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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2024

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to
Commission file number: 001-34620

IRONWOOD PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**04-3404176**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
100 Summer Street, Suite 2300 Boston, Massachusetts	**02110**
(Address of Principal Executive Offices)	(Zip Code)

(617) 621-7722
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, $0.001 par value	IRWD	Nasdaq Global Select 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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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 April 30, 2024, there were 158,957,123 shares of Class A common stock outstanding.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward-looking statements that involve risks, uncertainties, and assumptions. All statements contained in this Quarterly Report on Form 10-Q other than statements of historical fact are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements regarding our future financial position, business strategy, budgets, projected costs, plans and objectives of management for future operations. The words “may,” “continue,” “estimate,” “intend,” “plan,” “will,” “believe,” “project,” “expect,” “seek,” “anticipate,” “could,” “should,” “target,” “goal,” “potential” and similar expressions may identify forward-looking statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. These forward-looking statements include, among other things, statements about the demand and market potential for our products in the countries where they are approved for marketing, as well as the revenues therefrom; the timing, investment and associated activities involved in commercializing LINZESS® by us and AbbVie Inc. in the U.S.; the commercialization of CONSTELLA® in Europe and LINZESS in Japan and China, as well as our expectations regarding revenue generated from our partners; the timing, investment and associated activities involved in developing, obtaining regulatory approval for, launching, and commercializing our products and product candidates, such as apraglutide, by us and our partners worldwide; our ability and the ability of our partners to secure and maintain adequate reimbursement for our products; our ability and the ability of our partners and third parties to manufacture and distribute sufficient amounts of linaclotide active pharmaceutical ingredient, finished drug product and finished goods, as applicable, on a commercial scale; our expectations regarding U.S. and foreign regulatory requirements for our products and our product candidates, such as apraglutide, including our post-approval development and regulatory requirements; the ability of apraglutide and our other product candidates to meet existing or future regulatory standards; the safety profile and related adverse events of our products and our product candidates; the therapeutic benefits and effectiveness of our products and our product candidates and the potential indications and market opportunities therefor; our ability and the ability of our partners to obtain and maintain intellectual property protection for our products and our product candidates and the strength thereof, as well as Abbreviated New Drug Applications filed by generic drug manufacturers and potential U.S. Food and Drug Administration approval thereof, and associated patent infringement suits that we have filed or may file, or other action that we may take against such companies, and the timing and resolution thereof; our ability and the ability of our partners to perform our respective obligations under our collaboration, license and other agreements, and our ability to achieve milestone and other payments under such agreements; our plans with respect to the development, manufacture or sale of our product candidates and the associated timing thereof, including the design and results of pre-clinical studies and clinical trials; the in-licensing or acquisition of externally discovered businesses, products or technologies, or other strategic transactions, as well as partnering arrangements, including our option to acquire an exclusive license from COUR Pharmaceutical Development Company, Inc., to research, develop, manufacture and commercialize in the U.S., products containing CNP-104 for the treatment of primary biliary cholangitis, as well as partnering arrangements, including the timing of potential clinical development and regulatory milestones and expectations relating to the completion of, or the realization of the expected benefits from, such transactions; our expectations as to future financial performance, revenues, expense levels, payments, cash flows, profitability, tax obligations, capital raising and liquidity sources, and real estate needs, as well as the timing and drivers thereof, and internal control over financial reporting; our ability to repay our outstanding indebtedness when due, or redeem or repurchase all or a portion of such debt, as well as the potential benefits of the capped call transactions described herein; asset impairments, and the drivers thereof, and purchase commitments; the status of government regulation in the life sciences industry, particularly with respect to healthcare reform and drug pricing; trends and challenges in our potential markets; trends and challenges in our potential markets; and our ability to attract, motivate and retain key personnel.

Any or all of our forward-looking statements in this Quarterly Report on Form 10-Q may turn out to be inaccurate. These forward-looking statements may be affected by inaccurate assumptions or by known or unknown risks and uncertainties, including those related to the effectiveness of development and commercialization efforts by us and our partners; preclinical and clinical development, manufacturing and formulation development of linaclotide, apraglutide, CNP-104 and our other product candidates; the risk of uncertainty relating to pricing and reimbursement policies in the U.S., which, if not favorable for our products, could hinder or prevent our products’ commercial success; the risk that clinical programs and studies, including for linaclotide pediatric programs, apraglutide, CNP-104 and IW-3300, may not progress or develop as anticipated, including that studies are delayed or discontinued for any reason, such as safety, tolerability, enrollment, manufacturing, economic or other reasons; the risk that findings from our completed nonclinical studies and clinical trials may not be replicated in later studies and clinical trials may not be predictive of the results we may obtain in later-stage clinical trials or of the likelihood of regulatory approval; the risk that apraglutide will not be approved by the U.S. Food and Drug Administration or other regulatory agencies; the risk of competition or

that new products may emerge that provide different or better alternatives for treatment of the conditions that our products are approved to treat; the risk that we are unable to execute on our strategy to in-license externally developed products or product candidates; the risk that we are unable to successfully partner with other companies to develop and commercialize products or product candidates; the risk that healthcare reform and other governmental and private payor initiatives may have an adverse effect upon or prevent our products' or product candidates' commercial success; the efficacy, safety and tolerability of linaclotide and our product candidates; the risk that the commercial and therapeutic opportunities for LINZESS, apraglutide or our other product candidates are not as we expect; decisions by regulatory and judicial authorities; the risk we may never get additional patent protection for linaclotide, apraglutide and other product candidates, that patents for linaclotide, apraglutide or other products may not provide adequate protection from competition, or that we are not able to successfully protect such patents; the risk that we are unable to manage our expenses or cash use, or are unable to commercialize our products as expected; the risk that the development of any of our linaclotide pediatric programs, apraglutide, CNP-104 and/or IW-3300 is not successful or that any of our product candidates does not receive regulatory approval or is not successfully commercialized; outcomes in legal proceedings to protect or enforce the patents relating to our products and product candidates, including abbreviated new drug application litigation; the risk that financial and operating results may differ from our projections; developments in the intellectual property landscape; challenges from and rights of competitors or potential competitors; the risk that our planned investments do not have the anticipated effect on our company revenues; developments in accounting guidance or practice; Ironwood's or AbbVie's accounting practices, including reporting and settlement practices as between Ironwood and AbbVie; the risk that we are unable to manage our expenses or cash use, or are unable to commercialize our products as expected; the risk that our indebtedness could adversely affect our financial condition or restrict our future operations; and the additional risks identified under the heading "Part I, Item 1A—Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2023, which was filed with the U.S. Securities and Exchange Commission, or the SEC, on February 16, 2024. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Quarterly Report on Form 10-Q may not occur as contemplated, and actual results could differ materially from those anticipated or implied by the forward-looking statements.

You should not unduly rely on these forward-looking statements, which speak only as of the date of this Quarterly Report on Form 10-Q. Unless required by law, we undertake no obligation to publicly update or revise any forward-looking statements to reflect new information or future events or otherwise. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this Quarterly Report on Form 10-Q.

NOTE REGARDING TRADEMARKS

IRONWOOD PHARMACEUTICALS, INC.
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTER ENDED MARCH 31, 2024
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PART I — FINANCIAL INFORMATION

Item 1. ***Financial Statements***

Ironwood Pharmaceuticals, Inc.
Condensed Consolidated Balance Sheets
(In thousands, except share and per share amounts)
(unaudited)

	March 31, 2024	December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 121,540	$ 92,154
Accounts receivable, net	72,015	129,122
Prepaid expenses and other current assets	14,619	12,012
Total current assets	208,174	233,288
Property and equipment, net	5,288	5,585
Operating lease right-of-use assets	12,208	12,586
Intangible assets, net	3,478	3,682
Deferred tax assets	206,273	212,324
Other assets	3,398	3,608
Total assets	$ 438,819	$ 471,073
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 6,222	$ 7,830
Accrued research and development costs	11,880	21,331
Accrued expenses and other current liabilities	31,398	44,254
Current portion of operating lease liabilities	3,142	3,126
Current portion of convertible senior notes	199,800	199,560
Total current liabilities	252,442	276,101
Operating lease obligations, net of current portion	14,004	14,543
Convertible senior notes, net of current portion	198,477	198,309
Revolving credit facility	275,000	300,000
Other liabilities	29,414	28,415
Commitments and contingencies		
Stockholders' equity (deficit):		
Preferred stock, $0.001 par value, 75,000,000 shares authorized, no shares issued and outstanding	—	—
Class A Common Stock, $0.001 par value, 500,000,000 shares authorized and 158,957,123 shares issued and outstanding at March 31, 2024 and500,000,000 shares authorized and 156,354,238 shares issued and outstanding at December 31, 2023	159	156
Additional paid-in capital	1,373,022	1,355,195
Accumulated deficit	(1,702,777)	(1,698,615)
Accumulated other comprehensive loss	(922)	(3,031)
Total stockholders' deficit	(330,518)	(346,295)
Total liabilities and stockholders' deficit	$ 438,819	$ 471,073

The accompanying notes are an integral part of these condensed consolidated financial statements.

Ironwood Pharmaceuticals, Inc.
Condensed Consolidated Statements of Income (Loss)
(In thousands, except per share amounts)
(unaudited)

	Three Months Ended March 31,	
	2024	**2023**
Revenues:		
Collaborative arrangements revenue	$ 74,877	$ 104,061
Total revenues	74,877	104,061
Costs and expenses:		
Research and development	25,815	12,847
Selling, general and administrative	37,605	31,117
Restructuring expenses	437	—
Total costs and expenses	63,857	43,964
Income from operations	11,020	60,097
Other income (expense):		
Interest expense and other financing costs	(7,231)	(1,527)
Interest and investment income	1,169	7,272
Gain on derivatives	—	19
Other income (expense), net	(6,062)	5,764
Income before income taxes	4,958	65,861
Income tax expense	(9,120)	(20,147)
Net income (loss)	$ (4,162)	$ 45,714
Net income (loss) per share — basic	$ (0.03)	$ 0.30
Net income (loss) per share — diluted	$ (0.03)	$ 0.25
Weighted average shares used in computing net income (loss) per share — basic:	157,700	154,452
Weighted average shares used in computing net income (loss) per share — diluted:	157,700	186,680

The accompanying notes are an integral part of these condensed consolidated financial statements.

Ironwood Pharmaceuticals, Inc.
Condensed Consolidated Statements of Comprehensive Income (Loss)
(In thousands)
(unaudited)

	Three Months Ended March 31,	
	2024	**2023**
Net income (loss)	$ (4,162)	$ 45,714
Other comprehensive income, net of tax:		
Currency translation adjustment	1,937	—
Defined benefit pension plan	172	—
Total other comprehensive income, net of tax	2,109	—
Comprehensive income (loss)	$ (2,053)	$ 45,714

The accompanying notes are an integral part of these condensed consolidated financial statements.

Ironwood Pharmaceuticals, Inc.
Condensed Consolidated Statements of Stockholders' Equity (Deficit)
(In thousands, except share amounts)
(unaudited)

	Class A Common Stock		Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive income (loss)	Total stockholders' deficit
	Shares	Amount				
Balance at December 31, 2023	156,354,238	$ 156	$ 1,355,195	$ (1,698,615)	$ (3,031)	$ (346,295)
Issuance of common stock related to share-based awards	2,602,885	3	10,058	—	—	10,061
Share-based compensation expense related to share-based awards and employee stock purchase plan	—	—	8,385	—	—	8,385
Taxes paid related to net share settlement of share-based awards	—	—	(616)	—	—	(616)
Net loss	—	—	—	(4,162)	—	(4,162)
Other comprehensive income, net of tax	—	—	—	—	2,109	2,109
Balance at March 31, 2024	158,957,123	$ 159	$ 1,373,022	$ (1,702,777)	$ (922)	$ (330,518)

	Class A Common Stock		Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive income (loss)	Total stockholders' equity
	Shares	Amount				
Balance at December 31, 2022	154,026,949	$ 154	$ 1,348,600	$ (696,376)	$ —	$ 652,378
Issuance of common stock related to share-based awards	1,319,154	1	1,628	—	—	1,629
Share-based compensation expense related to share-based awards and employee stock purchase plan	—	—	7,131	—	—	7,131
Net income	—	—	—	45,714	—	45,714
Balance at March 31, 2023	155,346,103	$ 155	$ 1,357,359	$ (650,662)	$ —	$ 706,852

The accompanying notes are an integral part of these condensed consolidated financial statements.

Ironwood Pharmaceuticals, Inc.
Condensed Consolidated Statements of Cash Flow s
(In thousands)
(unaudited)

	Three Months Ended March 31,	
	2024	**2023**
Cash flows from operating activities:		
Net income (loss)	$ (4,162)	$ 45,714
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization	513	286
Loss on disposal of property and equipment	33	—
Share-based compensation expense	8,385	7,131
Change in fair value of note hedge warrants	—	(19)
Non-cash interest expense	589	402
Deferred income taxes	6,050	17,052
Changes in assets and liabilities:		
Accounts receivable, net	57,107	14,298
Prepaid expenses and other current assets	(2,607)	(3,669)
Operating lease right-of-use assets	378	349
Other assets	30	27
Accounts payable and accrued expenses	(12,526)	705
Accrued research and development costs	(9,451)	(2,384)
Operating lease liabilities	(523)	(479)
Other liabilities	1,169	758
Net cash provided by operating activities	44,985	80,171
Cash flows from investing activities:		
Purchases of property and equipment	(68)	(13)
Net cash used in investing activities	(68)	(13)
Cash flows from financing activities:		
Proceeds from exercise of stock options and employee stock purchase plan	10,061	3,981
Taxes paid related to net share settlement of share-based awards	(616)	—
Repayments of revolving credit facility	(25,000)	—
Net cash provided by (used in) financing activities	(15,555)	3,981
Effect of exchange rate changes on cash, cash equivalents and restricted cash	24	—
Net increase in cash, cash equivalents and restricted cash	29,386	84,139
Cash, cash equivalents and restricted cash, beginning of period	92,154	657,938
Cash, cash equivalents and restricted cash, end of period	$ 121,540	$ 742,077
Reconciliation of cash, cash equivalents, and restricted cash to the condensed consolidated balance sheets		
Cash and cash equivalents	$ 121,540	$ 740,342
Restricted cash	—	1,735
Total cash, cash equivalents, and restricted cash	$ 121,540	$ 742,077

The accompanying notes are an integral part of these condensed consolidated financial statements.

Ironwood Pharmaceuticals, Inc.
Notes to Condensed Consolidated Financial Statements
(unaudited)

1. Nature of Business

Ironwood Pharmaceuticals, Inc. ("Ironwood" or the "Company") is a gastrointestinal ("GI") healthcare company on a mission to advance the treatment of GI diseases and redefine the standard of care for GI patients. The Company is focused on the development and commercialization of innovative GI product opportunities in areas of significant unmet need, leveraging its demonstrated expertise and capabilities in GI diseases.

LINZESS® (linaclotide), the Company's commercial product, is the first product approved by the United States Food and Drug Administration (the "U.S. FDA") in a class of GI medicines called guanylate cyclase type C agonists ("GC-C agonists") and is indicated for adult men and women suffering from irritable bowel syndrome with constipation ("IBS-C") or chronic idiopathic constipation ("CIC") and for pediatric patients ages 6-17 years-old suffering from functional constipation ("FC"). LINZESS is available to adult men and women suffering from IBS-C or CIC in the United States (the "U.S."), Mexico and Saudi Arabia, adult men and women suffering from IBS-C or chronic constipation in Japan, and IBS-C in China, and pediatric patients ages 6-17 years old with FC in the U.S. Linaclotide is available under the trademarked name CONSTELLA® to adult men and women suffering from IBS-C or CIC in Canada, and to adult men and women suffering from IBS-C in certain European countries.

The Company has strategic partnerships with leading pharmaceutical companies to support the development and commercialization of linaclotide throughout the world. The Company and its partner, AbbVie Inc. (together with its affiliates, "AbbVie"), began commercializing LINZESS in the U.S. in December 2012. Under the Company's collaboration for North America with AbbVie, total net sales of LINZESS in the U.S., as recorded by AbbVie, are reduced by commercial costs incurred by each party, and the resulting amount is shared equally between the Company and AbbVie. Additionally, development costs are shared equally between the Company and AbbVie.

Outside of the U.S., the Company earns royalties as a percentage of net sales of products containing linaclotide as an active ingredient by the Company's collaboration partners. AbbVie has an exclusive license from the Company to develop and commercialize linaclotide in all countries other than China (including Hong Kong and Macau), Japan and the countries and territories of North America (the "AbbVie License Territory"). In addition, AbbVie has exclusive rights to commercialize linaclotide in Canada as CONSTELLA and in Mexico as LINZESS. Astellas Pharma Inc. ("Astellas"), the Company's partner in Japan, has an exclusive license to develop, manufacture, and commercialize linaclotide in Japan. AstraZeneca AB (together with its affiliates) ("AstraZeneca"), the Company's partner in China, has the exclusive right to develop, manufacture, and commercialize products containing linaclotide in China (including Hong Kong and Macau) (the "AstraZeneca License Territory").

In June 2023, the Company completed a tender offer to purchase 98% of the outstanding ordinary shares of VectivBio Holding AG ("VectivBio"), a clinical-stage biotechnology company focused on the discovery and development of treatments for severe, rare GI conditions for which there is a significant unmet medical need (the "VectivBio Acquisition"). In December 2023, the Company completed a squeeze-out merger under Swiss law to acquire all remaining outstanding ordinary shares and VectivBio Holding AG was merged with and into Ironwood Pharmaceuticals GmbH, a wholly-owned subsidiary of Ironwood organized under the laws of Switzerland. Through the acquisition, the Company is advancing apraglutide, a next-generation, synthetic peptide analog of glucagon-like peptide-2, for rare GI diseases, including short bowel syndrome with intestinal failure ("SBS-IF"), a severe malabsorptive condition. In February 2024, the Company announced positive topline results from its pivotal Phase III clinical trial, STARS, which evaluated the efficacy and safety of once-weekly subcutaneous apraglutide in reducing parenteral support dependency in adult patients with SBS-IF, and plans to submit a new drug application and other regulatory filings for apraglutide for use in adult patients with SBS who are dependent on parenteral support.

The Company has a collaboration and license option agreement (the "COUR Collaboration Agreement") with COUR Pharmaceutical Development Company, Inc. ("COUR"), a biotechnology company developing novel immune-modifying nanoparticles to treat autoimmune diseases. The COUR Collaboration Agreement grants the Company an

option to acquire an exclusive license to research, develop, manufacture and commercialize, in the U.S., products containing CNP-104, a potential treatment for primary biliary cholangitis, a rare autoimmune disease targeting the liver.

These and other agreements are more fully described in Note 4, *Collaboration, License and Other Agreements*, to these condensed consolidated financial statements.

The Company is also advancing IW-3300, a GC-C agonist, for the potential treatment of visceral pain conditions, including interstitial cystitis / bladder pain syndrome and endometriosis.

The Company was incorporated in Delaware on January 5, 1998 as Microbia, Inc. On April 7, 2008, the Company changed its name to Ironwood Pharmaceuticals, Inc. To date, the Company has dedicated a majority of its activities to the research, development and commercialization of linaclotide, as well as to the research and development of its other product candidates.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying condensed consolidated financial statements and the related disclosures are unaudited and have been prepared in accordance with accounting principles generally accepted in the U.S. Additionally, certain information and footnote disclosures normally included in the Company's annual financial statements have been condensed or omitted. Accordingly, these interim condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2023, which was filed with the Securities and Exchange Commission ("SEC") on February 16, 2024 (the "2023 Annual Report on Form 10-K").

The unaudited interim condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and, in the opinion of management, reflect all normal recurring adjustments considered necessary for a fair statement of the Company's financial position as of March 31, 2024, and the results of its operations for the three months ended March 31, 2024 and 2023, its statements of stockholders' equity (deficit) for the three months ended March 31, 2024 and 2023, and its cash flows for the three months ended March 31, 2024 and 2023. The results of operations for the three months ended March 31, 2024 and 2023 are not necessarily indicative of the results that may be expected for the full year or any other subsequent interim period.

Principles of Consolidation

The accompanying condensed consolidated financial statements as of March 31, 2024 include the accounts of Ironwood and its wholly-owned subsidiaries, Ironwood Pharmaceuticals Securities Corporation, Ironwood Pharmaceuticals GmbH, VectivBio AG, VectivBio Comet AG, GlyPharma Therapeutic Inc. ("GlyPharma"), and VectivBio US, Inc. All intercompany transactions and balances are eliminated in consolidation.

Use of Estimates

The preparation of condensed consolidated financial statements in accordance with U.S. generally accepted accounting principles requires the Company's management to make estimates and judgments that may affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements, and the amounts of revenues and expenses during the reported periods. On an ongoing basis, the Company's management evaluates its estimates, judgments and methodologies. Estimates and assumptions in the condensed consolidated financial statements include those related to revenue recognition; accounts receivable; useful lives of long-lived assets; impairment of long-lived assets, including goodwill; valuation procedures for right-of-use assets and operating lease liabilities; income taxes, including uncertain tax positions and the valuation allowance for deferred tax assets; research and development expenses; contingencies; defined benefit pension liabilities; and share-based compensation. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ materially from these estimates under different assumptions or conditions. Changes in estimates are reflected in reported results in the period in which they become known.

Summary of Significant Accounting Policies

The Company's significant accounting policies are described in Note 2, *Summary of Significant Accounting Policies*, in the 2023 Annual Report on Form 10-K. During the three months ended March 31, 2024, the Company did not adopt any additional significant accounting policies.

New Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board (the "FASB") or other standard setting bodies that are adopted by the Company as of the specified effective date. The Company did not adopt any new accounting pronouncements during the three months ended March 31, 2024 that had a material effect on its condensed consolidated financial statements.

In October 2023, the FASB issued Accounting Standards Update ("ASU") No. 2023-06, *Disclosure Improvements: Codification Amendment in Response to the SEC's Disclosure Update and Simplification Initiative* ("ASU 2023-06"). The guidance in ASU 2023-06 aligns the disclosure and presentation requirements in the FASB Accounting Standards Codification with the SEC's regulations. The effective date for each amendment will be the date on which the SEC's removal of the related disclosure requirement from Regulation S-X or Regulation S-K becomes effective, with early adoption prohibited. Any amendments not removed by the SEC by June 30, 2027 will not become effective. The amendments adopted in ASU 2023-06 will be applied prospectively. The Company is currently evaluating the impact that the adoption of ASU 2023-06 may have on its disclosures in its condensed consolidated financial statements.

In November 2023, the FASB issued ASU No. 2023-07, *Segment Reporting (Topic 280)* ("ASU 2023-07"). The guidance in ASU 2023-07 expands prior reportable segment disclosure requirements by requiring entities to disclose significant segment expenses that are regularly provided to the Chief Operating Decision Maker ("CODM") and details of how the CODM uses financial reporting to assess their segment's performance. The guidance is effective for fiscal years beginning after December 15, 2023 and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The ASU is required to be applied retrospectively upon adoption. The Company is currently evaluating the impact that the adoption of ASU 2023-07 may have on its condensed consolidated financial statements.

In December 2023, the FASB issued ASU No. 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures* ("ASU 2023-09"). The guidance in ASU 2023-09 improves the transparency of annual income tax disclosures by requiring greater disaggregation of information in the rate reconciliation and income taxes paid disaggregated by jurisdiction. The standard is effective for fiscal years beginning after December 15, 2024, with early adoption permitted. Upon adoption, ASU 2023-09 may be applied prospectively or retrospectively. The Company is currently evaluating the impact that the adoption of ASU 2023-09 may have on its disclosures in its annual consolidated financial statements.

Other recent accounting pronouncements issued, but not yet effective, are not expected to be applicable to the Company or have a material effect on the condensed consolidated financial statements upon future adoption.

3. Net Income (Loss) Per Share

The following table sets forth the computation of basic and diluted net income (loss) per common share (in thousands, except per share amounts):

	Three Months Ended March 31,	
	2024[1]	2023
Numerator:		
Net income (loss)	$ (4,162)	$ 45,714
Add back interest expense, net of tax benefit, on assumed conversion of 2024 Convertible Notes	—	447
Add back interest expense, net of tax benefit, on assumed conversion of 2026 Convertible Notes	—	668
Numerator used in computing net income (loss) per share — diluted	$ (4,162)	$ 46,829
Denominator:		
Weighted average number of common shares outstanding used in computing net income (loss) per share — basic	157,700	154,452
Effect of dilutive securities:		
Stock options	—	250
Time-based restricted stock units	—	1,234
Performance-based restricted stock units	—	736
Restricted stock	—	126
Shares subject to issuance under Employee Stock Purchase Plan	—	14
2024 Convertible Notes assumed conversion	—	14,934
2026 Convertible Notes assumed conversion	—	14,934
Dilutive potential common shares		
Weighted average number of common shares outstanding used in computing net income (loss) per share — diluted	157,700	186,680
Net income (loss) per share — basic	$ (0.03)	$ 0.30
Net income (loss) per share — diluted	$ (0.03)	$ 0.25

(1) During the three months ended March 31, 2024, the Company was in a net loss position and therefore did not differentiate basic and diluted earnings per share.

The outstanding securities set forth in the following table have been excluded from the computation of diluted weighted average shares outstanding, as applicable, as their effect would be anti-dilutive (in thousands):

	Three Months Ended March 31,	
	2024	2023
Stock options	3,074	5,046
Time-based restricted stock units	860	570
Performance-based restricted stock units	—	76
Note hedge warrants	—	8,318
Total	3,934	14,010

There was no dilutive impact of the 2024 Convertible Notes (as defined below) for the three months ended March 31, 2024 because the Company had elected prior to the beginning of the period to settle the conversion of 2024 Convertible Notes, if any, with a combination settlement of a cash payment equal to the principal value of converted notes and shares of Class A Common Stock equal to the conversion value in excess of the principal value, if any (Note 8). Accordingly, interest expense was not removed from the numerator and there was no calculated spread added to the denominator because the average market price of the Company's Class A Common Stock during the period was not in excess of the conversion price.

4. Collaboration, License and Other Agreements

The Company has linaclotide collaboration agreements with AbbVie for North America and AstraZeneca for China (including Hong Kong and Macau), as well as linaclotide license agreements with Astellas for Japan and with AbbVie for the AbbVie License Territory. The following table provides amounts included in the Company's condensed consolidated statements of income (loss) as collaborative arrangements revenue attributable to transactions from these and other agreements (in thousands):

	Three Months Ended March 31,	
Collaborative Arrangements Revenue	**2024**	**2023**
Linaclotide Collaboration and License Agreements:		
AbbVie (North America)	$ 72,455	$ 102,336
AbbVie (Europe and other)	706	663
AstraZeneca (China, including Hong Kong and Macau)	121	91
Astellas (Japan)	368	391
Other Agreements:		
Asahi Kasei Pharma (apraglutide)	711	—
Other	516	580
Total collaborative arrangements revenue	$ 74,877	$ 104,061

Accounts receivable, net, included $72.0 million and $129.1 million primarily related to collaborative arrangements revenue as of March 31, 2024 and December 31, 2023, respectively. Accounts receivable, net, included $70.9 million and $112.6 million due from the Company's partner, AbbVie, net of $ 3.6 million and $4.3 million of accounts payable, as of March 31, 2024 and December 31, 2023, respectively.

The Company routinely assesses the creditworthiness of its license and collaboration partners. The Company did not experience any material losses related to receivables from its license or collaboration partners during the three months ended March 31, 2024 and 2023.

Linaclotide Agreements

Collaboration Agreement for North America with AbbVie

In September 2007, the Company entered into a collaboration agreement with AbbVie to develop and commercialize linaclotide for the treatment of IBS-C, CIC, and other GI conditions in North America. Under the terms of this collaboration agreement, the Company received an upfront licensing fee, equity investment, and development and regulatory milestones, and shares equally with AbbVie all development costs as well as net profits or losses from the development and sale of linaclotide in the U.S. In addition, the Company receives royalties in the mid-teens percent based on net sales in Canada and Mexico. AbbVie is solely responsible for the further development, regulatory approval and commercialization of linaclotide in those countries and funding any costs.

During the three months ended March 31, 2024 and 2023, the Company incurred $ 1.5 million and $1.3 million, respectively, in total research and development expenses under the linaclotide collaboration for North America. As a result of the research and development cost-sharing provisions of the linaclotide collaboration for North America, the Company incurred $2.3 million and $3.0 million in incremental research and development costs during the three months ended March 31, 2024 and 2023, respectively, to reflect the obligations of each party under the collaboration to bear 50% of the development costs incurred.

The Company and AbbVie began commercializing LINZESS in the U.S. in December 2012. The Company receives 50% of the net profits and bears 50% of the net losses from the commercial sale of LINZESS in the U.S. Net profits or net losses consist of net sales of LINZESS to third-party customers and sublicense income in the U.S. less the cost of goods sold as well as selling, general and administrative expenses. LINZESS net sales are calculated and recorded by AbbVie and may include gross sales net of discounts, rebates, allowances, sales taxes, freight and insurance charges, and other applicable deductions.

The Company evaluated its linaclotide collaboration arrangement for North America and concluded that all development-period performance obligations had been satisfied as of September 2012. The Company has determined that there are three remaining commercial-period performance obligations, which include the sales detailing of LINZESS, participation in the joint commercialization committee, and approved additional trials. The consideration remaining includes cost reimbursements in the U.S. and net profit and loss sharing payments based on net sales in the U.S. Additionally, the Company receives royalties in the mid-teens percent based on net sales in Canada and Mexico. Royalties and net profit and loss sharing payments will be recorded as collaborative arrangements revenue or expense in the period earned, as these payments relate predominately to the license granted to AbbVie. The Company records royalty revenue in the period earned based on royalty reports from its partner, if available, or based on the projected sales and historical trends. The cost reimbursements received from AbbVie during the commercialization period will be recognized as earned in accordance with the right-to-invoice practical expedient, as the Company's right to consideration corresponds directly with the value of the services transferred during the commercialization period.

Under the Company's linaclotide collaboration agreement for North America, LINZESS net sales are calculated and recorded by AbbVie and include gross sales net of discounts, rebates, allowances, sales taxes, freight and insurance charges, and other applicable deductions, as noted above. These amounts include the use of estimates and judgments, which could be adjusted based on actual results in the future. The Company records its share of the net profits or net losses from the sales of LINZESS in the U.S. less commercial expenses on a net basis, and presents the settlement payments to and from AbbVie as collaboration expense or collaborative arrangements revenue, as applicable. This treatment is in accordance with the Company's revenue recognition policy, given that the Company is not the primary obligor and does not have the inventory risks in the collaboration agreement with AbbVie for North America. The Company relies on AbbVie to provide accurate and complete information related to net sales of LINZESS in accordance with U.S. generally accepted accounting principles in order to calculate its settlement payments to and from AbbVie and record collaboration expense or collaborative arrangements revenue, as applicable. During the three months ended March 31, 2024, the Company recognized a $38.0 million reduction to collaboration revenue, inclusive of a $ 30.0 million reduction related to information provided by AbbVie subsequent to the quarterly collaboration accounting settlement process, as a result of changes in estimates of sales reserves and allowances associated with governmental and contractual rebates. Excluding the changes in estimates, net income per share – basic and net income per share – diluted for the three months ended March 31, 2024 would have been $0.14 and $0.12, respectively.

The following table summarizes collaborative arrangements revenue from the linaclotide collaboration agreement for North America (in thousands):

	Three Months Ended March 31,	
	2024	2023
Collaborative arrangements revenue related to sales of LINZESS in the U.S.	$ 71,715	$ 101,636
Royalty revenue	740	700
Total collaborative arrangements revenue	$ 72,455	$ 102,336

The Company incurred $10.2 million and $9.7 million in total selling, general and administrative costs related to the sale of LINZESS in the U.S. in accordance with the cost-sharing arrangement with AbbVie for the three months ended March 31, 2024 and 2023, respectively.

In May 2014, CONSTELLA® became commercially available in Canada and, in June 2014, LINZESS became commercially available in Mexico. The Company records royalties on sales of CONSTELLA in Canada and LINZESS in Mexico in the period earned. The Company recognized $0.7 million of combined royalty revenues from Canada and Mexico during each of the three months ended March 31, 2024 and 2023.

License Agreement with AbbVie (All countries other than the countries and territories of North America, China (including Hong Kong and Macau), and Japan)

The Company has a license agreement with AbbVie to develop, manufacture and commercialize linaclotide in (i) Europe, and (ii) all other countries other than China (including Hong Kong and Macau), Japan, and the countries and territories of North America, or collectively the "Expanded Territory", for the treatment of IBS-C, CIC and other GI conditions.

Under the license agreement, as amended, AbbVie is obligated to pay the Company, (i) royalties based on sales volume in Europe in the upper-teens percent, and (ii) on a country-by-country and product-by-product basis in the Expanded Territory, a royalty as a percentage of net sales of products containing linaclotide as an active ingredient in the upper-single digits for five years following the first commercial sale of a linaclotide product in a country, and in the low-double digits thereafter. The royalty rate for products in Europe and the Expanded Territory will decrease, on a country-by-country basis, to the lower-single digits, or cease entirely, following the occurrence of certain events. The license agreement also contains certain sales-based milestones and commercial launch milestones, which could total up to $42.5 million.

The Company recognized $0.7 million of royalty revenue during each of the three months ended March 31, 2024 and 2023.

License Agreement for Japan with Astellas

The Company has a license agreement with Astellas to develop, manufacture, and commercialize linaclotide for the treatment of IBS-C, CIC and other GI conditions in Japan.

Under the license agreement, as amended, Astellas is required to pay royalties to the Company at rates beginning in the mid-single digit percent and escalating to low-double-digit percent, based on aggregate annual net sales in Japan of products containing linaclotide as an active ingredient. These royalty payments are subject to reduction following the expiration of certain licensed patents and the occurrence of generic competition in Japan.

The Company recognized $0.4 million of royalty revenue during each of the three months ended March 31, 2024 and 2023.

Collaboration Agreement for China (including Hong Kong and Macau) with AstraZeneca

The Company has a collaboration agreement with AstraZeneca under which AstraZeneca has the exclusive right to develop, manufacture and commercialize products containing linaclotide in the AstraZeneca License Territory.

Under the collaboration agreement, AstraZeneca is required to pay tiered royalties to the Company at rates beginning in the mid-single-digit percent and increasing up to twenty percent based on the aggregate annual net sales of products containing linaclotide in the AstraZeneca License Territory. In addition, AstraZeneca may be required to make milestone payments totaling up to $90.0 million contingent on the achievement of certain sales targets.

The Company recognized an insignificant amount of royalty revenue during each of the three months ended March 31, 2024 and 2023.

At December 31, 2023, the Company had accounts receivable in the amount of $ 15.0 million related to the third and final installment of a non-contingent receivable due from AstraZeneca in connection with an amendment to the collaboration agreement executed during 2019. The non-contingent receivable was collected in full during the three months ended March 31, 2024.

Apraglutide Agreements

Development and Commercialization Agreement with AKP

In March 2022, VectivBio entered into a development and commercialization agreement with Asahi Kasei Pharma Corporation (“AKP”) in which VectivBio granted an exclusive license to AKP, with the right to sublicense in multiple tiers, to develop, commercialize and exploit products derived from apraglutide in Japan.

Pursuant to the terms of the development and commercialization agreement with AKP, VectivBio received an upfront payment of JPY 3,000 million ($24.6 million at date of agreement) and development related payments of JPY 1,600 million in the aggregate ($13.1 million at date of agreement) and is eligible to receive development milestones of JPY 1,000 million ($8.2 million at date of agreement) and up to JPY 19,000 million ($155.8 million at date of agreement) of commercial and sales-based milestone payments. VectivBio is also eligible to receive payments in the commercial period for manufacturing supply equal to cost-plus manufacturing mark-up and tiered royalties of up to a

mid-double-digit percentage on product sales continuing until the later of (i) expiration of regulatory exclusivity in Japan, or (ii) expiration of the last valid patent claim that provides exclusivity to apraglutide in Japan (the "Royalty Term"). The development and commercialization agreement will terminate upon the expiration of the Royalty Term.

The Company identified two performance obligations consisting of the (i) exclusive license for the development and commercialization of apraglutide in Japan and (ii) development activities for conducting global trials and sharing of associated development data necessary for obtaining and maintaining regulatory approval in Japan. Each performance obligation was capable of being distinct and distinct in the context of the contract. The initial transaction price was allocated to each performance obligation on a relative standalone selling price basis. The Company assessed that it provided a right to use the license as the license exists (in terms of form and functionality) at the point in time at which it is granted and therefore, was satisfied at the inception of the arrangement. The development activities are being recognized over time as the Company performs development activities related to the global trials. The Company recognizes revenue associated with the development activities using an input method, according to the costs incurred, which in management's judgment, is the best measure of progress towards satisfying the performance obligation. Under the sales-or-usage-based royalty exception, revenue related to sales-based milestone payments and royalty payments will be recognized as the underlying sales occur.

Prior to the VectivBio Acquisition, VectivBio had received the upfront payment of JPY 3,000 million ($24.6 million at date of agreement), development-related payments of JPY 1,100 million ($9.0 million at date of agreement), and development milestones of JPY 500 million ($4.1 million at date of agreement). Upon the acquisition of VectivBio on June 29, 2023, the Company assumed a contract liability for deferred revenue related to the development-related payments at its fair value of $4.3 million.

The Company recognized $0.7 million of revenue related to development activities during the three months ended March 31, 2024. As of March 31, 2024, deferred revenue of $1.7 million is reported within accrued expenses and other current liabilities (Note 7) on the condensed consolidated balance sheets. Deferred revenue and future payments received related to development activities are expected to be recognized over the course of the development activities, which are expected to occur through 2028.

License Agreement with Ferring

In August 2012, as subsequently amended and restated in December 2016, GlyPharma entered into an exclusive licensing agreement with Ferring International Center, S.A. ("Ferring"), pursuant to which Ferring granted GlyPharma an exclusive, worldwide, sublicensable license under certain patent rights and know-how controlled by Ferring relating to apraglutide and certain know-how controlled by Ferring relating to specified alternate drug compounds, to research, develop, manufacture, make, have made, import, export, use, sell, distribute, promote, advertise, dispose of or offer to sell (i) products containing apraglutide whose manufacture, use or sale is covered by a valid claim of the licensed patents, or licensed products and (ii) products, containing a specified alternate drug compound, or alternate drug products. In April 2021, the license agreement was transferred and assigned to VectivBio AG, a subsidiary of VectivBio.

Under the license agreement, as partial consideration for the rights Ferring granted to it, VectivBio AG is required to pay Ferring a high single-digit percentage royalty on worldwide annual net sales of licensed products and alternate drug products until, on a country-by-country basis and licensed product-by-licensed product or alternate drug product-by-alternate drug product basis, as applicable, the date on which the manufacture, use or sale of such licensed product or alternate drug product, as applicable, ceases to be covered by a valid claim of a patent within the licensed patents in such a country. GlyPharma was also required to issue Ferring a certain number of warrants and Class A preferred shares pursuant to a shareholders' agreement. The equity obligations under the license agreement have been fully performed by GlyPharma.

The Company is also obligated to pay Ferring a specified percentage of the annual consideration VectivBio AG or its affiliates, including the Company, received in connection with sales of licensed product or alternate drug product by any third parties to which VectivBio AG or its affiliates, including the Company, grant a sublicense of any of the rights licensed to VectivBio AG by Ferring under this license agreement. Such percentage is in the high single digits for sales of both licensed products and alternate drug products, and such payments are owed for the duration of the royalty term for licensed products or alternate drug products, as applicable.

Other Collaboration and License Agreements

Collaboration and License Option Agreement with COUR

In November 2021, the Company entered into the COUR Collaboration Agreement, pursuant to which the Company has been granted an option (the "Option") to acquire an exclusive license to research, develop, manufacture and commercialize, in the U.S., products containing CNP-104, a tolerizing immune modifying nanoparticle ("CNP-104") for the treatment of primary biliary cholangitis ("PBC"). COUR has initiated a clinical study to evaluate the safety, tolerability, and pharmacodynamic effects and efficacy of CNP-104 in PBC patients.

Pursuant to the terms of the COUR Collaboration Agreement, the Company made an upfront, non-refundable payment of $6.0 million to COUR during the year ended December 31, 2021, and agreed to pay $ 13.5 million in non-contingent payments and milestone payments in connection with certain development activities and regulatory milestones. After reviewing the data from the clinical study for CNP-104, if the Company exercises the Option, the Company will pay COUR $35.0 million in exchange for the license, subject to the Company's right to apply a credit against such payment as described below. Upon commercialization, COUR will be eligible to receive commercial milestone payments of up to $440.0 million over the term of the agreement and royalties in the high-single digits to low-double digits percentage of the aggregated annual net sales in the U.S. of products containing CNP-104.

In April 2023, the Company and COUR executed an amendment to the COUR Collaboration Agreement, in which the Company agreed to pay a one-time, non-refundable, upfront payment of $6.0 million to COUR in exchange for the right to apply a credit of $6.6 million against future amounts due to COUR in connection with the exercise of the Option, commercial milestones, or royalties. In connection with such payment, COUR also granted the Company a right of first negotiation over certain additional potential research and development programs. The $6.0 million payment was recognized as research and development expense in the second quarter of 2023.

5. Fair Value of Financial Instruments

The tables below present information about the Company's assets and liabilities that are measured at fair value on a recurring basis as of March 31, 2024 and December 31, 2023 and indicate the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value. In general, fair values determined by Level 1 inputs utilize observable inputs such as quoted prices in active markets for identical assets or liabilities. Fair values determined by Level 2 inputs utilize data points that are either directly or indirectly observable, such as quoted prices for similar instruments in active markets, interest rates and yield curves. Fair values determined by Level 3 inputs utilize unobservable data points in which there is little or no market data, which require the Company to develop its own assumptions for the asset or liability.

The Company's investment portfolio may include fixed income securities that do not always trade on a daily basis. As a result, the pricing services used by the Company apply other available information as applicable through processes such as benchmark yields, benchmarking of like securities, sector groupings and matrix pricing to prepare valuations. In addition, model processes are used to assess interest rate impact and develop prepayment scenarios. These models take into consideration relevant credit information, perceived market movements, sector news and economic events. The inputs into these models may include benchmark yields, reported trades, broker-dealer quotes, issuer spreads and other relevant data. The Company validates the prices provided by its third-party pricing services by obtaining market values from other pricing sources and analyzing pricing data in certain instances. The Company periodically invests in certain reverse repurchase agreements, which are collateralized by Government Securities and Obligations for an amount not less than 102% of their principal amount. The Company does not record an asset or liability for the collateral as the Company is not permitted to sell or re-pledge the collateral. The collateral has at least the prevailing credit rating of U.S. Government Treasuries and Agencies. The Company utilizes a third-party custodian to manage the exchange of funds and ensure the collateral received is maintained at 102% of the reverse repurchase agreements principal amount on a daily basis.

The following tables present the assets and liabilities the Company has measured at fair value on a recurring basis (in thousands):

		Fair Value Measurements at Reporting Date Using		
	March 31, 2024	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash and cash equivalents:				
Money market funds	$ 83,809	$ 83,809	$ —	$ —
U.S. Treasury securities	10,836	—	10,836	—
Commercial paper	2,735	—	2,735	—
Total assets measured at fair value	$ 97,380	$ 83,809	$ 13,571	$ —

		Fair Value Measurements at Reporting Date Using		
	December 31, 2023	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash and cash equivalents:				
Money market funds	$ 45,939	$ 45,939	$ —	$ —
U.S. Treasury securities	10,507	—	10,507	—
Commercial paper	2,240	—	2,240	—
Total assets measured at fair value	$ 58,686	$ 45,939	$ 12,747	$ —

Cash equivalents, accounts receivable, prepaid expenses and other current assets, accounts payable, accrued research and development costs, accrued expenses and other current liabilities and current portion of operating lease obligations at March 31, 2024 and December 31, 2023 are carried at amounts that approximate fair value due to their short-term maturities.

Convertible Senior Notes

In August 2019, the Company issued $ 200.0 million aggregate principal amount of its 0.75% convertible senior notes due 2024 (the “2024 Convertible Notes”) and $200.0 million aggregate principal amount of its 1.50% convertible senior notes due 2026 (the “2026 Convertible Notes”) (Note 8). The fair value of the respective convertible senior notes, which differs from their carrying value, is influenced by interest rates, the price of the Company’s Class A Common Stock and the volatility thereof, and the prices for the respective convertible senior notes observed in market trading, which are Level 2 inputs.

The estimated fair value of the 2024 Convertible Notes was $ 198.0 million and $ 209.6 million as of March 31, 2024 and December 31, 2023, respectively. The estimated fair value of the 2026 Convertible Notes was $203.0 million and $217.1 million as of March 31, 2024 and December 31, 2023, respectively.

Capped Calls with Respect to 2024 Convertible Notes and 2026 Convertible Notes

In connection with the issuance of the 2024 Convertible Notes and the 2026 Convertible Notes, the Company entered into the capped call transactions (the “Capped Calls”) with certain financial institutions. The Capped Calls cover 29,867,480 shares of Class A Common Stock (subject to anti-dilution and certain other adjustments), which is the same number of shares of Class A Common Stock that initially underlie the 2024 Convertible Notes and the 2026 Convertible Notes. The Capped Calls have an initial strike price of approximately $13.39 per share, which corresponds to the initial conversion price of the 2024 Convertible Notes and the 2026 Convertible Notes, and have a cap price of approximately $17.05 per share (Note 8). The strike price and cap price are subject to anti-dilution adjustments generally similar to those applicable to the 2024 Convertible Notes and the 2026 Convertible Notes. These instruments meet the conditions outlined in ASC Topic 815, *Derivatives and Hedging* (“ASC 815”), to be classified in stockholders’ equity and are not subsequently remeasured as long as the conditions for equity classification continue to be met (Note 8).

Revolving Credit Agreement

Outstanding borrowings under the revolving credit facility (Note 8) are carried at amounts that approximate fair value based on their nature, terms, credit spreads, and variable interest rates, which are Level 3 inputs.

6. Leases

The Company's lease portfolio for the three months ended March 31, 2024 includes office leases for its current headquarters location and other locations, vehicle leases for its salesforce representatives, and leases for computer and office equipment.

The Company's headquarters office lease and vehicle lease require letters of credit totaling $ 1.2 million to secure the Company's obligations under the lease agreements. The letters of credit are maintained under a subfacility of the revolving credit agreement (Note 8).

Lease cost is recognized on a straight-line basis over the lease term. The components of lease cost for the three months ended March 31, 2024 and 2023 are as follows (in thousands):

	Three Months Ended March 31,	
	2024	2023
Operating lease cost	$ 627	$ 627
Short-term lease cost	384	271
Total lease cost	$ 1,011	$ 898

Supplemental information related to leases for the periods reported is as follows:

	Three Months Ended March 31,	
	2024	2023
Cash paid for amounts included in the measurement of lease liabilities (in thousands)	$ 773	$ 757
Weighted-average remaining lease term of operating leases (in years)	6.2	7.2
Weighted-average discount rate of operating leases	5.8 %	5.8 %

Summer Street Lease

In June 2019, the Company entered into a non-cancelable operating lease (the "Summer Street Lease") for approximately 39,000 square feet of office space on the 23 rd floor of 100 Summer Street, Boston, Massachusetts, which began serving as the Company's headquarters in October 2019. The Summer Street Lease terminates on June 11, 2030 and includes a 2% annual rent escalation, free rent periods, a tenant improvement allowance, and an option to extend the term of the lease for an additional five years at a market base rental rate. The extension option is not included in the lease term used for the measurement of the lease, as it is not reasonably certain to be exercised. The lease expense, inclusive of the escalating rent payments and lease incentives, is recognized on a straight-line basis over the lease term.

At lease commencement, the Company recorded a right-of-use asset and a lease liability using an incremental borrowing rate of 5.8%. At March 31, 2024, the balances of the right-of-use asset and operating lease liability were $ 12.2 million and $17.1 million, respectively. At December 31, 2023, the balances of the right-of-use asset and operating lease liability were $12.6 million and $17.7 million, respectively.

Lease costs recorded during each of the three months ended March 31, 2024 and 2023 were $0.6 million.

Future minimum lease payments under the Summer Street Lease as of March 31, 2024 are as follows (in thousands):

2024 (1)	$ 2,354
2025	3,189
2026	3,252
2027	3,318
2028	3,384
2029 and thereafter	4,901
Total future minimum lease payments	20,398
Less: present value adjustment	(3,252)
Operating lease liabilities	17,146
Less: current portion of operating lease liabilities	(3,142)
Operating lease liabilities, net of current portion	$ 14,004

(1) For the nine months ending December 31, 2024.

7. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

	March 31, 2024	December 31, 2023
Accrued compensation and benefits	$ 12,298	$ 19,937
Accrued interest	6,424	5,953
Accrued restructuring liabilities	2,961	8,303
Accrued taxes	1,900	1,244
Other	7,815	8,817
Total accrued expenses and other current liabilities	$ 31,398	$ 44,254

As of March 31, 2024, other accrued expenses of $ 7.8 million were comprised primarily of $ 6.0 million of uninvoiced vendor liabilities and $1.7 million of deferred revenue (Note 4). As of December 31, 2023, other accrued expenses of $8.8 million were comprised primarily of $ 6.1 million of uninvoiced vendor liabilities and $ 2.6 million of deferred revenue.

8. Debt

0.75% Convertible Senior Notes due 2024 and 1.50% Convertible Senior Notes due 2026

In August 2019, the Company issued $ 200.0 million aggregate principal amount of the 2024 Convertible Notes and $200.0 million aggregate principal amount of the 2026 Convertible Notes. The Company received net proceeds of $391.0 million from the sale of the 2024 Convertible Notes and 2026 Convertible Notes, after deducting fees and expenses of $9.0 million. The Company used $25.2 million of the net proceeds from the sale of the 2024 Convertible Notes and 2026 Convertible Notes to pay the cost of the Capped Calls, as described below. For purposes of this section, “Notes” refer to the 2024 Convertible Notes and the 2026 Convertible Notes, collectively.

The 2024 Convertible Notes and 2026 Convertible Notes were issued by the Company on August 12, 2019, pursuant to separate indentures, each dated as of such date (each an “Indenture” and together the “Indentures”), between the Company and U.S. Bank National Association, as trustee (the “Trustee”). The 2024 Convertible Notes bear cash interest at the annual rate of 0.75% and the 2026 Convertible Notes bear cash interest at the annual rate of 1.50%, each payable on June 15 and December 15 of each year. The 2024 Convertible Notes will mature on June 15, 2024 and the 2026 Convertible Notes will mature on June 15, 2026, unless earlier converted or repurchased.

The initial conversion rate for each of the 2024 Convertible Notes and the 2026 Convertible Notes is 74.6687 shares of Class A Common Stock (subject to adjustment as provided for in the applicable Indenture) per $1,000 principal amount of the 2024 Convertible Notes and 2026 Convertible Notes, which is equal to an initial conversion price of approximately $13.39 per share.

The Company held the option to determine the settlement method for conversions of the 2024 Convertible Notes through payment or delivery, as the case may be, of cash, shares of the Company’s Class A Common Stock, or a combination of cash and shares of Class A Common Stock (subject to, and in accordance with, the settlement provisions of the applicable Indenture). The Company has elected to settle conversions of the 2024 Convertible Notes through cash payment equal to the principal value and shares of Class A Common Stock for the conversion premium, if any.

Holders of the 2024 Convertible Notes had the right to convert their 2024 Convertible Notes at their option at any time prior to the close of business on the business day immediately preceding December 15, 2023 upon the occurrence of certain circumstances and no such conversions occurred. On or after December 15, 2023, until the close of business on the second scheduled trading day immediately preceding June 15, 2024, holders may convert their 2024 Convertible Notes, in multiples of $1,000 principal amount, at the option of the holder.

The Company will settle conversions of the 2026 Convertible Notes through payment or delivery, as the case may be, of cash, shares of the Company’s Class A Common Stock or a combination of cash and shares of Class A Common Stock, at the Company’s option (subject to, and in accordance with, the settlement provisions of the applicable Indenture).

Holders of the 2026 Convertible Notes may convert their Notes at their option at any time prior to the close of business on the business day immediately preceding December 15, 2025 in multiples of $1,000 principal amount, only under the following circumstances:

- during any calendar quarter commencing after the calendar quarter ending on December 31, 2019 (and only during such calendar quarter), if the last reported sale price of Class A Common Stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price for the 2026 Convertible Notes on each applicable trading day;

- during the five-business day period after any five consecutive trading day period (the “measurement period”) in which the “trading price” (as defined in each Indenture) per $1,000 principal amount of the 2026 Convertible Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of Class A Common Stock and the conversion rate for the 2026 Convertible Notes on each such trading day; or

- upon the occurrence of specified corporate events described in the applicable Indenture.

On or after December 15, 2025 until the close of business on the second scheduled trading day immediately preceding June 15, 2026, the holders of the 2026 Convertible Notes may convert their 2026 Convertible Notes, in multiples of $1,000 principal amount, regardless of the foregoing conditions.

Upon the occurrence of fundamental changes, as described in the Indentures, prior to the maturity date of the respective Notes, holders of such Notes may require the Company to repurchase for cash all or a portion of their Notes at a repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest. If a make-whole fundamental change, as described in the Indentures, occurs and a holder elects to convert its Notes in connection with such make-whole fundamental change, such holder may be entitled to an increase in the conversion rate as described in the Indentures.

The Indentures do not contain any financial covenants or restrict the Company's ability to repurchase the Company's securities, pay dividends or make restricted payments in the event of a transaction that substantially increases the Company's level of indebtedness. The Indentures provide for customary events of default. In the case of an event of default with respect to a series of Notes arising from specified events of bankruptcy or insolvency, all outstanding Notes of such series will become due and payable immediately without further action or notice. If any other event of default with respect to a series of Notes under the relevant Indenture occurs or is continuing, the Trustee or holders of at least 25% in aggregate principal amount of the then outstanding Notes of such series may declare the principal amount of such Notes to be immediately due and payable.

The Company accounts for each convertible debt instrument as a single liability measured at amortized cost.

The Company's outstanding balances for the convertible senior notes consisted of the following (in thousands):

	March 31, 2024	December 31, 2023
Principal:		
2024 Convertible Notes	$ 200,000	$ 200,000
2026 Convertible Notes	200,000	200,000
Less: unamortized debt issuance costs	(1,723)	(2,131)
Net carrying amount	$ 398,277	$ 397,869

In connection with the issuance of the 2024 Convertible Notes and the 2026 Convertible Notes, the Company incurred $9.0 million of debt issuance costs, which primarily consisted of initial purchaser's discounts and legal and other professional fees. The debt issuance costs are reflected as a reduction in the carrying value of the convertible senior notes and recorded as interest expense over the life of the 2024 Convertible Notes and the 2026 Convertible Notes.

The Company determined the expected life of the 2024 Convertible Notes and the 2026 Convertible Notes was equal to their approximately five and seven-year terms, respectively. The effective annual interest rates of the 2024 Convertible Notes and the 2026 Convertible Notes for the period from the date of issuance through March 31, 2024 were 1.2% and 1.9%, respectively. The effective annual interest rate is computed using the contractual interest and the amortization of debt issuance costs.

The following table sets forth total interest expense recognized related to convertible senior notes (in thousands):

	Three Months Ended March 31,	
	2024	2023
Contractual interest expense	$ 1,125	$ 1,125
Amortization of debt issuance costs	408	402
Total interest expense	$ 1,533	$ 1,527

Future minimum payments under the convertible senior notes as of March 31, 2024, are as follows (in thousands):

2024 (1)	$ 203,750
2025	3,000
2026	201,500
Total future minimum payments under the convertible senior notes	408,250
Less: amounts representing interest	(8,250)
Less: unamortized debt issuance costs	(1,723)
Convertible senior notes balance	$ 398,277

(1) For the nine months ending December 31, 2024.

Capped Calls with Respect to 2024 Convertible Notes and 2026 Convertible Notes

To minimize the impact of potential dilution to the Company's Class A common stockholders upon conversion of the 2024 Convertible Notes and the 2026 Convertible Notes, the Company entered into separate Capped Calls in connection with the issuance of the 2024 Convertible Notes and the 2026 Convertible Notes. The Company paid the counterparties $25.2 million to enter into the Capped Calls.

The Capped Calls have an initial strike price of approximately $ 13.39 per share, which corresponds to the initial conversion price of the 2024 Convertible Notes and the 2026 Convertible Notes and is subject to anti-dilution adjustments generally similar to those applicable to the 2024 Convertible Notes and the 2026 Convertible Notes. The Capped Calls have a cap price of approximately $17.05 per share, subject to certain adjustments. The Capped Calls cover 29,867,480 shares of Class A Common Stock (subject to anti-dilution and certain other adjustments), which is the same number of shares of Class A Common Stock that initially underlie the 2024 Convertible Notes and the 2026 Convertible Notes.

The Capped Calls are expected generally to reduce the potential dilution to the Class A Common Stock upon conversion of the 2024 Convertible Notes and the 2026 Convertible Notes in the event that the market price per share of Class A Common Stock is greater than the strike price of the Capped Calls as adjusted pursuant to the anti-dilution adjustments. If, however, the market price per share of Class A Common Stock exceeds the cap price of the Capped Calls, there would nevertheless be dilution upon conversion of the 2024 Convertible Notes and the 2026 Convertible Notes to the extent that such market price exceeds the cap price of the Capped Calls.

The Capped Calls are separate transactions entered into by and between the Company and the Capped Calls counterparties and are not part of the terms of the 2024 Convertible Notes or the 2026 Convertible Notes. Holders of the 2024 Convertible Notes and the 2026 Convertible Notes do not have any rights with respect to the Capped Calls. The Company recorded a reduction to additional paid-in capital of $25.0 million during the year ended December 31, 2019 related to the premium payments for the Capped Calls. Additionally, the Company recorded a $0.2 million reduction to equity related to transaction costs incurred in connection with the Capped Calls during the year ended December 31, 2019. These instruments meet the conditions outlined in ASC 815 to be classified in stockholders' equity and are not subsequently remeasured as long as the conditions for equity classification continue to be met.

Revolving Credit Facility

In May 2023, in connection with the VectivBio Acquisition, the Company entered into a credit agreement (the "Revolving Credit Agreement") with Wells Fargo Bank, N.A., as administrative agent, collateral agent, a letter of credit issuer and a lender, and the other agents, lenders and letter of credit issuers parties thereto.

The Revolving Credit Agreement provides for a four-year $500.0 million secured revolving credit facility (the "Revolving Credit Facility"), which includes a $10.0 million letter of credit subfacility, and loans made thereunder will mature on the earliest to occur of (i) May 21, 2027 or (ii) the date that is 91 days prior to the stated maturity date of the Company's existing convertible notes then outstanding, unless, in the case of clause (ii), the Company's minimum liquidity equals or exceeds certain agreed levels.

At the Company's election, borrowings under the Revolving Credit Agreement will bear interest at a rate equal to (a) Adjusted Term Secured Overnight Financing Rate ("Adjusted Term SOFR") (as defined in Revolving Credit Agreement) plus the applicable rate (ranging from 1.75% to 3.00%) or (b) the highest of (1) the weighted average overnight Federal funds rate, as published by the Federal Reserve Bank of New York, plus one half of 1.0%, (2) the prime lending rate or (3) the one-month Adjusted Term SOFR plus 1.0% in effect from time to time plus the applicable rate (ranging from 0.75% to 2.00%). The applicable rates are based on the Company's consolidated secured net leverage ratio (as defined under the Revolving Credit Facility) at the time of the applicable borrowing.

The Company pays a quarterly commitment fee of 0.30% to 0.425% on the daily amount by which the commitments under the Revolving Credit Agreement exceed the outstanding loans and letters of credit.

The loans and other obligations under the Revolving Credit Agreement are secured by substantially all of the Company's personal property, including a pledge of all the capital stock of subsidiaries held directly by the Company or any subsidiary that guarantees the Revolving Credit Agreement following the closing date (which pledge, in the case of

any foreign subsidiary, is limited to 65% of the voting stock), subject to certain customary exceptions and limitations. The Revolving Credit Agreement generally prohibits any other liens on the assets of the Company and its restricted subsidiaries, subject to certain exceptions as described in the Revolving Credit Agreement.

Under the terms of the Revolving Credit Agreement, the Company will be able to request an increase in the commitments or the addition of a term loan secured by a pari passu lien on the collateral of up to an additional amount equal to the greater of $200.0 million and 100% of the trailing twelve-month Consolidated Adjusted EBITDA (as defined in the Revolving Credit Agreement) upon satisfaction of customary conditions, including receipt of commitments from either new lenders or increased commitments from existing lenders.

The Revolving Credit Agreement contains certain customary covenants applicable to the Company and its Restricted Subsidiaries (as defined in the Revolving Credit Agreement), and commencing in the third quarter of 2023, the Company is required to maintain a maximum consolidated secured net leverage ratio of 3.00 to 1.00 and a minimum interest coverage ratio of 3.00 to 1.00, in each case at the end of each fiscal quarter. The Revolving Credit Agreement allows the Company to elect to increase the permitted maximum consolidated secured net leverage ratio to 3.50 to 1.00 for four fiscal quarters in the event it consummates an acquisition for consideration in excess of $ 50.0 million, subject to certain limitations on how often this election can be made. As of March 31, 2024, the Company was in compliance with all covenants under the Revolving Credit Agreement.

In connection with the Revolving Credit Agreement, the Company incurred $ 2.9 million of debt issuance costs, which primarily consisted of $2.0 million of lender fees and $ 0.9 million of legal and other professional fees. The debt issuance costs are classified as other assets and are amortized on a straight-line basis over the four-year term of the Revolving Credit Agreement. The Company had unamortized capitalized debt issuance costs of $2.3 million at March 31, 2024.

In June 2023, the Company borrowed $ 400.0 million to partially finance the VectivBio Acquisition. The outstanding principal balance on the revolving credit facility was $275.0 million and $ 300.0 million as of March 31, 2024 and December 31, 2023, respectively.

The following table sets forth total interest expense recognized related to the Revolving Credit Agreement (in thousands):

	Three Months Ended March 31, 2024
Contractual interest expense	$ 5,757
Amortization of debt issuance costs	180
Other financing costs	13
Total interest expense	$ 5,950

9. Employee Stock Benefit Plans

The Company has several share-based compensation plans under which stock options, restricted stock awards, restricted stock units and other share-based awards are available for grant to employees, officers, directors and consultants of the Company.

The following table summarizes share-based compensation expense (in thousands):

	Three Months Ended March 31,	
	2024	2023
Share-based compensation expense:		
Research and development	$ 2,213	$ 1,355
Selling, general and administrative	6,172	5,776
Total share-based compensation expense included in operating expenses	8,385	7,131
Income tax benefit	1,365	297
Total share-based compensation expense, net of tax	$ 7,020	$ 6,834

10. Income Taxes

The income tax provision during interim periods is computed by applying an estimated annual U.S. effective income tax rate to U.S. year-to-date pre-tax income, plus adjustments for significant unusual or infrequently occurring items, in accordance with ASC Subtopic 740-270, *Income Taxes – Interim Reporting*. Year-to-date pre-tax net loss generated in Switzerland is not included in the interim period income tax provision, as the related deferred tax assets are reserved in full by a valuation allowance.

During the three months ended March 31, 2024 and 2023, the Company recorded income tax expense of $ 9.1 million and $20.1 million, respectively. Due to the Company's ability to offset its pre-tax income against net operating losses, the majority of its tax provision is expected to represent a non-cash expense until its net operating losses have been fully utilized.

The Company continues to record a valuation allowance against certain deferred tax assets comprised primarily of net operating loss carryforwards in Switzerland, as well as U.S. federal and state tax credits that are expected to expire prior to utilization. On a periodic basis, the Company reassesses the valuation allowance on its deferred income tax assets, weighing positive and negative evidence to assess the recoverability of the deferred tax assets.

11. Workforce Reductions and Restructuring

In June 2023, the Company commenced the elimination of certain positions in connection with the VectivBio Acquisition. The majority of the eliminations were substantially completed during the year ended December 31, 2023. During the three months ended March 31, 2024, the Company incurred $0.4 million of restructuring expenses, which are comprised primarily of employee severance, benefits, and related costs.

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

Forward-Looking Information

The following discussion of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and the notes to those financial statements appearing elsewhere in this Quarterly Report on Form 10-Q and the audited consolidated financial statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2023, which was filed with the U.S. Securities and Exchange Commission, or the SEC, on February 16, 2024, or the 2023 Annual Report on Form 10-K. This discussion contains forward-looking statements that involve significant risks and uncertainties. As a result of many factors, such as those set forth under "Note Regarding Forward-Looking Statements," in this Quarterly Report on Form 10-Q, under "Part I, Item 1A—Risk Factors" in our 2023 Annual Report on Form 10-K and under "Risk Factors" in Item 1A of this Quarterly Report on Form 10-Q, our actual results may differ materially from those anticipated in these forward-looking statements.

Overview

We are a gastrointestinal, or GI, healthcare company dedicated to advancing the treatment of GI diseases and redefining the standard of care for GI patients. We are focused on the development and commercialization of innovative GI product opportunities in areas of significant unmet need, leveraging our demonstrated expertise and capabilities in GI diseases.

LINZESS® (linaclotide), our commercial product, is the first product approved by the United States Food and Drug Administration, or U.S. FDA, in a class of GI medicines called guanylate cyclase type C agonists, or GC-C agonists, and is indicated for adult men and women suffering from irritable bowel syndrome with constipation, or IBS-C, or chronic idiopathic constipation, or CIC, and for pediatric patients ages 6-17 years-old suffering from functional constipation, or FC. LINZESS is available to adult men and women suffering from IBS-C or CIC in the United States, or the U.S., Mexico, and Saudi Arabia, adult men and women suffering from IBS-C or chronic constipation in Japan, and IBS-C in China, and pediatric patients ages 6-17 with FC in the U.S. Linaclotide is available under the trademarked name CONSTELLA® to adult men and women suffering from IBS-C or CIC in Canada, and to adult men and women suffering from IBS-C in certain European countries.

We have strategic partnerships with leading pharmaceutical companies to support the development and commercialization of linaclotide throughout the world, including with AbbVie Inc. (together with its affiliates), or AbbVie, in the U.S. and all countries worldwide other than China (including Hong Kong and Macau) and Japan, AstraZeneca AB (together with its affiliates), or AstraZeneca, in China (including Hong Kong and Macau) and Astellas Pharma Inc., or Astellas, in Japan.

We also aim to leverage our leading development and commercialization capabilities in GI to bring additional treatment options to GI patients.

In June 2023, we completed a tender offer to purchase 98% of the outstanding ordinary shares of VectivBio Holding AG, or the VectivBio Acquisition. In December 2023, we completed a squeeze-out merger under Swiss law to acquire all remaining shares and VectivBio Holding AG was merged with and into Ironwood Pharmaceuticals GmbH, our wholly-owned subsidiary organized under the laws of Switzerland. The VectivBio Acquisition was partially funded with $400.0 million of borrowings under a new revolving credit facility, or the Revolving Credit Facility, as further described in Note 8, *Debt*, to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q. Through the acquisition, the Company is advancing apraglutide, a next-generation, synthetic peptide analog of glucagon-like peptide-2, or GLP-2, for rare gastrointestinal diseases, including short bowel syndrome with intestinal failure, or SBS-IF, as well as several earlier stage assets.

In November 2021, we entered into a collaboration and license option agreement, or the COUR Collaboration Agreement, with COUR Pharmaceutical Development Company, Inc., or COUR, that grants us an option to acquire an exclusive license to research, develop, manufacture and commercialize, in the U.S., products containing CNP-104, a tolerizing immune modifying nanoparticle, for the treatment of primary biliary cholangitis, or PBC.

We are also advancing IW-3300, a GC-C agonist, for the potential treatment of visceral pain conditions, such as interstitial cystitis/bladder pain syndrome, or IC/BPS, and endometriosis.

To date, we have dedicated a majority of our activities to the research, development and commercialization of linaclotide, as well as to the research and development of our other product candidates. For the three months ended March 31, 2024 and 2023, we recorded net loss of $4.2 million and net income of $45.7 million, respectively. As of March 31, 2024, we had an accumulated deficit of approximately $1.7 billion. We are unable to predict the extent of any future losses or guarantee that our company will be able to maintain positive cash flows.

We were incorporated in Delaware on January 5, 1998 as Microbia, Inc. On April 7, 2008, we changed our name to Ironwood Pharmaceuticals, Inc. We operate in one reportable business segment—human therapeutics.

Financial Operations Overview

Revenues. Our revenues are generated primarily through our collaborative arrangements and license agreements related to research and development and commercialization of linaclotide.

The majority of our revenues are generated from the sales of LINZESS in the U.S. We record our share of the net profits and losses from the sales of LINZESS in the U.S. less commercial expenses on a net basis and present the settlement payments to and from AbbVie as collaboration expense or collaborative arrangements revenue, as applicable. Net profits or losses consist of net sales to third-party customers and sublicense income in the U.S. less the cost of goods sold as well as selling, general and administrative expenses. Although we expect net sales to increase over time, the settlement payments between AbbVie and us, resulting in collaborative arrangements revenue or collaboration expense, are subject to fluctuation based on the ratio of selling, general and administrative expenses incurred by each party. In addition, our collaborative arrangements revenue may fluctuate as a result of the timing and amount of license fees and clinical and commercial milestones received and recognized under our current and future strategic partnerships as well as timing and amount of royalties from the sales of linaclotide in the European, Canadian, Mexican, Japanese, or Chinese markets or any other markets where linaclotide receives approval and is commercialized.

Research and Development Expense. The core of our research and development strategy is to leverage our demonstrated expertise and capabilities in GI diseases to bring multiple medicines to patients. Research and development expense consists of expenses incurred in connection with the research into and development of products and product candidates. These expenses consist primarily of compensation, benefits and other employee-related

expenses, research and development related facility costs, third-party contract costs relating to nonclinical study and clinical trial activities, development of manufacturing processes, regulatory registration of third-party manufacturing facilities, and licensing fees for our product candidates.

Research and development expenses include amounts owed to AbbVie on an ongoing basis under cost-sharing provisions in our collaboration agreement for linaclotide. Reimbursements received for research and development activities under this agreement are netted against research and development expenses.

Linaclotide. Our commercial product, LINZESS, is commercially available in the U.S. for the treatment of IBS-C or CIC in adults and for FC in pediatric patients ages 6-17 years-old. Linaclotide is also available to adult men and women suffering from IBS-C or CIC in certain countries of the world, including China, Japan, and in a number of E.U. countries.

We and AbbVie continue to explore ways to enhance the clinical profile of LINZESS by studying linaclotide in additional indications, populations and formulations to assess its potential to treat various conditions. In September 2020, based on the Phase IIIb data of linaclotide 290 mcg on the overall abdominal symptoms of bloating, pain and discomfort in adult patients with IBS-C, the U.S. FDA approved our supplemental new drug application to include a more comprehensive description of the effects of LINZESS in its approved label.

In addition, we and AbbVie have established a nonclinical and clinical post-marketing plan with the U.S. FDA to understand the safety and efficacy of LINZESS in pediatric patients. In August 2021, the U.S. FDA approved a revised label for LINZESS based on clinical safety data that had been generated thus far in pediatric studies. The updated label modified the boxed warning for risk of serious dehydration and contraindication against use in children to those less than two years of age. The boxed warning and contraindication previously applied to all children less than 18 years of age and less than 6 years of age, respectively. In June 2023, the U.S. FDA approved LINZESS as a once-daily treatment for pediatric patients ages 6-17 years-old with FC, making LINZESS the first and only FDA-approved prescription therapy for FC in this patient population. The safety and effectiveness of LINZESS in patients with FC less than 6 years of age or in patients with IBS-C less than 18 years of age have not been established. Additional clinical pediatric programs in IBS-C and FC are ongoing.

Apraglutide for SBS-IF. In February 2024, we announced positive topline results from our pivotal Phase III clinical trial, STARS, which evaluated the efficacy and safety of once-weekly subcutaneous apraglutide in reducing parenteral support, or PS, dependency in adult patients with SBS-IF. SBS-IF, a rare and severe organ failure condition in which patients are dependent on PS, affects an estimated 18,000 adult patients in the U.S., Europe, and Japan. Based on these results, we plan to submit a new drug application and other regulatory filings as a once-weekly GLP-2 analog for apraglutide for use in adult patients with SBS who are dependent on PS.

Apraglutide for aGvHD: In March 2024, we announced positive, primary results up to Day 91 for our Phase II exploratory trial, STARGAZE, to evaluate apraglutide in patients with steroid-refractory gastrointestinal acute Graft versus Host Disease, or aGvHD, which evaluated the safety and tolerability of once-weekly apraglutide in aGvHD patients treated with standard of care, including systemic corticosteroids and ruxolitinib. The STARGAZE study will continue through its two-year endpoint, where apraglutide will be re-evaluated for safety and efficacy.

CNP-104. Through the COUR Collaboration Agreement, we and COUR are developing CNP-104 for the treatment of PBC, a rare autoimmune disease targeting the liver. In December 2021, the U.S. FDA granted Fast Track Designation to CNP-104. COUR is currently conducting a clinical study to evaluate the safety, tolerability, pharmacodynamic effects and efficacy of CNP-104 in PBC patients. Enrollment is complete and topline data is expected in the third quarter of 2024.

IW-3300. We are developing IW-3300, a GC-C agonist, for the potential treatment of visceral pain conditions, including IC/BPS and endometriosis. We successfully completed Phase I studies to evaluate the safety and tolerability of IW-3300 in healthy volunteers and are continuing the Phase II proof of concept study in IC/BPS.

Early research and development. Our early research and development efforts have been focused on supporting our development stage GI programs, including exploring strategic options for further development of certain of our internal programs, as well as evaluating external development-stage GI programs.

The following table sets forth our research and development expenses related to our product pipeline for the three months ended March 31, 2024 and 2023, respectively. These expenses relate primarily to compensation, benefits and other employee-related expenses and external costs associated with nonclinical studies and clinical trial costs for our product candidates. We allocate costs related to facilities, depreciation, share-based compensation, research and development support services and certain other costs directly to programs.

	Three Months Ended March 31,	
	2024	2023
	(in thousands)	
Linaclotide[1]	$ 4,486	$ 5,435
Apraglutide	19,275	—
CNP-104	504	486
IW-3300	3,492	4,050
Early research and development[2]	(1,942)	2,876
Total research and development expenses	$ 25,815	$ 12,847

(1) Includes linaclotide in all indications, populations and formulation.

(2) Includes $4.8 million reduction to research and development expense recognized in the first quarter of 2024 in connection with the settlement of a license-related contract liability.

The lengthy process of securing regulatory approvals for new drugs requires the expenditure of substantial resources. Any failure by us to obtain, or any delay in obtaining, regulatory approvals would materially adversely affect our product development efforts and our business overall.

We cannot currently estimate with any degree of certainty the amount of time or money that we will be required to expend in the future on linaclotide for additional indications, populations or formulations.

Given the inherent uncertainties that come with the development of pharmaceutical products, we cannot estimate with any degree of certainty how our programs will evolve, and therefore the amount of time or money that would be required to obtain regulatory approval to market them.

As a result of these uncertainties surrounding the timing and outcome of any approvals, we are currently unable to estimate precisely when, if ever, linaclotide's utility will be expanded within its currently approved indications; if or when linaclotide will be developed outside of its current markets, indications, populations or formulations; or when, if ever, apraglutide or any of our other product candidates will generate revenues and cash flows.

We invest carefully in our pipeline, and the commitment of funding for each subsequent stage of our development programs is dependent upon the receipt of clear, supportive data. In addition, we intend to access externally discovered drug candidates that fit within our core strategy. In evaluating these potential assets, we apply the same investment criteria as those used for investments in internally discovered assets.

The successful development of our product candidates is highly uncertain and subject to a number of risks including, but not limited to:

- The duration of clinical trials may vary substantially according to the type, complexity and novelty of the product candidate;
- The U.S. FDA and comparable agencies in foreign countries impose substantial and varying requirements on the introduction of therapeutic pharmaceutical products, typically requiring lengthy and detailed laboratory and clinical testing procedures, sampling activities and other costly and time-consuming procedures;
- Data obtained from nonclinical and clinical activities at any step in the testing process may be adverse and lead to discontinuation or redirection of development activity. Data obtained from these activities also are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval;
- The duration and cost of early research and development, including nonclinical studies and clinical trials, may vary significantly over the life of a product candidate and are difficult to predict;

- The costs, timing and outcome of regulatory review of a product candidate may not be favorable, and, even if approved, a product may face post-approval development and regulatory requirements;
- There may be substantial costs, delays and difficulties in successfully integrating externally developed product candidates into our business operations; and
- The emergence of competing technologies and products and other adverse market developments may negatively impact us.

As a result of the factors discussed above, including the factors discussed under "Note Regarding Forward-Looking Statements" in this Quarterly Report on Form 10-Q, and under "Part I, Item 1A – Risk Factors" in our 2023 Annual Report on Form 10-K, we are unable to determine the duration and costs to complete current or future nonclinical and clinical stages of our product candidates or when, or to what extent, we will generate revenues from the commercialization and sale of our product candidates. Development timelines, probability of success and development costs vary widely. We anticipate that we will make determinations as to which additional programs to pursue and how much funding to direct to each program on an ongoing basis in response to the data of each product candidate, the competitive landscape and ongoing assessments of such product candidate's commercial potential.

We expect to invest in our development programs and incur substantial research and development expenses for the foreseeable future. We will continue to invest in linaclotide, including the investigation of ways to enhance the clinical profile within its currently approved indications, and the exploration of its potential utility in other indications, populations and formulations. We will continue to invest in our GI-focused product candidates, including apraglutide, as we advance them through pre-clinical and clinical trials, in addition to funding research and development activities under our external collaboration and license agreements.

Selling, General and Administrative Expense. Selling, general and administrative expense consists primarily of compensation, benefits and other employee-related expenses for personnel in our administrative, finance, legal, information technology, business development, commercial, sales, marketing, communications and human resource functions. Other costs include legal costs of pursuing patent protection of our intellectual property, general and administrative related facility costs, insurance costs and professional fees for accounting, tax, consulting, legal and other services. As we continue to invest in the commercialization of LINZESS, apraglutide and other product candidates, we expect our selling, general and administrative expenses will be substantial for the foreseeable future.

We include AbbVie's selling, general and administrative cost-sharing payments in the calculation of the net profits and net losses from the sale of LINZESS in the U.S. and present the net payment to or from AbbVie as collaboration expense or collaborative arrangements revenue, respectively.

Restructuring Expenses. Restructuring expenses pertain to restructuring initiatives in connection with the VectivBio Acquisition and are more fully described in Note 11, *Workforce Reductions and Restructuring*.

Interest Expense and Other Financing Costs. Interest expense consists primarily of cash and non-cash interest costs related to our convertible senior notes and Revolving Credit Facility. Non-cash interest expense consists of amortization of debt issuance costs.

Interest and Investment Income. Interest and investment income consists of interest earned on our cash and cash equivalents, as well as significant financing components of payments due from collaboration partners.

Gain on Derivatives. Gain on derivatives consists of the change in fair value of note hedge warrants, which terminated unexercised upon expiry in April 2023. Refer to Note 8, *Debt*, in the financial statements included in our 2023 Annual Report on Form 10-K for additional information related to the note hedge warrants.

Income Taxes. We prepare our income tax provision based on our interpretation of the income tax accounting rules and each jurisdiction's enacted tax laws and regulations. At interim reporting dates, we record our income tax provision by applying our estimated annual effective tax rate to year-to-date pre-tax income, plus adjustments for significant unusual or infrequently occurring items.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our condensed consolidated financial statements prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make certain estimates and assumptions that may affect the reported amounts of assets and liabilities, the disclosure of assets and liabilities at the date of the condensed consolidated financial statements, and the amounts of revenues and expenses during the reported periods. We base our estimates on our historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ materially from our estimates under different assumptions or conditions. Changes in estimates are reflected in reported results in the period in which they become known.

During the three months ended March 31, 2024, there were no material changes to our critical accounting policies as reported in our 2023 Annual Report on Form 10-K.

Results of Operations

The following discussion summarizes the key factors our management believes are necessary for an understanding of our condensed consolidated financial statements.

	Three Months Ended March 31,	
	2024	2023
	(in thousands)	
Revenues:		
Collaborative arrangements revenue	$ 74,877	$ 104,061
Total revenues	74,877	104,061
Costs and expenses:		
Research and development	25,815	12,847
Selling, general and administrative	37,605	31,117
Restructuring expenses	437	—
Total costs and expenses	63,857	43,964
Income from operations	11,020	60,097
Other income (expense):		
Interest expense and other financing costs	(7,231)	(1,527)
Interest and investment income	1,169	7,272
Gain on derivatives	—	19
Other income (expense), net	(6,062)	5,764
Income before income taxes	4,958	65,861
Income tax expense	(9,120)	(20,147)
Net income (loss)	$ (4,162)	$ 45,714

Three months ended March 31, 2024 compared to three months ended March 31, 2023

Revenues

	Three Months Ended March 31,		Change
	2024	2023	$
		(in thousands)	
Revenues:			
Collaborative arrangements revenue	$ 74,877	$ 104,061	$ (29,184)
Total revenues	$ 74,877	$ 104,061	$ (29,184)

Collaborative Arrangements Revenue. The decrease in collaborative arrangements revenue of $29.2 million for the three months ended March 31, 2024 compared to the three months ended March 31, 2023 was primarily related to a $29.9 million decrease in our share of net profits from the sale of LINZESS in the U.S. During the three months ended March 31, 2024, the Company recognized a $38.0 million reduction to collaboration revenue, inclusive of a $30.0 million reduction related to information provided by AbbVie subsequent to the quarterly collaboration accounting settlement process, as a result of changes in estimates of sales reserves and allowances associated with governmental and

contractual rebates. Excluding the impact of the changes in estimates, our share of net profits from the sale of LINZESS in the U.S increased nominally during the three months ended March 31, 2024 compared to the three months ended March 31, 2023, with increases from prescription demand and inventory channel fluctuations partially offset by decreased net price.

Operating Expenses

	Three Months Ended March 31,		Change
	2024	2023	$
		(in thousands)	
Operating expenses:			
Research and development	$ 25,815	$ 12,847	$ 12,968
Selling, general and administrative	37,605	31,117	6,488
Restructuring expenses	437	—	437
Total operating expenses	$ 63,857	$ 43,964	$ 19,893

Research and Development Expense. The increase in research and development expense of $13.0 million for the three months ended March 31, 2024 compared to the three months ended March 31, 2023 was primarily related to $19.3 million in apraglutide costs, partially offset by a $4.8 million reduction to research and development expense in connection with the settlement of a license-related contract liability.

Selling, General and Administrative Expense. Selling, general and administrative expenses increased by $6.5 million for the three months ended March 31, 2024 compared to the three months ended March 31, 2023, primarily due to $3.2 million of selling, general and administrative costs incurred for operating activities of the acquired VectivBio entities, a $1.8 million increase in professional services costs, and a $0.7 million increase in severance costs.

Restructuring Expenses. Restructuring expenses pertain to the restructuring initiatives that commenced in June 2023 in connection with the VectivBio Acquisition.

Other Income (Expense), Net

	Three Months Ended March 31,		Change
	2024	2023	$
		(in thousands)	
Other income (expense):			
Interest expense and other financing costs	$ (7,231)	$ (1,527)	$ (5,704)
Interest and investment income	1,169	7,272	(6,103)
Gain on derivatives	—	19	(19)
Total other income (expense), net	$ (6,062)	$ 5,764	$ (11,826)

Interest Expense and Other Financing Costs. Interest expense increased by $5.7 million for three months ended March 31, 2024 compared to the three months ended March 31, 2023 primarily due to $5.9 million of interest expense incurred under the revolving credit facility used to partially finance the VectivBio Acquisition in June 2023.

Interest and Investment Income. Interest and investment income decreased by $6.1 million for the three months ended March 31, 2024 compared to the three months ended March 31, 2023 primarily from a decrease in cash and investment balances following the VectivBio Acquisition in June 2023.

Gain on Derivatives. For the three months ended March 31, 2023, we recorded an insignificant gain on derivatives resulting from a decrease in the fair value of our note hedge warrants, which terminated unexercised upon expiry during April 2023.

Income Tax Expense. For the three months ended March 31, 2024 and 2023, we recorded income tax expense of $9.1 million and $20.1 million, respectively. Due to our ability to utilize our net operating losses to offset federal taxable income and taxable income in most states, the majority of our tax provision will be a non-cash expense until our net operating losses have been fully utilized.

Liquidity and Capital Resources

As of March 31, 2024, we had $121.5 million of cash and cash equivalents. Our cash equivalents include amounts held in money market funds, U.S. Treasury securities and commercial paper. We invest cash in excess of immediate requirements in accordance with our investment policy, which limits the amounts we may invest in certain types of investments and requires all investments held by us to be at least A- rated, with a remaining final maturity when purchased of less than twenty-four months, so as to primarily achieve liquidity and capital preservation objectives.

We anticipate our cash balance and our expected net cash inflows from operations to allow us to meet our near-term and long-term cash obligations, which are reflected in our condensed consolidated balance sheets. Our most significant fixed obligations are debt obligations and lease commitments, for which annual payments are disclosed in Note 8, *Debt*, and Note 6, *Leases*, respectively, to our financial statements included elsewhere in this Quarterly Report on Form 10-Q.

We may from time to time seek to retire, redeem or repurchase all or part of our outstanding debt through cash purchases and/or exchanges, in open market purchases, privately negotiated transactions, by tender offer or otherwise. Such repurchases, redemptions or exchanges, if any, of our debt will depend on prevailing market conditions, liquidity requirements, contractual restrictions and other factors, and the amounts involved may be material.

Sources of Liquidity

We have financed our operations to date primarily through both the private sale of our preferred stock and the public sale of our common stock, debt financings, and cash generated from our operations. As of March 31, 2024, our debt is comprised of $400.0 million aggregate principal amount of convertible notes, due at various dates between 2024 and 2026, and $275.0 million aggregate principal amount outstanding under our Revolving Credit Facility, which we entered into in May 2023 to partially finance the VectivBio Acquisition. The Revolving Credit Facility provides for $500.0 million of borrowing capacity and includes a $10.0 million letter of credit subfacility. Refer to Note 8, *Debt*, to our condensed consolidated financial statements included elsewhere in this Quarterly Report on Form 10-Q for information related to our debt obligations.

Summary of Cash Flows

The following table summarizes cash flows from operating, investing, and financing activities for the three months ended March 31, 2024 and 2023:

	Three Months Ended March 31,	
	2024	2023
	(in thousands)	
Net cash provided by (used in):		
Operating activities	$ 44,985	$ 80,171
Investing activities	(68)	(13)
Financing activities	(15,555)	3,981
Effect of exchange rate changes on cash, cash equivalents and restricted cash	24	—
Net increase in cash, cash equivalents and restricted cash	$ 29,386	$ 84,139

Cash Flows from Operating Activities

Net cash provided by operating activities is derived by adjusting net income (loss) for non-cash items and changes in operating assets and liabilities, which reflect timing differences between the receipt and payment of cash associated with transactions and when they are recognized in the results of operations.

Net cash inflows for the three months ended March 31, 2024 and 2023 totaled $45.0 million and $80.2 million, respectively, and were derived primarily from collaboration arrangements revenue related to sales of LINZESS in the U.S.

Cash Flows from Investing Activities

Cash used in investing activities for each of the three months ended March 31, 2024 and 2023 was insignificant and pertained to the purchase of property and equipment.

Cash Flows from Financing Activities

Cash used in financing activities for the three months ended March 31, 2024 totaled $15.6 million and was comprised primarily of a $25.0 million repayment on the Revolving Credit Facility, partially offset by $10.1 million of proceeds from the exercise of stock options. Cash provided by financing activities for the three months ended March 31, 2023 totaled $4.0 million and was generated from proceeds from the exercise of stock options.

Funding Requirements

We began commercializing LINZESS in the U.S. with our collaboration partner, AbbVie, in the fourth quarter of 2012, and we currently derive a significant portion of our revenue from this collaboration. Our goal is to generate and maintain positive cash flows, driven by increased revenue generated through sales of LINZESS and other commercial activities and financial discipline, while continuing to invest in the development and commercialization of linaclotide, apraglutide, and other product candidates.

Under our collaboration with AbbVie for North America, total net sales of LINZESS in the U.S., as recorded by AbbVie, are reduced by commercial costs incurred by each party, and the resulting amount is shared equally between us and AbbVie. Additionally, we receive royalties from AbbVie based on sales of linaclotide in its licensed territories outside of the U.S. We believe revenues from our LINZESS partnership for the U.S. with AbbVie will continue to constitute a significant portion of our total revenue for the foreseeable future and we cannot be certain that such revenues, as well as the revenues from our other commercial activities, will continue to enable us to generate positive cash flows, or to do so in the timeframes we expect. We also anticipate that we will continue to incur substantial expenses for the next several years as we further develop and commercialize linaclotide in the U.S., develop and commercialize other products, including apraglutide, and invest in building our pipeline through internal or external opportunities, including potential payments associated with exercising the option under the COUR Collaboration Agreement. We believe that our cash on hand as of March 31, 2024 will be sufficient to meet our projected operating needs at least through the next twelve months from the issuance of these financial statements.

Our forecast of the period of time through which our financial resources will be adequate to support our operations, including the underlying revenue expectations and estimates regarding the costs to continue to develop, obtain regulatory approval for, and commercialize linaclotide in the U.S., as well as our expectations regarding revenue from Astellas for Japan and AstraZeneca for China (including Hong Kong and Macau), and our goal to generate and maintain positive cash flows, are forward-looking statements that involve risks and uncertainties. Our actual results could vary materially and negatively from these and other forward-looking statements as a result of a number of factors, including the factors discussed under the headings “Note Regarding Forward-Looking Statements” in this Quarterly Report on Form 10-Q and under “Part I, Item 1A—Risk Factors” in our 2023 Annual Report on Form 10-K. We have based our estimates on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect.

Due to the numerous risks and uncertainties associated with the development and commercialization of our product candidates, we are unable to estimate precisely the amounts of capital outlays and operating expenditures necessary to develop, obtain regulatory approval for, and commercialize linaclotide, apraglutide and our other product candidates, in each case, for all of the markets, indications, populations and formulations for which we believe each is suited. Our funding requirements will depend on many factors, including, but not limited to, the following:

- the revenue generated by sales of LINZESS and CONSTELLA and from any other sources;
- the rate of progress and cost of our commercialization activities, including the expense we incur in marketing and selling LINZESS in the U.S. and from any other sources;
- the success of our third-party manufacturing activities;

- the time and costs involved in developing, and obtaining regulatory approvals for, our product candidates, including apraglutide, as well as the timing and cost of any post-approval development and regulatory requirements;
- the time and cost associated with integrating VectivBio's business and assets into our business operations;
- the time and costs associated with commercial manufacturing, sales, marketing and distribution of apraglutide, if approved;
- the success of our research and development efforts;
- the emergence of competing or complementary products;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the terms and timing of any collaborative, licensing or other arrangements that we may establish, including milestones, royalties or other payments due or payable under such agreements;
- the settlement method used for our outstanding convertible notes; and
- the acquisition of businesses, products and technologies and the impact of other strategic transactions, as well as the cost and timing of evaluating, acquiring, and, if completed, integrating into our business operations any such assets.

Financing Strategy

We may, from time to time, consider additional funding through a combination of new collaborative arrangements, strategic alliances, and additional equity and debt financings or from other sources. We will continue to manage our capital structure and to consider all financing opportunities, whenever they may occur, that could strengthen our long-term liquidity profile. Any such capital transactions may or may not be similar to transactions in which we have engaged in the past. There can be no assurance that any such financing opportunities will also be available on acceptable terms, if at all.

New Accounting Pronouncements

For a discussion of recent accounting pronouncements, refer to Note 2, *Summary of Significant Accounting Policies*, to our consolidated financial statements in our 2023 Annual Report on Form 10-K and Note 2, *Summary of Significant Accounting Policies*, appearing elsewhere in this Quarterly Report on Form 10-Q. We did not otherwise adopt any new accounting pronouncements during the three months ended March 31, 2024 that had a material effect on our condensed consolidated financial statements included in this report.

Item 3. *Quantitative and Qualitative Disclosures about Market Risk*

Interest Rate Risk

We are exposed to market risk related to changes in interest rates. We invest our cash in a variety of financial instruments, principally securities issued by the U.S. government and its agencies, including collateralized reverse repurchase agreements, and money market instruments, as well as commercial paper. The goals of our investment policy are preservation of capital, fulfillment of liquidity needs and fiduciary control of cash and investments. We also seek to maximize income from our investments without assuming significant risk.

Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of interest rates, particularly because our investments are in short-term marketable securities. Due to the primarily short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 1% change in interest rates would not have a material effect on the fair market value of our portfolio. Accordingly, we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our investment portfolio.

We do not believe our cash and cash equivalents have significant risk of default or illiquidity. While we believe our cash and cash equivalents do not contain excessive risk, we cannot provide absolute assurance that in the future our investments will not be subject to adverse changes in market value. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits. Given the potential instability of financial institutions, we cannot provide assurance that we will not experience losses on these deposits.

Our convertible senior notes bear interest at a fixed rate and therefore have minimal exposure to changes in interest rates; however, because these interest rates are fixed, we may be paying a higher interest rate, relative to market, in the future if our credit rating improves or other circumstances change.

We are exposed to market risks related to fluctuations in interest rates relating to our four-year secured $500.0 million Revolving Credit Facility. The increase or decrease in annual interest expense resulting from a 10% increase or decrease in the applicable interest rate is $2.0 million.

Equity Price Risk

Our convertible notes include conversion and settlement provisions that are based on the price of our Class A Common Stock at conversion or maturity of the notes. The amount of cash we may be required to pay is determined by the price of our Class A Common Stock. The fair values of our convertible notes are dependent on the price and volatility of our Class A Common Stock and will generally increase or decrease as the market price of our common stock changes.

To minimize the impact of potential dilution to our common stock upon conversion of the notes, we entered into the capped call transactions with respect to the 0.75% convertible senior notes due 2024 and the 1.50% convertible senior notes due 2026.

The convertible notes and derivatives are more fully described in Note 8, *Debt,* in the accompanying notes to our condensed consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q.

Foreign Currency Risk

We are also exposed to risks related to changes in foreign currency exchange rates relating to our foreign operations. The functional currency of our international subsidiaries is the local currency. We are exposed to foreign currency risk to the extent that we enter into transactions denominated in currencies other than our subsidiaries' respective functional currencies. We are also exposed to unfavorable fluctuations of the U.S. dollar, which is our reporting currency, against the currencies of our operating subsidiaries when their respective financial statements are translated into U.S. dollars for inclusion in our condensed consolidated financial statements. We do not currently hedge our foreign currency exchange rate risk. Foreign currency has not had, nor do we believe that a decrease or increase in any foreign currency exchange rates would have, a material impact on our results of operations.

Item 4. *Controls and Procedures*

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) of the Securities Exchange Act of 1934, or Exchange Act, our management, including our principal executive officer and our principal financial officer, conducted an evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q of the effectiveness of the design and operation of our disclosure controls and procedures. Based on that evaluation, our principal executive officer and principal financial officer

concluded that our disclosure controls and procedures are effective at the reasonable assurance level in ensuring that information required to be disclosed by us in the 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. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports we file under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

As permitted by guidance issued by the SEC that an assessment of internal control over financial reporting of a recently acquired business may be omitted from management's evaluation of disclosure controls and procedures, management excluded an assessment of the internal controls of VectivBio, which we acquired on June 29, 2023, from its evaluation of the effectiveness of our disclosure controls and procedures. VectivBio represented 3% of our consolidated total assets and less than 1% of our consolidated total revenues as of and for the three months ended March 31, 2024, respectively. We are in the process of integrating VectivBio into our system of internal control over financial reporting.

Other than with respect to the integration of VectivBio into our system of internal control over financial reporting, there have been no changes in our internal control over financial reporting that occurred during the quarter ended March 31, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

Item 1A. *Risk Factors*

Our business faces significant risks and uncertainties. Certain important factors may have a material adverse effect on our business prospects, financial condition and results of operations, and you should carefully consider them. Accordingly, in evaluating our business, we encourage you to carefully consider the discussion of risk factors in "Part I, Item 1A—Risk Factors" in our 2023 Annual Report on Form 10-K, in addition to other information contained in or incorporated by reference into this Quarterly Report on Form 10-Q.

Item 5. *Other Information*

During the quarter ended March 31, 2024, the following directors and officers (as defined in Rule 16a-1(f) under the Exchange Act) of the Company adopted or terminated a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408(a) of Regulation S-K, for the purchase or sale of our securities, the material terms of which are set forth in the table below.

Name (Title)	Action Taken (Date of Action)	Type of Trading Arrangement	Nature of Trading Arrangement	Duration of Trading Arrangement [(1)]	Aggregate Number of Securities
Julie McHugh (Director)	Adoption (March 11, 2024)	Rule 10b5-1 trading arrangement	Sale	March 1, 2025	22,766

(1) The dates in this column represent the scheduled expiration date of each director or officer's Rule 10b5-1 trading arrangement. Each Rule 10b5-1 trading arrangement may terminate earlier than the date provided should all transactions contemplated thereunder occur prior to such date.

Item 6. *Exhibits*

See the Exhibit Index on the following page of this Quarterly Report on Form 10-Q.

EXHIBIT INDEX

Exhibit No:	Description
3.1	Eleventh Amended and Restated Certificate of Incorporation. Incorporated by reference to Exhibit 3.1 of Ironwood Pharmaceuticals, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009, filed with the SEC on March 30, 2010.
3.2	Certificate of Retirement. Incorporated by reference to Exhibit 3.2 of Ironwood Pharmaceuticals, Inc.'s Amendment No. 1 to Form 8-A, filed with the SEC on January 3, 2019.
3.3	Certificate of Amendment of Eleventh Amended and Restated Certificate of Incorporation. Incorporated by reference to Exhibit 3.1 of Ironwood Pharmaceuticals, Inc.'s Current Report on Form 8-K, filed with the SEC on May 31, 2019.
3.4	Fifth Amended and Restated Bylaws. Incorporated by reference to Exhibit 3.2 of Ironwood Pharmaceuticals, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2009, filed with the SEC on March 30, 2010.
31.1*	Certification of Chief Executive Officer pursuant to Rules 13a-14 or 15d-14 of the Exchange Act.
31.2*	Certification of Chief Financial Officer pursuant to Rules 13a-14 or 15d-14 of the Exchange Act.
32.1‡	Certification of Chief Executive Officer pursuant to Rules 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350.
32.2‡	Certification of Chief Financial Officer pursuant to Rules 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350.
101.INS*	XBRL Instance Document – The Instance Document does not appear in the Interactive Data Files because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	XBRL Taxonomy Extension Schema Document.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Label Linkbase Database.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.
104*	The cover page from this Quarterly Report on Form 10-Q formatted in Inline XBRL.

* Filed herewith.

‡ Furnished herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Ironwood Pharmaceuticals, Inc.

Date: May 9, 2024

By: /s/ THOMAS MCCOURT
Thomas McCourt
Chief Executive Officer
(Principal Executive Officer)

Date: May 9, 2024

By: /s/ RONALD SILVER
Ronald Silver
Vice President, Corporate Controller
(Principal Accounting Officer)

EXHIBIT 31.1

CERTIFICATION PURSUANT
TO RULES 13a-14(a) OR 15d-14(a) UNDER
THE SECURITIES EXCHANGE ACT OF 1934

I, Thomas McCourt, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ironwood Pharmaceuticals, Inc. (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2024

/s/ THOMAS MCCOURT
Thomas McCourt
Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION PURSUANT
TO RULES 13a-14(a) OR 15d-14(a) UNDER
THE SECURITIES EXCHANGE ACT OF 1934

I, Sravan K. Emany, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ironwood Pharmaceuticals, Inc. (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 9, 2024

/s/ SRAVAN K. EMANY
Sravan K. Emany
Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Ironwood Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Thomas McCourt, 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, to my knowledge that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) 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.

/s/ THOMAS MCCOURT
Thomas McCourt
Chief Executive Officer

May 9, 2024

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.

EXHIBIT 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of Ironwood Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Sravan K. Emany, 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, to my knowledge that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) 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.

/s/ SRAVAN K. EMANY
Sravan K. Emany
Chief Financial Officer

May 9, 2024

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.