Viking shares collar		7,318
Total current derivative assets	$	11,133
Primrose mRNA	$	2,921
Agenus Partner Programs		14,099
Agenus Warrant (5 years contractual term)		2,226
Total noncurrent derivative assets	$	19,246

Schedule of Other Investment

Other investments consist of the following (in thousands):

		September 30, 2024
Equity securities in Primrose Bio	$	6,712
InvIOs investment		4,196
Neuritek warrants		—
Palvella Series C preferred stock		1,000
Total other investments	$	11,908

Schedule of Inventory in Other Assets

inventory (raw materials and work in process related to the manufacturing of finished goods) for the preparation of comm
ZELSUVMI™ by Pelthos Therapeutics, a wholly owned subsidiary of Ligand. For additional information on ZELSUVM
Acquisitions. Below is a summary of the inventory included in other current assets (in thousands):

		September 30, 2024
Raw materials	$	2,495
Work in process		260
Total Pelthos inventory in other current assets	$	2,755

Schedule of Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

		September 30, 2024
Compensation	$	3,830
Subcontractor		1,756
Professional fees		3,296
Customer deposit		621
Supplier		276
Royalties owed to third parties		2,989
Amounts owed to former licensees		—
Other		2,832
Total accrued liabilities	$	15,600

Schedule of Other Long Term Liabilities

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

		September 30, 2024
Unrecognized tax benefits	$	14,48
Novan (Pelthos) contract liability		15,32
Other long-term liabilities		(
	$	29,87

Schedule of Accounting for Share-Based Compensation

The following table summarizes share-based compensation expense recorded as components of research and developmen
and administrative expenses for the periods indicated (in thousands):

	Three months ended September 30,				Nine Se
	2024		2023		2024
SBC - Research and development expenses	$	982	$	1,639	$ 2,
SBC - General and administrative expenses		14,189		5,245	30,
	$	15,171	$	6,884	$ 33,

Schedule of Fair-Value Options Awarded to Employees and Directors

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

	Three months ended September 30,		Nine Se
	2024	2023	2024
Risk-free interest rate	4.4%	4.3%	4.3%
Dividend yield	—	—	—
Expected volatility	44.7%	44.7%	44.7%
Expected term (years)	4.7	5.2	4.7

Schedule of Computation of Basic and Diluted Earnings per Share

The following table presents the calculation of weighted average shares used to calculate basic and diluted earnings per sh

	Three months ended September 30,		Nine m Sept
	2024	2023	2024
Weighted average shares outstanding:	18,419	17,380	18,06
Dilutive potential common shares:			
Restricted stock	—	—	17
Stock options	—	—	34
2023 Notes	—	—	–
Shares used to compute diluted income (loss) per share	18,419	17,380	18,57
Potentially dilutive shares excluded from calculation due to anti-dilutive effect	1,099	4,762	1,81

Sale of Pelican Business and Investment in Primrose Bio (Tables)	9 Months Ended Sep. 30, 2024
Discontinued Operations and Disposal Groups [Abstract]	
Schedule of Carrying Amounts of Major Classes of Assets and Liabilities Related to Assets Held for Sale	We determined that the sale of Pelican meets the definition of a deconsolidation of a business. Net assets sold together with allocated goodv paid were as follows (in thousands):
Schedule of Fair Value of the Consideration	Fair value of the consideration received includes the following (in thousands):

Property and equipment, net	
Intangible assets	
Other assets	
Operating lease right-of-use assets	
Finance lease right-of-use assets	
Accrued liabilities	
Deferred revenue	
Long-term operating lease liabilities	
Other liabilities	
Net assets so	
Allocated goodw	
Cash consideration pa	

Equity method investment	
Equity securities	
Derivative assets	

Acquisitions (Tables)	9 Months Ended Sep. 30, 2024
Business Combination, Asset Acquisition, and Joint Venture Formation [Abstract]	
Schedule of Recognized Identified Assets Acquired and Liabilities Assumed	The amount of purchase consideration was allocated to the acquisition date fair values of acquired assets and assumed liabilities as follows

Cash and cash equivalents	$
Contract assets (financial royalty assets)	
Other assets	
Accounts payable and accrued liabilities	
Income tax payable	
Deferred tax liabilities, net	
Total fair value of net assets acquired	$

The following table sets forth an allocation of the purchase price to the identifiable tangible and intangible assets acquired
assumed, with the excess recorded to goodwill (in thousands):

Restricted cash
Property and equipment, net
Operating lease right-of-use asset
Other assets
Deferred tax asset
Intangible assets acquired
Goodwill
Deferred revenue
Operating lease liabilities
Other liabilities
Cash paid for Novan, including restricted cash received
DIP loan fees and interest
Total consideration

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

Organization, Consolidation and Presentation of Financial Statements [Abstract]

Schedule of Financial Royalty Assets

9 Months Ended

Sep. 30, 2024

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

	September 30, 2024			December	
	Gross carrying value[2]	Allowance [1]	Net carrying value [2]	Gross carrying value	Allowa
Apeiron	$ 113,371	$ (735)	$ 112,636	$ —	$
Agenus (Bot/Bal)	40,815	(408)	40,407	—	
Elutia (CorMatrix)	10,032	(2,607)	7,425	13,304	
Selexis	242	(58)	184	940	
Ovid (Soticlestat)	4,122	(41)	4,081	30,310	
Tolerance Therapeutics (TZIELD)	25,698	(101)	25,597	25,810	
Ensifentrine inventors	16,018	(481)	15,537	—	
Total financial royalty assets, net	$ 210,298	$ (4,431)	$ 205,867	$ 70,364	$

(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 $6.6 million current portion of financial royalty assets which represents an estimation for current quarter royalty receipts that are collected during the subseq presented in other current assets on our condensed consolidated balance sheet as of September 30, 2024.

Fair Value Measurements (Tables)	9 Months Ended Sep. 30, 2024

Fair Value Disclosures [Abstract]

Schedule of Assets and Liabilities Measured at Fair Value

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

	September 30, 2024				December 3	
	Level 1	Level 2	Level 3	Total	Level 1	Level 2
Assets:						
Short-term investments, excluding Viking[(1)]	$ 19,575	$ 73,139	$ —	$ 92,714	$ 7,291	$ 107,879
Investment in Viking common stock	63,310	—	—	63,310	32,185	—
Derivative assets[(2)]	—	—	30,379	30,379	—	—
Total assets	$ 82,885	$ 73,139	$ 30,379	$ 186,403	$ 39,476	$ 107,879
Liabilities:						
Contingent liabilities - CyDex	$ —	$ —	$ 223	$ 223	$ —	$ —
Contingent liabilities - Metabasis[(3)]	—	3,768	—	3,768	—	2,878
Total liabilities	$ —	$ 3,768	$ 223	$ 3,991	$ —	$ 2,878

(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 a 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 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) c 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 marketabl 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 quar 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) Derivative assets include instruments used for risk-management purposes, and other instruments. Derivative assets which are not used for risk management purposes include: (a) a and royalty payments from Agenus Partnered Programs, (b) Agenus Warrant, (c) Upsize Option, (d) Viking Share Collar (e) and rights to receive from Primrose Bio 50% of milestone entered into by Primordial Genetics. The considerations were recognized as derivative assets included under current derivative assets and noncurrent derivative assets in our condense They are recognized as derivative assets under ASC 815, Derivatives and Hedging. The fair value of the Agenus Partnered Programs and the Primrose Bio derivative assets was deter flow approach, utilizing the mostly-likely cash flows which considered the probability of success for the underlying clinical programs. The discount rate used contemplates the underl the partnered programs. At

September 30, 2024, the discount rates used range between 15% and 25%. At December 31, 2023, the discount rate used was 25%. The fair value of the Agenus Warrant and Viking S a Black-Scholes-Merton model. The fair value of the Upsize Option was determined using a binomial option pricing model.

(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 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 dev 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 fluctuat 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 program Viking, including VK2809. VK2809 is a novel selective TR-β agonist with potential in multiple indications, including hypercholesterolemia, dyslipidemia, NASH, and X-ALD. Unde 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 clinical trial. During the three and nine months ended September 30, 2024, we adjusted the balance of the Metabasis CVR liability by decreasing $0.2 million and increasing $0.9 mill market. During the three and nine months ended September 30, 2023, we adjusted the balance of the Metabasis CVR liability by decreasing $0.1 million and increasing $0.002 millio

Schedule of Reconciliation of Level 3 Financial Instruments

A reconciliation of the level 3 financial instruments as of September 30, 2024 is as follows (in thousands):

Assets	
Fair value of level 3 financial instruments as of December 31, 2023	
Additions to derivative assets	
Fair value adjustments to derivative assets	
Fair value of level 3 financial instruments as of September 30, 2024	
Liabilities	
Fair value of level 3 financial instruments as of December 31, 2023	
Payments to CVR holders and other contingent payments	
Fair value adjustments to contingent liabilities	
Fair value of level 3 financial instruments as of September 30, 2024	

Stockholders' Equity (Tables)	9 Months Ended Sep. 30, 2024

Equity [Abstract]

Schedule of Stock Option Plan Activity

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

	Stock Options			Restri
	Shares		Weighted-Average Exercise Price	Shares
Balance as of December 31, 2023	2,640,458	$	65.70	350,90
Granted	743,117	$	85.71	318,58
Options exercised/RSUs vested	(784,467)	$	59.07	(126,79
Forfeited	(57,161)	$	70.71	(42,87
Balance as of September 30, 2024	2,541,947	$	73.48	499,83

Schedule of Restricted Stock Activity

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

	Stock Options			Restri
	Shares		Weighted-Average Exercise Price	Shares
Balance as of December 31, 2023	2,640,458	$	65.70	350,90
Granted	743,117	$	85.71	318,58
Options exercised/RSUs vested	(784,467)	$	59.07	(126,79
Forfeited	(57,161)	$	70.71	(42,87
Balance as of September 30, 2024	2,541,947	$	73.48	499,83

Basis of Presentation and Summary of Significant Accounting Policies - Narrative (Details) shares in Thousands	1 Months Ended	3 Months Ended		9 Months Ended					
	Jan. 31, 2010 cvr	Sep. 30, 2024 USD ($) position shares	Sep. 30, 2023 USD ($) shares	Sep. 30, 2024 USD ($) position segment shares	Sep. 30, 2023 USD ($) shares	Jun. 30, 2024 USD ($)	May 29, 2024 USD ($)	Dec. 31, 2023 USD ($)	Sep. 18, 2023 contract
Property, Plant and Equipment									
Number of reportable segments | segment				1					
Revenue recognized that was previously deferred		$ 200,000	$ 0	$ 1,200,000	$ 0				
Sale of Viking common stock (in shares) | shares		0	0	700	4,500				
Gain on sale of Viking common stock				$ 60,000,000	$ 37,200,000				
Number of positions in an unrealized loss position | position		32		32					
Unrealized losses		$ (10,000.00)		$ (10,000.00)					
Amortized cost				50,000.00					
Credit losses related to available-for-sale debt securities		0	$ 0		0				
(Decrease) increase in allowance for credit losses		(10,000.00)	100,000	(130,000)	140,000				
Inventory write-down		100,000	0	200,000	0				
Inventory		16,740,000		16,740,000				$ 23,969,000	
Fair value adjustments to partner program derivatives		$ (7,812,000)	0	$ (7,812,000)	0				
Derivative, Gain (Loss), Statement of Income or Comprehensive Income [Extensible Enumeration]		Gain (Loss) on Investments		Gain (Loss) on Investments					
Received amount expended		$ 5,675,000	$ 5,532,000	$ 17,000,000	$ 19,049,000				
Employee retention credit		2,300,000		2,300,000					
Financial royalty liability current		6,600,000		6,600,000					
Prepaid expense		$ 2,200,000		$ 2,200,000					
Potentially dilutive shares excluded from calculation due to anti-dilutive effect (in shares) | shares		1,099	4,762	1,815	4,663				
Metabasis									
Property, Plant and Equipment									

Number of CVRs issued per acquiree share | cvr	4				
Share-based Compensation					
Property, Plant and Equipment					
Potentially dilutive shares excluded from calculation due to anti-dilutive effect (in shares) | shares		700	300		
Performance Shares					
Property, Plant and Equipment					
Performance period for awards (in years)			3 years		
Minimum | Performance Shares					
Property, Plant and Equipment					
Payout range (as a percent)			0.00%		
Maximum | Performance Shares					
Property, Plant and Equipment					
Payout range (as a percent)			200.00%		
Other Derivatives					
Property, Plant and Equipment					
Fair value adjustments to partner program derivatives		$ (8,000,000)	$ (6,800,000)		
Agenus Partnered Program					
Property, Plant and Equipment					
Additional maximum investment				$ 25,000,000	
Percentage of milestones (as a percent)					50.00%
Agenus Partnered Program | Primordial Genetics					
Property, Plant and Equipment					
Number of contracts | contract					2
Viking | Collars					
Property, Plant and Equipment					
Fair value adjustments to partner program derivatives		(7,900,000)	7,300,000		
Agenus, Inc. | Partner Programs					
Property, Plant and Equipment					
Fair value adjustments to partner program derivatives		(7,200,000)	(7,200,000)		
Primrose Bio					

Property, Plant and Equipment				
Fair value adjustments to partner program derivatives	$ (600,000) $ 0	$ (600,000) $ 0		
Palvella				
Property, Plant and Equipment				
Convertible note			$ 2,500,000	
Convertible note maturity period (in years)			3 years	
Palvella | Minimum				
Property, Plant and Equipment				
Interest in sales revenue (as a percent)	8.00%	8.00%		
Palvella | Maximum				
Property, Plant and Equipment				
Interest in sales revenue (as a percent)	9.80%	9.80%		
Palvella | Royalty Agreements				
Property, Plant and Equipment				
Additional royalties receivable under sales-based milestones	$ 5,000,000	$ 5,000,000		
Received amount expended		700,000		
Captisol				
Property, Plant and Equipment				
Inventory	$ 3,300,000	$ 3,300,000		$ 4,600,000

Basis of Presentation and Summary of Significant Accounting Policies - Revenue by Source (Details) - USD ($) $ in Thousands	3 Months Ended		9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023	Sep. 30, 2024	Sep. 30, 2023
Disaggregation of Revenue				
Total revenues	$ 51,812	$ 32,868	$ 124,321	$ 103,213
Royalties				
Disaggregation of Revenue				
Total revenues	31,709	23,888	73,966	62,473
Revenue from intangible royalty assets				
Disaggregation of Revenue				
Total revenues	26,552	23,863	67,512	61,447
Kyprolis				
Disaggregation of Revenue				
Total revenues	11,599	10,537	27,229	24,862
Evomela				
Disaggregation of Revenue				
Total revenues	1,747	2,497	5,877	7,404
Teriparatide injection				
Disaggregation of Revenue				
Total revenues	2,376	2,800	6,520	9,913
Rylaze				
Disaggregation of Revenue				
Total revenues	3,886	3,678	10,070	9,315
Filspari				
Disaggregation of Revenue				
Total revenues	3,206	1,122	7,402	1,707
Vaxneuvance				
Disaggregation of Revenue				
Total revenues	1,466	1,313	3,962	2,990
Other				
Disaggregation of Revenue				
Total revenues	2,272	1,916	6,452	5,256
Income from financial royalty assets				
Disaggregation of Revenue				
Total revenues	5,157	25	6,454	1,026
Captisol				
Disaggregation of Revenue				
Total revenues	6,255	8,608	22,967	24,450
Contract revenue and other income				
Disaggregation of Revenue				
Total revenues	13,848	372	27,388	16,290

Milestone and other				
Disaggregation of Revenue				
Total revenues	13,848	372	25,444	16,290
Other income				
Disaggregation of Revenue				
Total revenues	$ 0	$ 0	$ 1,944	$ 0

Basis of Presentation and Summary of Significant Accounting Policies - Investment Categories (Details) - USD ($) $ in Thousands	Sep. 30, 2024	Dec. 31, 2023
Debt Securities, Available-for-sale		
Amortized cost	$ 98,954	$ 120,874
Gross unrealized gains	87	79
Gross unrealized losses	(6,327)	(5,783)
Estimated fair value	92,714	115,170
Total short-term investments	156,024	147,355
Bond fund		
Debt Securities, Available-for-sale		
Amortized cost	39,512	63,763
Gross unrealized gains	0	0
Gross unrealized losses	(265)	(537)
Estimated fair value	39,247	63,226
U.S. government securities		
Debt Securities, Available-for-sale		
Amortized cost	19,051	6,736
Gross unrealized gains	31	18
Gross unrealized losses	0	(3)
Estimated fair value	19,082	6,751
Bank deposits		
Debt Securities, Available-for-sale		
Amortized cost	12,280	17,165
Gross unrealized gains	21	12
Gross unrealized losses	0	(1)
Estimated fair value	12,301	17,176
Corporate bonds		
Debt Securities, Available-for-sale		
Amortized cost	10,969	14,850
Gross unrealized gains	30	40
Gross unrealized losses	(3)	(2)
Estimated fair value	10,996	14,888
Commercial paper		
Debt Securities, Available-for-sale		
Amortized cost	10,591	11,578
Gross unrealized gains	5	9
Gross unrealized losses	(1)	(1)
Estimated fair value	10,595	11,586
Municipal bonds		
Debt Securities, Available-for-sale		

Amortized cost		1,007
Gross unrealized gains		0
Gross unrealized losses		(4)
Estimated fair value		1,003
Corporate equity securities		
Debt Securities, Available-for-sale		
Amortized cost	6,551	5,775
Gross unrealized gains	0	0
Gross unrealized losses	(6,058)	(5,235)
Estimated fair value	493	540
Common Stock		
Debt Securities, Available-for-sale		
Viking common stock	$ 63,310	$ 32,185

Basis of Presentation and Summary of Significant Accounting Policies - Available-for-Sale Debt Securities by Contractual Maturity (Details) $ in Thousands	Sep. 30, 2024 USD ($)
Amortized Cost	
Within one year	$ 91,072
After one year through five years	4,647
Total	95,719
Fair Value	
Within one year	91,152
After one year through five years	4,655
Total	$ 95,807

Basis of Presentation and Summary of Significant Accounting Policies - Goodwill and Other Identifiable Intangible Assets (Details) - USD ($) $ in Thousands	Sep. 30, 2024	Dec. 31, 2023
Summary of Goodwill and Other Identifiable Intangible Assets		
Goodwill	$ 105,250	$ 103,370
Total goodwill and other identifiable intangible assets, net	380,155	402,976
Complete technology		
Summary of Goodwill and Other Identifiable Intangible Assets		
Definite lived intangible assets	39,249	42,911
Less: accumulated amortization	(19,072)	(20,894)
Trade name		
Summary of Goodwill and Other Identifiable Intangible Assets		
Definite lived intangible assets	2,642	2,642
Less: accumulated amortization	(1,810)	(1,710)
Customer relationships		
Summary of Goodwill and Other Identifiable Intangible Assets		
Definite lived intangible assets	29,600	29,600
Less: accumulated amortization	(20,280)	(19,161)
Contractual relationships		
Summary of Goodwill and Other Identifiable Intangible Assets		
Definite lived intangible assets	360,000	360,000
Less: accumulated amortization	$ (115,424)	$ (93,782)

Basis of Presentation and Summary of Significant Accounting Policies - Schedule of Derivative Assets (Details) - USD ($) $ in Thousands	9 Months Ended		
	Sep. 30, 2024	Dec. 31, 2023	Sep. 18, 2023
Derivative [Line Items]			
Total current derivative assets	$ 11,133	$ 0	
Total noncurrent derivative assets	19,246	3,531	$ 3,200
Primrose Bio			
Derivative [Line Items]			
Total noncurrent derivative assets	2,921	3,531	
Equity Option | Agenus, Inc.			
Derivative [Line Items]			
Total current derivative assets	3,815	0	
Total noncurrent derivative assets	$ 2,226	0	
Derivative, term of contract (in years)	5 years		
Collars | Viking			
Derivative [Line Items]			
Total current derivative assets	$ 7,318	0	
Partner Programs | Agenus, Inc.			
Derivative [Line Items]			
Total noncurrent derivative assets	$ 14,099	$ 0	

Basis of Presentation and Summary of Significant Accounting Policies - Other Investment (Details) - USD ($) $ in Thousands	Sep. 30, 2024	Dec. 31, 2023
Summary of Investment Holdings		
Total other investments	$ 11,908	$ 36,726
Equity Securities | Primrose Bio		
Summary of Investment Holdings		
Total other investments	6,712	32,726
Equity Securities | InvIOs		
Summary of Investment Holdings		
Total other investments	4,196	0
Neuritek warrants		
Summary of Investment Holdings		
Total other investments	0	3,000
Palvella Series C preferred stock		
Summary of Investment Holdings		
Total other investments	$ 1,000	$ 1,000

Basis of Presentation and Summary of Significant Accounting Policies - Inventory in Other Assets (Details) - USD ($) $ in Thousands	Sep. 30, 2024	Dec. 31, 2023
Inventory [Line Items]		
Total Pelthos inventory in other current assets	$ 16,740	$ 23,969
Zelsuvmi		
Inventory [Line Items]		
Raw materials	2,495	420
Work in process	260	195
Total Pelthos inventory in other current assets	$ 2,755	$ 615

Basis of Presentation and Summary of Significant Accounting Policies - Accrued Liabilities and Other Long-Term Liabilities (Details) - USD ($) $ in Thousands	Sep. 30, 2024	Dec. 31, 2023
Accrued Liabilities		
Compensation	$ 3,830	$ 4,682
Subcontractor	1,756	1,756
Professional fees	3,296	2,394
Customer deposit	621	621
Supplier	276	303
Royalties owed to third parties	2,989	900
Amounts owed to former licensees	0	45
Other	2,832	1,766
Total accrued liabilities	$ 15,600	$ 12,467

Basis of Presentation and Summary of Significant Accounting Policies - Other Long-term Liabilities (Details) - USD ($) $ in Thousands	Sep. 30, 2024	Dec. 31, 2023
Organization, Consolidation and Presentation of Financial Statements [Abstract]		
Unrecognized tax benefits	$ 14,481	$ 14,039
Novan (Pelthos) contract liability	15,324	13,700
Other long-term liabilities	69	19
Other long-term liabilities	$ 29,874	$ 27,758

Basis of Presentation and Summary of Significant Accounting Policies - Accounting for Share-Based Compensation (Details) - USD ($) $ in Thousands	3 Months Ended		9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023	Sep. 30, 2024	Sep. 30, 2023
Basis of Presentation				
Share-based compensation expense	$ 15,171	$ 6,884	$ 33,565	$ 20,022
SBC - Research and development expenses				
Basis of Presentation				
Share-based compensation expense	982	1,639	2,588	5,362
SBC - General and administrative expenses				
Basis of Presentation				
Share-based compensation expense	$ 14,189	$ 5,245	$ 30,977	$ 14,660

Basis of Presentation and Summary of Significant Accounting Policies - Fair Value Valuation Assumptions (Details)	3 Months Ended		9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023	Sep. 30, 2024	Sep. 30, 2023
Organization, Consolidation and Presentation of Financial Statements [Abstract]				
Risk-free interest rate (as a percent)	4.40%	4.30%	4.30%	4.10%
Dividend yield (as a percent)	0.00%	0.00%	0.00%	0.00%
Expected volatility (as a percent)	44.70%	44.70%	44.70%	51.50%
Expected term (years)	4 years 8 months 12 days	5 years 2 months 12 days	4 years 8 months 12 days	5 years 3 months 18 days

Basis of Presentation and Summary of Significant Accounting Policies - Net (Loss) Gain Per Share (Details) - shares shares in Thousands	3 Months Ended		9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023	Sep. 30, 2024	Sep. 30, 2023
Antidilutive Securities Excluded from Computation of Earnings Per Share				
Weighted average shares outstanding (in shares)	18,419	17,380	18,061	17,241
Dilutive potential common shares:				
Shares used to compute diluted income (loss) per share (in shares)	18,419	17,380	18,574	17,784
Potentially dilutive shares excluded from calculation due to anti-dilutive effect (in shares)	1,099	4,762	1,815	4,663
Restricted stock				
Dilutive potential common shares:				
Dilutive potential common shares (in shares)	0	0	173	82
Stock options				
Dilutive potential common shares:				
Dilutive potential common shares (in shares)	0	0	340	302
2023 Notes				
Dilutive potential common shares:				
Dilutive potential common shares (in shares)	0	0	0	159

Agenus Transaction (Details) $ in Thousands	May 29, 2024 USD ($) $ / shares shares	Sep. 30, 2024 USD ($) $ / shares	Dec. 31, 2023 USD ($)
Asset Acquisition [Line Items]			
Net carrying value		$ 205,867	$ 62,291
Agenus, Inc.			
Asset Acquisition [Line Items]			
Net carrying value	$ 75,000	$ 40,407	$ 0
Royalties right to receive (as a percent)	18.75%		
Maximum capital sourcing	$ 100,000		
Maximum financing royalty asset	$ 200,000		
Warrants term (in years)	5 years		
Securities called by warrants (in shares) | shares	867,052		
Exercise price (in USD per share) | $ / shares	$ 17.3		
Agenus, Inc. | Expected Term			
Asset Acquisition [Line Items]			
Derivative liability, measurement input	4	3.7	
Agenus, Inc. | Option Volatility			
Asset Acquisition [Line Items]			
Derivative liability, measurement input	0.84	0.99	
Agenus, Inc. | Risk Free Interest Rate			
Asset Acquisition [Line Items]			
Derivative liability, measurement input	0.047	0.036	
Agenus, Inc. | Share Price			
Asset Acquisition [Line Items]			
Derivative liability, measurement input | $ / shares	15.03	5.48	
Agenus, Inc. | BMS-986442			
Asset Acquisition [Line Items]			
Future milestones right to receive (as a percent)	31.875%		
Agenus, Inc. | AGEN2373			
Asset Acquisition [Line Items]			
Future milestones right to receive (as a percent)	31.875%		
Agenus, Inc. | INCAGN2385			
Asset Acquisition [Line Items]			
Future milestones right to receive (as a percent)	31.875%		
Agenus, Inc. | INCAGN2390			
Asset Acquisition [Line Items]			
Future milestones right to receive (as a percent)	31.875%		
Agenus, Inc. | MK-4830			
Asset Acquisition [Line Items]			
Future milestones right to receive (as a percent)	31.875%		
Agenus, Inc. | UGN-301			
Asset Acquisition [Line Items]			

Future milestones right to receive (as a percent)	31.875%
Agenus, Inc. | BOT/BAL	
Asset Acquisition [Line Items]	
Future royalties (as a percent)	2.625%
Agenus Partnered Program	
Asset Acquisition [Line Items]	
Additional maximum investment	$ 25,000

Sale of Pelican Business and Investment in Primrose Bio - Narrative (Details) $ in Thousands	Sep. 18, 2023 USD ($) contract milestone shares	3 Months Ended Sep. 30, 2024 USD ($)	3 Months Ended Sep. 30, 2023 USD ($)	9 Months Ended Sep. 30, 2024 USD ($)	9 Months Ended Sep. 30, 2023 USD ($)	Jan. 01, 2025 USD ($)	Dec. 31, 2023 USD ($)
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations							
Gain on sale of Pelican		$ 0	$ 2,121	$ 0	$ 2,121		
Noncurrent derivative assets	$ 3,200	19,246		$ 19,246			$ 3,531
Derivative Asset Noncurrent, Statement Of Financial Position, Extensible Enumeration, Not Disclosed Flag				condensed consolidated balance sheet			
Loss on derivative instruments				$ (14,655)	0		
Losses from equity method investment in Primrose Bio				11,576	0		
Primrose Bio							
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations							
Impairment of equity method investment		0		5,800			
Losses from equity method investment in Primrose Bio		1,200		5,800			
Decrease in value of investment		30		25,790			
Primrose Bio							
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations							
Consideration paid for an interest in potential development milestone	$ 15,000						
Noncurrent derivative assets		2,921		2,921			$ 3,531
Primrose Bio | PeliCRM197 | Forecast							
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations							
Sales revenue milestone						$ 3,000	
Primrose Bio | Below 3 million | PeliCRM197 | Forecast							

Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations						
Interest in sales revenue (as a percent)						25.00%
Primrose Bio | Above 3 million | PeliCRM197 | Forecast						
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations						
Interest in sales revenue (as a percent)						35.00%
Agenus Partnered Program						
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations						
Percentage of milestones (as a percent)	50.00%					
Agenus Partnered Program | Primordial Genetics						
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations						
Number of contracts | contract	2					
Number of milestones (milestone) | milestone	2					
Loss on derivative instruments		$ (600)		$ (600)		
Disposal Group, Disposed of by Sale, Not Discontinued Operations | Pelican Technology Holdings, Inc.						
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations						
Consideration paid for an interest in potential development milestone	$ 15,000					
Goodwill written off					4,100	
Gain on sale of Pelican			$ 2,100		$ 2,100	
Business exit costs	$ 1,200					
Disposal Group, Disposed of by Sale, Not Discontinued Operations | Pelican Technology Holdings, Inc. | Restricted Stock Awards						
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations						
Shares received as consideration (in shares) | shares	474,746					
Disposal Group, Disposed of by Sale, Not Discontinued Operations | Pelican Technology Holdings, Inc. | Common Stock						

Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations	
Shares received as consideration (in shares) | shares	2,146,957
Disposal Group, Disposed of by Sale, Not Discontinued Operations | Pelican Technology Holdings, Inc. | Preferred Stock	
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations	
Shares received as consideration (in shares) | shares	4,278,293

Sale of Pelican Business and Investment in Primrose Bio - Net Asset (Details) - Disposal Group, Disposed of by Sale, Not Discontinued Operations - Pelican Technology Holdings, Inc. $ in Thousands	Sep. 18, 2023 USD ($)
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations	
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
Total	$ 47,063

Sale of Pelican Business and Investment in Primrose Bio - Fair Value of the Consideration (Details) - Disposal Group, Disposed of by Sale, Not Discontinued Operations - Pelican Technology Holdings, Inc. $ in Thousands	Sep. 18, 2023 USD ($)
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations	
Cash consideration paid	$ 49,184
Equity method investment	
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations	
Cash consideration paid	13,706
Equity securities	
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations	
Cash consideration paid	32,278
Derivative assets	
Income Statement, Balance Sheet and Additional Disclosures by Disposal Groups, Including Discontinued Operations	
Cash consideration paid	$ 3,200

Acquisitions - Narrative (Details) € in Millions	Jul. 15, 2024 USD ($)	Jul. 15, 2024 EUR (€)	Sep. 27, 2023 USD ($)	9 Months Ended Sep. 30, 2024 USD ($)	9 Months Ended Sep. 30, 2023 USD ($)	12 Months Ended Dec. 31, 2023 USD ($)
Business Acquisition						
Cash paid for InvIOs investment				$ 4,196,000	$ 0	
InvIOs Holding AG						
Business Acquisition						
Cash paid for InvIOs investment	$ 4,200,000					
Equity issuance cost	200,000					
InvIOs Holding AG | Investor						
Business Acquisition						
Cash paid for InvIOs investment	8,800,000	€ 8				
APEIRON						
Business Acquisition						
Aggregate acquisition amount	100,500,000					
Contingent earn-out payment	28,000,000					
Deferred transaction costs	4,900,000					
Contract assets (financial royalty assets)	106,156,000			106,156,000		
Deferred tax liability	$ 18,109,000					
Intangible assets acquired				$ 0		
Novan, Inc.						
Business Acquisition						
Aggregate acquisition amount			$ 12,150,000			
Contract assets (financial royalty assets)					0	
Cash payments for acquisition			15,000,000			
Liabilities incurred			15,000,000			
Intangible assets acquired			$ 10,700,000		$ 10,700,000	
Acquired (as a percent)			10.30%			
Cash acquired from acquisition			$ 2,800,000			
Acquisition related costs						$ 3,100,000
Goodwill acquired that is expected to be deductible for tax purposes			$ 0			
Discount rate used to value intangible assets acquired (as a percent)			29.00%			

Weighted-average estimated useful life of finite-lived intangible assets acquired (in years)	15 years
Other liabilities	$ 13,700,000
Research and development	$ 25,000,000
Novan, Inc. | Discount Rate | Valuation Technique, Discounted Cash Flow	
Business Acquisition	
Contingent liability measurement input (as a percent)	0.14
Novan, Inc. | Core Technology	
Business Acquisition	
Intangible assets acquired	$ 12,200,000
Novan, Inc. | Bridge Loan	
Business Acquisition	
Liabilities incurred	$ 3,000,000

Acquisitions - Fair Values of Assets Acquired and Liabilities Assumed (Details) - APEIRON - USD ($) $ in Thousands	Sep. 30, 2024	Jul. 15, 2024
Business Acquisition		
Cash and cash equivalents		$ 13,437
Contract assets (financial royalty assets)	$ 106,156	106,156
Other assets		8,965
Accounts payable and accrued liabilities		(3,740)
Income tax payable		(1,276)
Deferred tax liabilities, net		(18,109)
Total fair value of net assets acquired		$ 105,433

Acquisitions - Assets Acquired and Liabilities Assumed (Details) - USD ($) $ in Thousands		9 Months Ended		
	Sep. 27, 2023	Sep. 30, 2024	Sep. 30, 2023	Dec. 31, 2023
Business Acquisition				
Goodwill		$ 105,250		$ 103,370
Cash paid for Novan, including restricted cash received		$ 0	$ 10,405	
Novan, Inc.				
Business Acquisition				
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		10,700	
Goodwill	3,709		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		$ 10,405	
DIP loan fees and interest	1,162			
Total consideration	$ 12,150			

Spin-off of OmniAb (Details) $ in Millions	9 Months Ended Sep. 30, 2024 USD ($)	Oct. 26, 2022
Segment Reporting, Revenue Reconciling Item		
Deferred tax asset adjustment	$ (1.7)	
Discontinued operations		
Segment Reporting, Revenue Reconciling Item		
Percentage of voting interests disposed (as a percent)		1

Financial Royalty Assets, net (formerly known as Commercial License Rights) - Schedule of Financial Royalty Assets (Details) - USD ($) $ in Thousands	Sep. 30, 2024	Aug. 31, 2024	May 29, 2024	Mar. 31, 2024	Dec. 31, 2023
Finite-Lived Intangible Assets					
Gross carrying value	$ 210,298				$ 70,364
Allowance	(4,431)				(8,073)
Net carrying value	205,867				62,291
Financial royalty liability current	6,600				
Apeiron					
Finite-Lived Intangible Assets					
Gross carrying value	113,371				0
Allowance	(735)				0
Net carrying value	112,636				0
Agenus (Bot/Bal)					
Finite-Lived Intangible Assets					
Gross carrying value	40,815				0
Allowance	(408)				0
Net carrying value	40,407		$ 75,000		0
Elutia (CorMatrix)					
Finite-Lived Intangible Assets					
Gross carrying value	10,032				13,304
Allowance	(2,607)				(7,490)
Net carrying value	7,425				5,814
Selexis					
Finite-Lived Intangible Assets					
Gross carrying value	242				940
Allowance	(58)				(179)
Net carrying value	184				761
Ovid (Soticlestat)					
Finite-Lived Intangible Assets					
Gross carrying value	4,122				30,310
Allowance	(41)				(303)
Net carrying value	4,081				30,007
Tolerance Therapeutics (TZIELD)					
Finite-Lived Intangible Assets					
Gross carrying value	25,698				25,810
Allowance	(101)				(101)
Net carrying value	25,597				25,709
Ensifentrine inventors					
Finite-Lived Intangible Assets					

Gross carrying value	16,018	$ 13,600	$ 3,800	0
Allowance	(481)			0
Net carrying value	$ 15,537			$ 0

Financial Royalty Assets, net (formerly known as Commercial License Rights) - Narrative (Details)		1 Months Ended	3 Months Ended		9 Months Ended					
	May 31, 2017 USD ($)	Nov. 30, 2023 USD ($)	Sep. 30, 2024 USD ($)	Sep. 30, 2023 USD ($)	Sep. 30, 2024 USD ($)	Sep. 30, 2023 USD ($)	Aug. 31, 2024 USD ($)	Mar. 31, 2024 USD ($)	Dec. 31, 2023 USD ($)	Oct. 31, 2023 USD ($)
Finite-Lived Intangible Assets										
Impairment loss of financial royalty assets			$ 0		$ 26,491,000	$ 924,000				
Gross carrying value			210,298,000		210,298,000				$ 70,364,000	
Tolerance Therapeutics (TZIELD)										
Finite-Lived Intangible Assets										
Product royalty (as a percent)		1.00%								
Cash payments for acquisition		$ 20,000,000								
Deferred tax liability		$ 5,500,000								
Ovid (Soticlestat)										
Finite-Lived Intangible Assets										
Impairment loss of financial royalty assets					26,200,000					
Gross carrying value			$ 4,122,000		$ 4,122,000				30,310,000	
Ovid (Soticlestat) | Discount Rate										
Finite-Lived Intangible Assets										
Discount rate (as a percent)			0.17		0.17					
Ovid (Soticlestat) | Soticlestat										
Finite-Lived Intangible Assets										
Consideration paid for an interest in potential development milestone										$ 30,000,000
Interest in sales revenue (as a percent)										13.00%
Selexis										
Finite-Lived Intangible Assets										
Impairment loss of financial royalty assets				$ 900,000	$ 300,000	900,000				
Gross carrying value			$ 242,000		242,000				940,000	
Elutia (CorMatrix)										
Finite-Lived Intangible Assets										
Proceeds from royalties received	$ 10,000,000									
Product royalty (as a percent)	5.00%									
Credit loss adjustment			(300,000)	$ 3,200,000	(4,900,000)	$ 3,200,000				
Gross carrying value			10,032,000		10,032,000				13,304,000	
Elutia (CorMatrix) | Maximum										
Finite-Lived Intangible Assets										

Additional royalties receivable under sales-based milestones	$ 10,000,000				
Ensifentrine inventors					
Finite-Lived Intangible Assets					
Gross carrying value		$ 16,018,000	$ 16,018,000	$ 13,600,000	$ 3,800,000	$ 0

Fair Value Measurements - Assets and Liabilities Measured at Fair Value on Recurring Basis (Details) $ in Thousands	1 Months Ended	3 Months Ended		9 Months Ended		12 Months Ended	
	Jan. 31, 2010 cvr	Sep. 30, 2024 USD ($)	Sep. 30, 2023 USD ($)	Sep. 30, 2024 USD ($)	Sep. 30, 2023 USD ($)	Dec. 31, 2023 USD ($)	Sep. 18, 2023 contract
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]							
Derivative Asset Statement Of Financial Position Extensible Enumeration Not Disclosed Flag				Derivative assets(2)		Derivative assets(2)	
Number of CVR series | cvr	4						
Agenus Partnered Program							
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]							
Percentage of milestones (as a percent)							50.00%
Agenus Partnered Program | Discount Rate							
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]							
Discount rate (as a percent)						0.25	
Agenus Partnered Program | Primordial Genetics							
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]							
Number of contracts | contract							2
Transferred over Time | Phase 3 clinical trial							
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]							
Gross contract asset		$ 10,000		$ 10,000			
Minimum | Agenus Partnered Program | Discount Rate							
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]							
Discount rate (as a percent)		0.15		0.15			
Maximum | Agenus Partnered Program | Discount Rate							
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]							
Discount rate (as a percent)		0.25		0.25			
Maximum | Transferred over Time | Development, regulatory, & commercial milestones and tiered royalties							
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]							

Investments		$ 375,000		$ 375,000		
Metabasis						
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]						
Number of CVRs issued per acquiree share | cvr	4					
Number of CVRs issued from each CVR series | cvr	1					
Frequency of cash payments to CVR holders	6 months					
(Decrease) increase of mark-to-market adjustment of CVR liability		(200)	$ (100)	900	$ 2	
Recurring						
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]						
Investment in Viking common stock		63,310		63,310		$ 32,185
Derivative asset		30,379		30,379		3,531
Total assets		186,403		186,403		150,886
Total liabilities		3,991		3,991		3,198
Recurring | Short-term investments, excluding Viking						
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]						
Investments, fair value		92,714		92,714		115,170
Recurring | Contingent liabilities | CyDex						
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]						
Contingent liabilities		223		223		320
Recurring | Contingent liabilities | Metabasis						
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]						
Contingent liabilities		3,768		3,768		2,878
Recurring | Level 1						
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]						
Investment in Viking common stock		63,310		63,310		32,185
Derivative asset		0		0		0
Total assets		82,885		82,885		39,476
Total liabilities		0		0		0
Recurring | Level 1 | Short-term investments, excluding Viking						
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]						
Investments, fair value		19,575		19,575		7,291
Recurring | Level 1 | Contingent liabilities | CyDex						

Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]			
Contingent liabilities	0	0	0
Recurring | Level 1 | Contingent liabilities | Metabasis			
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]			
Contingent liabilities	0	0	0
Recurring | Level 2			
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]			
Investment in Viking common stock	0	0	0
Derivative asset	0	0	0
Total assets	73,139	73,139	107,879
Total liabilities	3,768	3,768	2,878
Recurring | Level 2 | Short-term investments, excluding Viking			
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]			
Investments, fair value	73,139	73,139	107,879
Recurring | Level 2 | Contingent liabilities | CyDex			
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]			
Contingent liabilities	0	0	0
Recurring | Level 2 | Contingent liabilities | Metabasis			
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]			
Contingent liabilities	3,768	3,768	2,878
Recurring | Level 3			
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]			
Investment in Viking common stock	0	0	0
Derivative asset	30,379	30,379	3,531
Total assets	30,379	30,379	3,531
Total liabilities	223	223	320
Recurring | Level 3 | Short-term investments, excluding Viking			
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]			
Investments, fair value	0	0	0
Recurring | Level 3 | Contingent liabilities | CyDex			
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]			
Contingent liabilities	223	223	320

Recurring | Level 3 | Contingent liabilities | Metabasis			
Fair Value, Assets and Liabilities Measured on Recurring and Nonrecurring Basis [Line Items]			
Contingent liabilities	$ 0	$ 0	$ 0

Fair Value Measurements - Reconciliation of Level 3 Financial Instruments (Details) $ in Thousands	9 Months Ended Sep. 30, 2024 USD ($)
Assets	
Beginning balance	$ 3,531
Additions to derivative assets	34,185
Fair value adjustments to derivative assets	(7,337)
Ending balance	$ 30,379
Fair Value, Asset, Recurring Basis, Unobservable Input Reconciliation, Gain (Loss), Statement of Income or Comprehensive Income [Extensible Enumeration]	Gain (Loss) on Investments
Liabilities	
Beginning balance	$ 320
Payments to CVR holders and other contingent payments	(200)
Fair value adjustments to contingent liabilities	103
Ending balance	$ 223
Fair Value, Liability, Recurring Basis, Unobservable Input Reconciliation, Gain (Loss), Statement of Income or Comprehensive Income [Extensible Enumeration]	Non Cash Change In Estimated Fair Value Of Contingent Value Rights

Fair Value Measurements - Narrative (Details) - USD ($)	3 Months Ended		9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023	Sep. 30, 2024	Sep. 30, 2023
Fair Value Disclosures [Abstract]				
Goodwill and intangible asset impairment	$ 0	$ 0	$ 0	$ 0
Tangible asset impairment charges	$ 0	$ 0	$ 0	$ 0

Debt (Details) - Revolving Credit Facility - USD ($)	Oct. 12, 2023	Sep. 30, 2024	Jul. 08, 2024
Line of Credit Facility			
Maximum borrowing capacity	$ 75,000,000		$ 125,000,000
Line of Credit			
Line of Credit Facility			
Available borrowing		$ 124,400,000	
Letters of credit outstanding		$ 600,000	
Minimum			
Line of Credit Facility			
Line of credit facility, interest rate (as a percent)	0.30%		
Minimum | Secured Overnight Financing Rate (SOFR)			
Line of Credit Facility			
Variable rate (as a percent)	1.75%		
Minimum | Base Rate			
Line of Credit Facility			
Variable rate (as a percent)	0.75%		
Maximum			
Line of Credit Facility			
Line of credit facility, interest rate (as a percent)	0.45%		
Maximum | Secured Overnight Financing Rate (SOFR)			
Line of Credit Facility			
Variable rate (as a percent)	2.50%		
Maximum | Base Rate			
Line of Credit Facility			
Variable rate (as a percent)	1.50%		

Income Tax (Details)	3 Months Ended		9 Months Ended	
	Sep. 30, 2024	Sep. 30, 2023	Sep. 30, 2024	Sep. 30, 2023
Income Tax Disclosure [Abstract]				
Effective income tax rate (as a percent)	(13.10%)	15.40%	35.10%	23.50%

Stockholders' Equity - Narrative (Details) - USD ($)	1 Months Ended Jun. 30, 2024	3 Months Ended Sep. 30, 2024	9 Months Ended Sep. 30, 2024	Apr. 30, 2023	Sep. 30, 2022
Share-based Compensation Arrangement by Share-based Payment Award					
Outstanding options that are exercisable (in shares)		1,400,000	1,400,000		
Outstanding options that are exercisable, weighted average exercise price (in USD per share)		$ 70.27	$ 70.27		
Employee Stock Purchase Plan					
Authorized stock repurchase amount				$ 50,000,000	
Remaining authorized stock repurchase amount		$ 50,000,000	$ 50,000,000		
At-the Market Equity Offering					
Employee Stock Purchase Plan					
Sale of stock, authorized offering amount					$ 100,000,000
Sale of common stock (in shares)		334,325	334,325		
Common stock aggregate offering price			$ 34,300,000		
2002 Stock Incentive Plan | Stock Options					
Share-based Compensation Arrangement by Share-based Payment Award					
Increase the number of shares under the 2002 stock incentive plan (in shares)	1,300,000				
Amended ESPP					
Employee Stock Purchase Plan					
Share purchase price as percent of market price (as a percent)			85.00%		
Shares available for future purchases (in shares)			26,244		

Stockholders' Equity - Stock Option Plan and Restricted Stock Activity (Details)	9 Months Ended Sep. 30, 2024 $ / shares shares
Shares	
Balance at beginning of period (in shares) | shares	2,640,458
Granted (in shares) | shares	743,117
Options exercised (in shares) | shares	(784,467)
Forfeited (in shares) | shares	(57,161)
Balance at end of period (in shares) | shares	2,541,947
Weighted-Average Exercise Price	
Balance at beginning of period (in USD per share) | $ / shares	$ 65.70
Granted (in USD per share) | $ / shares	85.71
Options exercised (in USD per share) | $ / shares	59.07
Forfeited (in USD per share) | $ / shares	70.71
Balance at end of period (in USD per share) | $ / shares	$ 73.48
Restricted Stock Awards	
Restricted Stock Awards	
Nonvested at beginning of period (in shares) | shares	350,905
Granted (in shares) | shares	318,588
RSUs vested (in shares) | shares	(126,793)
Forfeited (in shares) | shares	(42,870)
Nonvested at end of period (in shares) | shares	499,830
Weighted-Average Grant Date Fair Value	
Nonvested at beginning of period (in USD per share) | $ / shares	$ 81.22
Granted (in USD per share) | $ / shares	85.23
RSUs vested (in USD per share) | $ / shares	85.55
Forfeited (in USD per share) | $ / shares	72.32
Nonvested at end of period (in USD per share) | $ / shares	$ 83.44

Commitment and Contingencies (Details) $ in Millions	Oct. 31, 2019 complaint	9 Months Ended Sep. 30, 2024 USD ($)
Loss Contingencies [Line Items]		
Increase in operating lease assets		$ 1.6
Increase in operating lease liability		$ 1.6
US District Court for the Northern District of Ohio		
Loss Contingencies [Line Items]		
Number of civil complaints filed against entity | complaint	3	