IRONWOOD PHARMACEUTICALS INC
Form 10-Q
May 04, 2018
Table of Contents

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, 2018

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 (State or other jurisdiction of incorporation or organization)	04-3404176 (I.R.S. Employer Identification Number)

301 Binney Street Cambridge, Massachusetts (Address of Principal Executive Offices)	02142 (Zip Code)

(617) 621-7722

(Registrant's telephone number, including area code)

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files): Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 (Do not check if a smaller reporting company)	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 27, 2018, there were 137,944,013 shares of Class A common stock outstanding and 13,997,357 shares of Class B common stock outstanding.

Table of Contents

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q, including the sections titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors”, contains forward-looking statements. All statements contained in this Quarterly Report on Form 10-Q other than statements of historical fact are forward-looking statements. 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” and similar expressions may identify forward-looking statem 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 Allergan plc in the U.S. and ZURAMPIC® and DUZALLO® by us in the U.S.;

- the timing and execution of the launches and commercialization of CONSTELLA® in Europe and LINZESS in Japan;

- the timing, investment and associated activities involved in developing, obtaining regulatory approval for, launching, and commercializing our products and product candidates 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 and lesinurad active pharmaceutical ingredient, 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, including our post-approval development and regulatory requirements;

- the ability of our 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 and our partners' ability 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 and our partners' ability 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 and clinical studies;

- the in-licensing or acquisition of externally discovered businesses, products or technologies, as well as partnering arrangements, including expectations relating to the completion of, or the realization of the expected benefits from, such transactions;

Table of Contents

- our expectations as to future financial performance, revenues, expense levels, payments, cash flows, profitability, tax obligations, capital raising and liquidity sources, real estate needs and concentration of voting control, 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 note hedge transactions described herein;

- inventory levels and write downs, or asset impairments, and the drivers thereof, and inventory purchase commitments;

- our expectations regarding amortization or impairments of intangible assets and estimates and assumptions related thereto;

- our ability to compete with other companies that are or may be developing or selling products that are competitive with our products and product candidates;

- the status of government regulation in the life sciences industry, particularly with respect to healthcare reform;

- trends and challenges in our potential markets;

- our ability to attract and motivate key personnel;

- the proposed separation of the Company’s operations into two independent, publicly traded companies, including the completion and timing of the separation, the business and operations of each company and any benefits or costs of the separation, including the tax treatment; and

- other factors discussed elsewhere in this Quarterly Report on Form 10-Q.

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 the risks, uncertainties and assumptions identified under the heading “Risk Factors” in this Quarterly Report on Form 10-Q. 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 U.S. Securities and Exchange Commission, or the SEC, after the date of this Quarterly Report on Form 10-Q.

NOTE REGARDING TRADEMARKS

Table of Contents

IRONWOOD PHARMACEUTICALS, INC.

QUARTERLY REPORT ON FORM 10-Q

FOR THE QUARTER ENDED MARCH 31, 2018

TABLE OF CONTENTS

March 31,

Table of Contents

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, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$ 144,788	$ 125,736
Available-for-sale securities	49,659	95,680
Accounts receivable, net	4,988	3,190
Related party accounts receivable, net	65,663	78,967
Inventory	1,705	735
Prepaid expenses and other current assets	8,924	7,288
Total current assets	275,727	311,596
Restricted cash	7,056	7,056
Property and equipment, net	16,844	17,274
Convertible note hedges	113,445	108,188
Intangible assets, net	156,429	159,905
Goodwill	785	785
Other assets	809	870
Total assets	$ 571,095	$ 605,674
LIABILITIES AND STOCKHOLDERS' (DEFICIT) EQUITY		
Current liabilities:		
Accounts payable and related party accounts payable, net	$ 11,609	$ 15,958
Accrued research and development costs	4,673	7,313
Accrued expenses and other current liabilities	30,145	38,237
Current portion of capital lease obligations	3,359	4,077
Current portion of deferred rent	237	195
Current portion of 2026 Notes	11,958	—
Current portion of contingent consideration	355	247
Total current liabilities	62,336	66,027
Deferred rent, net of current portion	5,860	5,449
Contingent consideration, net of current portion	31,389	31,011
Note hedge warrants	96,129	92,188
Convertible senior notes	253,153	249,193
2026 Notes, net of current portion	135,220	146,898
Other liabilities	5,060	5,060
Commitments and contingencies		
Stockholders’ (deficit) equity:		

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 137,606,687 and 136,465,526 shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively	138	137
Class B common stock, $0.001 par value, 100,000,000 shares authorized and 13,997,357 shares issued and outstanding at March 31, 2018 and 13,983,762 shares issued outstanding at December 31, 2017	14	14
Additional paid-in capital	1,333,791	1,318,536
Accumulated deficit	(1,351,904)	(1,308,760)
Accumulated other comprehensive loss	(91)	(79)
Total stockholders' (deficit) equity	(18,052)	9,848
Total liabilities and stockholders' (deficit) equity	$ 571,095	$ 605,674

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

Table of Contents

Ironwood Pharmaceuticals, Inc.

Condensed Consolidated Statements of Operations

(In thousands, except per share amounts)

(unaudited)

	Three Months Ended March 31,	
	2018	2017
Revenues:		
Collaborative arrangements revenue	$ 63,086	$ 51,865
Product revenue, net	635	289
Sale of active pharmaceutical ingredient	5,434	12
Total revenues	69,155	52,166
Cost and expenses:		
Cost of revenues, excluding amortization of acquired intangible assets	2,607	531
Research and development	36,505	33,702
Selling, general and administrative	61,923	55,604
Amortization of acquired intangible assets	3,476	420
Loss on fair value remeasurement of contingent consideration	512	1,614
Total cost and expenses	105,023	91,871
Loss from operations	(35,868)	(39,705)
Other (expense) income:		
Interest expense	(9,273)	(8,983)
Interest and investment income	681	395
Gain (loss) on derivatives	1,316	(2,199)
Loss on extinguishment of debt	—	(2,009)
Other expense, net	(7,276)	(12,796)
Net loss	$ (43,144)	$ (52,501)
Net loss per share—basic and diluted	$ (0.29)	$ (0.36)
Weighted average number of common shares used in net loss per share—basic and diluted:	151,013	147,786

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

Table of Contents

Ironwood Pharmaceuticals, Inc.

Condensed Consolidated Statements of Comprehensive Loss

(In thousands)

(unaudited)

	Three Months Ended March 31,	
	2018	2017
Net loss	$ (43,144)	$ (52,501)
Other comprehensive loss:		
Unrealized losses on available-for-sale securities	(12)	(34)
Total other comprehensive loss	(12)	(34)
Comprehensive loss	$ (43,156)	$ (52,535)

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

Table of Contents

Ironwood Pharmaceuticals, Inc.

Condensed Consolidated Statements of Cash Flows

(In thousands)

(unaudited)

	Three Months Ended March 31,	
	2018	2017
Cash flows from operating activities:		
Net loss	$ (43,144)	$ (52,501)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,790	2,910
Amortization of acquired intangible assets	3,476	420
Gain on disposal of property and equipment	(34)	—
Share-based compensation expense	9,043	7,279
Change in fair value of note hedge warrants	3,941	20,187
Change in fair value of convertible note hedges	(5,257)	(17,988)
Write-down of excess non-cancellable ZURAMPIC sample purchase commitments	—	1,353
Gain on facility subleases	—	(1,579)
Accretion of discount/premium on investment securities	(118)	105
Non-cash interest expense	4,239	3,877
Non-cash change in fair value of contingent consideration	512	1,614
Loss on extinguishment of debt	—	2,009
Changes in assets and liabilities:		
Accounts receivable and related party accounts receivable	11,506	13,707
Prepaid expenses and other current assets	(1,647)	372
Inventory	(768)	71
Other assets	62	201
Accounts payable, related party accounts payable and accrued expenses	(12,300)	(5,238)
Accrued research and development costs	(2,640)	(1,831)
Deferred revenue	—	741
Deferred rent	453	(3,555)
Net cash used in operating activities	(30,886)	(27,846)
Cash flows from investing activities:		
Purchases of available-for-sale securities	(2,491)	(44,777)
Sales and maturities of available-for-sale securities	48,620	133,830
Purchases of property and equipment	(1,509)	(1,037)
Proceeds from sale of property and equipment	33	43
Net cash provided by investing activities	44,653	88,059
Cash flows from financing activities:		
Proceeds from issuance of 2026 Notes, net of discount to lender	—	146,250
Costs associated with issuance of 2026 Notes	—	(209)
Proceeds from exercise of stock options and employee stock purchase plan	6,203	8,171
Payments on capital leases	(827)	(796)
Principal payments on PhaRMA notes	—	(134,258)

Payments on contingent purchase price consideration	(91)	(56)
Net cash provided by financing activities	5,285	19,102
Net increase in cash, cash equivalents and restricted cash	19,052	79,315
Cash, cash equivalents and restricted cash, beginning of period	132,792	62,251
Cash, cash equivalents and restricted cash, end of period	$ 151,844	$ 141,566
Reconciliation of cash, cash equivalents, and restricted cash to the condensed consolidated balance sheets		
Cash and cash equivalents	$ 144,788	$ 133,319
Restricted cash	7,056	8,247
Total Cash, cash equivalents, and restricted cash	$ 151,844	$ 141,566

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

Table of Contents

Ironwood Pharmaceuticals, Inc.

Notes to Condensed Consolidated Financial Statements

(unaudited)

1. Nature of Business

Overview

Ironwood Pharmaceuticals, Inc. (the "Company") is a commercial biotechnology company leveraging its proven development and commercial capabilities as it seeks to bring multiple medicines to patients. The Company is advancing innovative product opportunities in areas of large unmet need, based upon the Company's target-to-disease approach to development and leveraging the Company's core areas of expertise in gastrointestinal ("GI") and primary care, as well as in guanylate cyclase ("GC") pathways.

The Company's first commercial product, linaclotide, is available to adult men and women suffering from irritable bowel syndrome with constipation ("IBS-C"), or chronic idiopathic constipation ("CIC"), in certain countries around the world. Linaclotide is available under the trademarked name LINZESS® to adult men and women suffering from IBS-C or CIC in the United States (the "U.S.") and Mexico, and to adult men and women suffering from IBS-C in Japan. 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 and its partner Allergan plc (together with its affiliates, "Allergan") began commercializing LINZESS in the U.S. in December 2012. Under the Company's collaboration with Allergan for North America, total net sales of LINZESS in the U.S., as recorded by Allergan, are reduced by commercial costs incurred by each party, and the resulting amount is shared equally between the Company and Allergan. Allergan also has an exclusive license from the Company to develop and commercialize linaclotide in all countries other than China, Hong Kong, Macau, Japan and the countries and territories of North America (the "Allergan License Territory"). On a country-by-country and product-by-product basis in the Allergan License Territory, Allergan pays the Company a royalty as a percentage of net sales of products containing linaclotide as an active ingredient. In addition, Allergan 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 and commercialize linaclotide in Japan. In March 2017, Astellas began commercializing LINZESS for the treatment of

adults with IBS-C in Japan, and in September 2017, Astellas submitted a supplemental new drug application for approval of LINZESS for the treatment of adults with chronic constipation in Japan. The Company has a collaboration agreement with AstraZeneca AB (together with its affiliates, "AstraZeneca"), to co-develop and co-commercialize linaclotide in China, Hong Kong and Macau, with AstraZeneca having primary responsibility for the local operational execution. In December 2015, the Company and AstraZeneca filed for approval with the China Food and Drug Administration ("CFDA") to market linaclotide in China.

The Company's and Allergan's linaclotide life cycle management strategy in the U.S. includes the objective of strengthening the clinical profile of linaclotide by obtaining additional abdominal symptom claims and expanding the clinical utility of linaclotide by demonstrating the pain-relieving effect of a delayed release formulation, through the advancement of linaclotide delayed release in all forms of IBS. The Company and Allergan are also continuing 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.

The Company is advancing another GI development program, IW-3718, a gastric retentive formulation of a bile acid sequestrant for the potential treatment of uncontrolled gastroesophageal reflux disease ("GERD"). The Company's clinical research has demonstrated that reflux of bile from the intestine into the stomach and esophagus plays a key role in the ongoing symptoms of uncontrolled GERD. IW-3718 is a novel formulation of a bile acid sequestrant designed to release in the stomach over an extended period of time, bind to bile that refluxes into the stomach, and potentially provide symptomatic relief in patients with uncontrolled GERD. In July 2017, the Company reported positive top-line data from a Phase IIb clinical trial evaluating IW-3718 that the Company believes supports the advancement of this program into Phase III development.

Table of Contents

In June 2016, the Company closed a transaction with AstraZeneca (the "Lesinurad Transaction") pursuant to which the Company received an exclusive license to develop, manufacture, and commercialize in the U.S. products containing lesinurad as an active ingredient (the "Lesinurad License"), including ZURAMPIC® and DUZALLO®. Lesinurad 200mg tablets were approved as ZURAMPIC by the U.S. Food and Drug Administration ("FDA") in December 2015 for use in combination with a xanthine oxidase inhibitor for the treatment of hyperuricemia associated with uncontrolled gout ("uncontrolled gout"). In October 2016, the Company began commercializing ZURAMPIC in the U.S. The FDA approved DUZALLO, a fixed-dose combination product of lesinurad and allopurinol in August 2017 for the treatment of hyperuricemia associated with gout in patients who have not achieved goal serum uric acid levels with a medically appropriate daily dose of allopurinol alone. In October 2017, the Company began commercializing DUZALLO in the U.S. In January 2018, the Company commenced an initiative to evaluate the optimal mix of investments for the lesinurad franchise for uncontrolled gout, including DUZALLO and ZURAMPIC. As part of this effort, in 2018, the Company began re-allocating resources within the lesinurad franchise to systematically explore a more comprehensive marketing mix in select test markets (with paired controls), while continuing to build market presence for the lesinurad franchise across the country. The Company expects the data received in 2018 from these test markets to inform the Company's future investment in the lesinurad franchise.

The Company is also leveraging its pharmacological expertise in GC pathways gained through the discovery and development of linaclotide, a GC-C agonist, to develop and advance a pipeline of sGC stimulators, including praliciguat (IW-1973) and olinciguat (IW-1701). The Company is advancing praliciguat, its lead clinical sGC stimulator, for the potential treatment of diabetic nephropathy and the potential treatment of heart failure with preserved ejection fraction ("HFpEF"). The Company's second clinical sGC stimulator, olinciguat, is being developed for the potential treatment of achalasia and sickle cell disease.

In May 2018, the Company announced its intent, as authorized by its Board of Directors, to separate its sGC business from its commercial and GI business, resulting in two independent, publicly traded companies, Ironwood and a new company ("R&D Co"). Following the separation, Ironwood is expected to focus on accelerating growth of its in-market products, including LINZESS, and advance development programs targeting treatments for GI diseases, uncontrolled gout, and abdominal pain. The separated R&D Co. is expected to focus on the sGC pipeline development programs for the treatment of serious and orphan diseases. The separation is expected to be completed in the first half of 2019 and is anticipated to be tax-free.

The Company has periodically entered into co-promotion agreements to maximize its salesforce productivity. As part of this strategy, in August 2015, the Company and Allergan entered into an agreement for the co-promotion of VIBERZI® (eluxadoline) in the U.S., Allergan's treatment for adults suffering from IBS with diarrhea ("IBS-D"). In January 2017, the Company and Allergan entered into a commercial agreement under which adjustments to the Company's or Allergan's share of the net profits under the share adjustment provision of the collaboration agreement for linaclotide in North America are eliminated, in full, in 2018 and all subsequent years. As part of this agreement, Allergan appointed the Company, on a non-exclusive basis, to promote CANASA® (mesalamine), approved for the treatment of ulcerative proctitis, and DELZICOL® (mesalamine), approved for the treatment of ulcerative colitis, in the U.S. for approximately two years. In December 2017, this agreement was amended to include and extend the promotion of VIBERZI through December 31, 2018 and discontinue the promotion of DELZICOL effective January 1, 2018.

These agreements are more fully described in Note 3, Goodwill and Intangible Assets, and Note 4, Collaboration, License, Co-Promotion and Other Commercial Agreements, to these condensed consolidated financial statements.

In September 2016, the Company closed a direct private placement, pursuant to which the Company issued $150.0 million in aggregate principal amount of 8.375% notes due 2026 (the “2026 Notes”) on January 5, 2017 (the “Funding Date”). The Company received net proceeds of approximately $11.2 million from the 2026 Notes, after redemption of the PhaRMA Notes outstanding balance and accrued interest of approximately $135.1 million and deducting fees and expenses of approximately $3.7 million. The proceeds from the issuance of the 2026 Notes were used to redeem the outstanding principal balance of the 11% PhaRMA Notes due 2024 (the “PhaRMA Notes”) on the Funding Date. These transactions are more fully described in Note 9, Notes Payable, to these condensed consolidated financial statements.

Table of Contents

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, 2017, which was filed with the Securities and Exchange Commission on February 22, 2018 (the "2017 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 presentation of the Company's financial position as of March 31, 2018, and the results of its operations for the three months ended March 31, 2018 and 2017, and its cash flows for the three months ended March 31, 2018 and 2017. The results of operations for the three months ended March 31, 2018 and 2017 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 include the accounts of Ironwood Pharmaceuticals, Inc. and its wholly owned subsidiaries, Ironwood Pharmaceuticals Securities Corporation and Ironwood Pharmaceuticals GmbH. All intercompany transactions and balances are eliminated in consolidation.

Reclassifications and Revisions to Prior Period Financial Statements

Certain prior period financial statement items, such as Sale of Active Pharmaceutical Ingredient and Restricted Cash, have been reclassified to conform to current period presentation.

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 on-going basis, the Company's management evaluates its estimates, judgments and methodologies. Significant estimates and assumptions in the condensed consolidated financial statements include those related to revenue recognition, including returns, rebates, and other pricing adjustments; available-for-sale securities; inventory valuation, and related reserves; impairment of long-lived assets, including its acquired intangible assets and goodwill; initial valuation procedures for the issuance of convertible notes; fair value of derivatives; balance sheet classification of notes payable and convertible notes; income taxes, including the valuation allowance for deferred tax assets; research and development expenses; contingent consideration; contingencies 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 2017 Annual Report on Form 10-K. During the three months ended March 31, 2018, the Company adopted the following additional significant accounting policies:

Revenue Recognition

Effective January 1, 2018, the Company adopted Accounting Standards Codification ("ASC") Topic 606, Revenue from Contracts with Customers ("ASC 606") using the modified retrospective transition method. The adoption of ASC 606 represents a change in accounting principle that aims to more closely align revenue recognition with the

Table of Contents

delivery of the Company's services and will provide financial statement readers with enhanced disclosures. In accordance with ASC 606, the Company recognizes revenue when the customer obtains control of a promised good or service, in an amount that reflects the consideration which the Company expects to receive in exchange for the good or service. The reported results for the three months ended as of March 31, 2018 reflect the application of ASC 606 guidance, while the reported results for prior periods were prepared in accordance with ASC 605, Revenue Recognition ("ASC 605"). Upon adoption of ASC 606, the Company concluded that no cumulative adjustment to the accumulative deficit as of January 1, 2018 was necessary. There were no remaining or ongoing deliverables or unrecognized consideration as of December 31, 2017 that required an adjustment to accumulated deficit. The adoption of ASC 606 had no impact on the Company's statement of operations, balance sheets, or statement of cash flows.

As part of the ASC 606 adoption, the Company has utilized certain practical expedients outlined in the guidance. These practical expedients include:

- Expensing as incurred incremental costs of obtaining a contract, such as sales commissions, if the amortization period of the asset would be less than one year.
- Recognizing revenue in the amount that the Company has the right to invoice, when consideration from the customer corresponds directly with the value to the customer of the Company's performance completed to date.
- For contracts that were modified before the beginning of the earliest reporting period presented in accordance with the pending content that links to this paragraph, an entity need not retrospectively restate the contract for those contract modifications in accordance with paragraphs ASC 606-10-25-12 through 25-13. Instead, an entity shall reflect the aggregate effect of all modifications that occur before the beginning of the earliest period presented in accordance with the pending content that links to this paragraph when: a. Identifying the satisfied and unsatisfied performance obligations b. Determining the transaction price c. Allocating the transaction price to the satisfied and unsatisfied performance obligations.

Prior to the adoption of ASC 606, the Company recognized revenue when there was persuasive evidence that an arrangement existed, services had been rendered or delivery had occurred, the price was fixed or determinable, and collection was reasonably assured.

The Company's revenues are generated primarily through collaborative arrangements and license agreements related to the research and development and commercialization of linaclotide, as well as co-promotion arrangements in the U.S. and product revenue related to the commercial sale of ZURAMPIC and DUZALLO in the U.S. The terms of the collaborative research and development, license, co-promotion and other agreements contain multiple performance obligations which may include (i) licenses, (ii) research and development activities, including participation on joint steering committees, (iii) the manufacture of finished drug product, active pharmaceutical ingredient ("API"), or development materials for a partner, which are reimbursed at a contractually determined rate, and (iv) co-promotion activities by the Company's clinical sales specialists. Non-refundable payments to the Company under these agreements may include (i) up-front license fees, (ii) payments for research and development activities, (iii) payments for the manufacture of finished drug product, API, or development materials, (iv) payments based upon the achievement of certain milestones, (v) payments for sales detailing, promotional support services and medical education initiatives, and (vi) royalties on product sales. Additionally, the Company may receive its share of the net profits or bear its share of the net losses from the sale of linaclotide in the U.S. and for China, Hong Kong and Macau through its collaborations with Allergan and AstraZeneca, respectively. The Company has adopted a policy to recognize revenue net of tax withholdings, as applicable.

Revenue recognition under ASC 606

Upon executing a revenue generating arrangement, the Company assesses whether it is probable the Company will collect consideration in exchange for the good or service it transfers to the customer. To determine revenue recognition for arrangements that the Company determines are within the scope of ASC 606, it performs the following

five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies the performance obligations. The Company must develop

Table of Contents

assumptions that require significant judgment to determine the stand-alone selling price for each performance obligation identified in the contract. The assumptions that are used to determine the stand-alone selling price may include forecasted revenues, development timelines, reimbursement rates for personnel costs, discount rates and probabilities of technical and regulatory success.

Collaboration, License, Co-Promotion and Other Commercial Agreements

Upon licensing intellectual property to a customer, the Company determines if the license is distinct from the other performance obligations identified in the arrangement. The Company recognizes revenues from the transaction price, including non-refundable, up-front fees allocated to the license when the license is transferred to the customer if the license has distinct benefit to the customer. For licenses that are combined with other promises, the Company assesses the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time. For performance obligations that are satisfied over time, the Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

The Company's license and collaboration agreements include milestone payments, such as development and other milestones. The Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price using the most likely amount method at the inception of the agreement. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the control of the Company, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis, for which the Company recognizes revenue as or when the performance obligations under the contract are satisfied. The Company re-evaluates the probability of achievement of such milestones and any related constraint at each reporting period, and any adjustments are recorded on a cumulative catch-up basis.

Agreements that include the supply API or drug product for either clinical development or commercial supply at the customer's discretion are generally considered as options. The Company assesses if these options provide a material right to its partner, and if so, they are accounted for as separate performance obligations. If the Company is entitled to additional payments when the customer exercises these options, any additional payments are recorded as revenue when the customer obtains control of the goods, which is typically upon shipment for sales of API and upon delivery for sales of drug product.

For agreements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue when the related sales occur in accordance with the sales-based royalty exception under ASC 606-10-55-65.

Net Profit or Net Loss Sharing

In accordance with ASC 808 Topic, Collaborative Arrangements ("ASC 808"), the Company considered the nature and contractual terms of the arrangement and the nature of the Company's business operations to determine the classification of payments under the Company's collaboration agreements. While ASC 808 provides guidance on classification, the standard is silent on matters of separation, initial measurement, and recognition. Therefore, the Company, consistent with its accounting policies prior to the adoption of ASC 606, applies the separation, initial measurement, and recognition principles of ASC 606 to its collaboration agreements.

The Company's collaborative arrangements revenues generated from sales of LINZESS in the U.S. are considered akin to sales-based royalties. In accordance with the sales-based royalty exception, the Company recognizes its share of the

pre-tax commercial net profit or net loss generated from the sales of LINZESS in the U.S. in the period the product sales are earned, as reported by Allergan, and related cost of goods sold and selling, general and administrative expenses are incurred by the Company and its collaboration partner. These amounts are partially determined based on amounts provided by Allergan and involve the use of estimates and judgments, such as product sales allowances and accruals related to prompt payment discounts, chargebacks, governmental and contractual rebates, wholesaler fees, product returns, and co-payment assistance costs, which could be adjusted based on actual results in the future. The Company is highly dependent on Allergan for timely and accurate information regarding any net revenues realized from sales of LINZESS in the U.S. in accordance with both ASC 808 and ASC 606, and the costs incurred in

Table of Contents

selling it, in order to accurately report its results of operations. If the Company does not receive timely and accurate information or incorrectly estimates activity levels associated with the collaboration at a given point in time, the Company could be required to record adjustments in future periods.

In accordance with ASC 606-10-55, Principal Agent Considerations, the Company records revenue transactions as net product revenue in its condensed consolidated statements of operations if it is deemed the principal in the transaction, which includes being the primary obligor, retaining inventory risk, and control over pricing. Given that the Company is not the primary obligor and does not have the inventory risks in the collaboration agreement with Allergan for North America, it records its share of the net profits or net losses from the sales of LINZESS in the U.S. on a net basis and presents the settlement payments to and from Allergan as collaboration expense or collaborative arrangements revenue, as applicable. The Company and Allergan settle the cost sharing quarterly, such that the Company’s statement of operations reflects 50% of the pre-tax net profit or loss generated from sales of LINZESS in the U.S.

Product revenue, net

Net product revenue is derived from sales of ZURAMPIC and DUZALLO (“the Lesinurad Products”) in the U.S. The Company sells the Lesinurad Products principally to a limited number of national wholesalers and selected regional wholesalers (the “Distributors”). The Distributors resell the Lesinurad Products to retail pharmacies and healthcare providers, who then sell to patients.

Net product revenue is recognized when the Distributor obtains control of the Company’s product, which occurs at a point in time, typically upon shipment of Lesinurad Products to the Distributor. When the Company performs shipping and handling activities after the transfer of control to the Distributor (e.g., when control transfers prior to delivery), they are considered as fulfillment activities, and accordingly, the costs are accrued for when the related revenue is recognized. The Company expenses incremental costs of obtaining a contract as and when incurred if the expected amortization period of the asset that the Company would have recognized is one year or less.

The Company evaluates the creditworthiness of each of its Distributors to determine whether it is probable that a significant reversal in the amount of the cumulative revenue recognized will not occur. The Company calculates its net product revenue based on the wholesale acquisition cost that the Company charges its Distributors for the Lesinurad Products less variable consideration. The product revenue variable consideration consists of estimates relating to (i) trade discounts and allowances, such as invoice discounts for prompt payment and distributor fees, (ii) estimated government and private payor rebates, chargebacks and discounts, such as Medicaid reimbursements, (iii) reserves for expected product returns and (iv) estimated costs of incentives offered to certain indirect customers including patients. These estimates could be adjusted based on actual results in the period such variances become known.

Trade Discounts and Allowances: The Company generally provides invoice discounts on sales of Lesinurad Products to its Distributors for prompt payment and pays fees for distribution services and for certain data that Distributors provide to the Company. Consistent with historical industry practice, the Company expects its Distributors to earn these discounts and fees, and accordingly deducts the full amount of these discounts and fees from its gross product revenues at the time such revenues are recognized.

Rebates, Chargebacks and Discounts: The Company contracts with Medicaid, other government agencies and various private organizations ("Third-party Payors") to allow for eligible purchases of the Lesinurad Products at partial or full reimbursement from such Third-party Payors. The Company estimates the rebates, chargebacks and discounts it will be obligated to provide to Third-party Payors and deducts these estimated amounts from its gross

product revenue at the time the revenue is recognized. Based upon (i) the Company's contracts with these Third-party Payors, (ii) the government-mandated discounts applicable to government-funded programs, (iii) information obtained from the Company's Distributors and third-parties regarding the payor mix for Lesinurad Products and (iv) historical industry information regarding the payor mix for analog products, the Company estimates the rebates, chargebacks and discounts that it will be obligated to provide to Third-party Payors.

Product Returns: The Company estimates the amount of Lesinurad Products that will be returned and deducts these estimated amounts from its gross revenue at the time the revenue is recognized. The Company's Distributors have the right to return unopened, unprescribed Lesinurad Products beginning six months prior to the labeled expiration date and ending twelve months after the labeled expiration date. The expiration date for the Lesinurad Products is at least 24 months after it has been converted into tablet form, which is the last step in the manufacturing process for Lesinurad

Table of Contents

Products and generally occurs within a few months before Lesinurad Products are delivered to the Company. The Company currently estimates product returns based on data provided to the Company by its Distributors and by other third parties, historical industry information regarding rates for similar pharmaceutical products, the estimated remaining shelf life of the Lesinurad Products previously shipped and currently being shipped to Distributors, and contractual agreements with the Company's Distributors intended to limit the amount of inventory they maintain. Reporting from the Distributors includes Distributor sales and inventory held by Distributors, which provides the Company with visibility into the distribution channel in order to determine which products, if any, were eligible to be returned.

Other Incentives: Incentives that the Company offers include voluntary patient assistance programs, such as co-pay assistance programs which are intended to provide financial assistance to qualified commercially insured patients with prescription drug co-payments required by payors. The calculation of the accrual for co-pay assistance is based on an estimate of claims and the cost per claim that the Company expects to receive associated with product that has been recognized as revenue.

Product revenue is recorded net of the trade discounts, allowances, rebates, chargebacks, discounts, product returns, and other incentives. Certain of these adjustments are recorded as an accounts receivable reserve.

Other

The Company produces linaclotide finished drug product, API and development materials for certain of its partners.

The Company recognizes revenue on linaclotide finished drug product, API and development materials when control have transferred to the partner, which generally occurs upon shipment for sales of API and upon delivery for sales of drug product, after the material has passed all quality testing required for collaborator acceptance. As it relates to development materials and API produced for Astellas, the Company is reimbursed at a contracted rate. Such reimbursements are considered as part of revenue generated pursuant to the Astellas license agreement and are presented as collaborative arrangements revenue. Any linaclotide finished drug product, API and development materials currently produced for Allergan for the U.S. or AstraZeneca for China, Hong Kong and Macau are recognized in accordance with the cost-sharing provisions of the Allergan and AstraZeneca collaboration agreements, respectively.

Revenue recognition prior to the adoption of ASC 606

Agreements Entered into Prior to January 1, 2011

For arrangements that include multiple deliverables and were entered into prior to January 1, 2011, the Company followed the provisions of ASC Topic 605-25, Revenue Recognition—Multiple-Element Arrangements (‘‘ASC 605-25’’), in accounting for these agreements. Under ASC 605 25, the Company was required to identify the deliverables included within the agreement and evaluate which deliverables represent separate units of accounting. Collaborative research and development and licensing agreements that contained multiple deliverables were divided into separate units of accounting when the following criteria were met:

- Delivered element(s) had value to the collaborator on a standalone basis,
- There was objective and reliable evidence of the fair value of the undelivered obligation(s), and
- If the arrangement included a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) was considered probable and substantially within the Company's control.

The Company allocated arrangement consideration among the separate units of accounting either on the basis of each unit's respective fair value or using the residual method, and applied the applicable revenue recognition criteria to each of the separate units. If the separation criteria were not met, revenue of the combined unit of accounting was recorded based on the method appropriate for the last delivered item.

Table of Contents

Agreements Entered into or Materially Modified on or after January 1, 2011 and prior to January 1, 2018

The Company evaluated revenue from multiple element agreements entered into on or after January 1, 2011 under ASU No. 2009 13, Multiple-Deliverable Revenue Arrangements ("ASU 2009 13"), or ASC 605, until the adoption of ASC 606. The Company also evaluated whether amendments to its multiple element arrangements were considered material modifications that were subject to the application of ASU 2009 13. This evaluation required management to assess all relevant facts and circumstances and to make subjective determinations and judgments.

When evaluating multiple element arrangements under ASU 2009 13, the Company considered whether the deliverables under the arrangement represented separate units of accounting. This evaluation required subjective determinations and required management to make judgments about the individual deliverables and whether such deliverables were separable from the other aspects of the contractual relationship. In determining the units of accounting, management evaluated certain criteria, including whether the deliverables had standalone value, based on the consideration of the relevant facts and circumstances for each arrangement. Factors considered in this determination included the research, manufacturing and commercialization capabilities of the partner and the availability of relevant research and manufacturing expertise in the general marketplace. In addition, the Company considered whether the collaborator can use the license or other deliverables for their intended purpose without the receipt of the remaining elements, and whether the value of the deliverable was dependent on the undelivered items and whether there were other vendors that could provide the undelivered items.

The consideration received was allocated among the separate units of accounting using the relative selling price method, and the applicable revenue recognition criteria were applied to each of the separate units.

The Company determined the estimated selling price for deliverables using vendor specific objective evidence ("VSOE") of selling price, if available, third party evidence ("TPE") of selling price if VSOE was not available, or best estimate of selling price ("BESP") if neither VSOE nor TPE was available.

Up Front License Fees prior to January 1, 2018

When management believed the license to its intellectual property had stand-alone value, the Company generally recognized revenue attributed to the license upon delivery. When management believed the license to its intellectual property did not have stand alone value from the other deliverables to be provided in the arrangement, it was combined with other deliverables and the revenue of the combined unit of accounting was recorded based on the method appropriate for the last delivered item.

Milestones prior to January 1, 2018

At the inception of each arrangement that included pre-commercial milestone payments, the Company evaluated whether each pre-commercial milestone was substantive, in accordance with ASU No. 2010-17, Revenue Recognition—Milestone Method ("ASU 2010-17"), prior to the adoption of ASC 606. This evaluation included an assessment of whether (a) the consideration was commensurate with either (1) the entity's performance to achieve the milestone, or (2) the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from the entity's performance to achieve the milestone, (b) the consideration relates solely to past performance and (c) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. The Company evaluated factors such as the scientific, clinical, regulatory, commercial and other risks that must be overcome to achieve the respective milestone, the level of effort and investment required and whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment. At December 31, 2017, the Company had no pre-commercial milestones that were deemed substantive.

Commercial milestones were accounted for as royalties and are recorded as revenue upon achievement of the milestone, assuming all other revenue recognition criteria are met.

Net Profit or Net Loss Sharing prior to January 1, 2018

In accordance with ASC 808 Topic, Collaborative Arrangements, and ASC 605 45, Principal Agent Considerations, the Company considered the nature and contractual terms of the arrangement and the nature of the Company's business operations to determine the classification of the transactions under the Company's collaboration

Table of Contents

agreements. The Company recorded revenue transactions gross in the condensed consolidated statements of operations if it is deemed the principal in the transaction, which includes being the primary obligor and having the risks and rewards of ownership.

The Company recognized its share of the pre tax commercial net profit or net loss generated from the sales of LINZESS in the U.S. in the period the product sales are reported by Allergan and related cost of goods sold and selling, general and administrative expenses are incurred by the Company and its collaboration partner. These amounts were partially determined based on amounts provided by Allergan and involve the use of estimates and judgments, such as product sales allowances and accruals related to prompt payment discounts, chargebacks, governmental and contractual rebates, wholesaler fees, product returns, and co payment assistance costs, which could be adjusted based on actual results. For the periods covered in the condensed consolidated financial statements presented, there have been no material changes to prior period estimates of revenues, cost of goods sold or selling, general and administrative expenses associated with the sales of LINZESS in the U.S.

The Company records its share of the net profits or net losses from the sales of LINZESS in the U.S. on a net basis and presents the settlement payments to and from Allergan as collaboration expense or collaborative arrangements revenue, as applicable, as the Company is not the primary obligor and does not have the risks and rewards of ownership in the collaboration agreement with Allergan for North America. The Company and Allergan settle the cost sharing quarterly, such that the Company’s statement of operations reflects 50% of the pre tax net profit or loss generated from sales of LINZESS in the U.S.

Royalties on Product Sales prior to January 1, 2018

The Company received royalty revenues under certain of the Company’s license or collaboration agreements. The Company recorded these revenues as earned.

Product Revenue, Net prior to January 1, 2018

As noted above, net product revenue is derived from sales of the Lesinurad Products in the U.S.

The Company recognized net product revenue from sales of the Lesinurad Products in accordance with ASC 605, when persuasive evidence of an arrangement exists, delivery has occurred and title of the product and associated risk of loss has passed to the customer, the price is fixed or determinable, and collection from the customer has been reasonably assured. ASC 605 required, among other criteria, that future returns could be reasonably estimated in order to recognize revenue.

The Company began commercializing ZURAMPIC in October 2016 and DUZALLO in October 2017 in the U.S. Initially, upon the product launch of each of the Lesinurad Products, the Company determined that it was not able to reliably make certain estimates, including returns, necessary to recognize product revenue upon delivery to Distributors. As a result, through September 30, 2017, the Company recorded net product revenue for the Lesinurad Products using a deferred revenue recognition model (sell-through). Under the deferred revenue model, the Company did not recognize revenue until the respective product was prescribed to an end-user. Accordingly, the Company recognized net product revenue when the Lesinurad Products were prescribed to the end-user, using estimated prescription demand and pharmacy demand from third party sources and the Company’s analysis of third party market research data, as well as other third-party information through September 30, 2017.

During the three months ended December 31, 2017, the Company concluded it had sufficient volume of historical activity and visibility into the distribution channel, in order to reasonably make all estimates required under ASC 605 to recognize product revenue upon delivery to the Distributor. During the three months and year ended December 31, 2017, product revenue is recognized upon delivery of the Lesinurad Products to the Distributors. The Company evaluated the creditworthiness of each of its Distributors to determine whether revenue can be recognized upon delivery, subject to satisfaction of the other requirements, or whether recognition was required to be delayed until receipt of payment. In order to conclude that the price is fixed or determinable, the Company must be able to (i) calculate its gross product revenue from the sales to Distributors and (ii) reasonably estimate its net product revenue. The Company calculated gross product revenue based on the wholesale acquisition cost that the Company charged its Distributors for ZURAMPIC and DUZALLO. The Company estimated its net product revenue by deducting from its gross product revenue (i) trade discounts and allowances, such as invoice discounts for prompt payment and distributor

Table of Contents

fees, (ii) estimated government and private payor rebates, chargebacks and discounts, such as Medicaid reimbursements, (iii) reserves for expected product returns and (iv) estimated costs of incentives offered to certain indirect customers including patients. These estimates could be adjusted based on actual results in the period such variances become known.

Other

The Company supplies linaclotide finished drug product, API and development materials for certain of its partners.

The Company recognized revenue on linaclotide finished drug product, API and development materials when the material had passed all quality testing required for collaborator acceptance, delivery had occurred, title and risk of loss had transferred to the partner, the price was fixed or determinable, and collection was reasonably assured.

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. Except as set forth below, the Company did not adopt any new accounting pronouncements during the three months ended March 31, 2018 and 2017 that had a material effect on its condensed consolidated financial statements.

In May 2014, the FASB issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers ("ASU 2014-09"), which supersedes the revenue recognition requirements in ASC 605, and most industry-specific guidance. The new standard requires that an entity recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. The update also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017 and should be applied retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying this update recognized at the date of initial application. Early adoption is permitted beginning after December 15, 2016, including interim reporting periods within those years. In April 2016, the FASB issued ASU No. 2016-10, Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing ("ASU 2016-10"), which clarifies certain aspects of identifying performance obligations and licensing implementation guidance. In May 2016, the FASB issued ASU No. 2016-12, Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients ("ASU 2016-12"), related to disclosures of remaining performance obligations, as well as other amendments to guidance on collectability, non-cash consideration and the presentation of sales and other similar taxes collected from customers. These standards have the same effective date and transition date as ASU 2014-09. These standards allow for either a full retrospective or a modified retrospective transition approach. The Company adopted these ASUs using the modified retrospective transition approach effective January 1, 2018. The adoption of these ASUs did not have a material impact on the Company's financial position or results of operations as of and for the three months ended March 31, 2018; however, adoption did result in significant changes to the Company's financial statement disclosures.

In February 2016, the FASB issued ASU No. 2016-02, Leases ("ASU 2016-02"), which supersedes the lease accounting requirements in ASC Topic 840, Leases, and most industry-specific guidance. ASU 2016-02 requires the identification of arrangements that should be accounted for as leases by lessees. In general, for lease arrangements exceeding a 12-month term, these arrangements must now be recognized as assets and liabilities on the balance sheet of the lessee. Under ASU 2016-02, a right-of-use asset and lease obligation will be recorded for all leases, whether operating or financing, while the income statement will reflect lease expense for operating leases and amortization and interest expense for financing leases. The balance sheet amount recorded for existing leases at the date of adoption of ASU 2016-02 must be calculated using the applicable incremental borrowing rate at the date of adoption. In addition, ASU 2016-02 requires the use of modified retrospective method, which will require adjustment to all comparative periods presented in the condensed consolidated financial statements. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. The Company is evaluating the potential impact that the adoption of ASU 2016-02 may have on the Company's financial position and results of operations. The Company's analysis includes, but is not limited to, reviewing existing leases, reviewing other service agreements for embedded leases, evaluating potential system implementations, assessing

Table of Contents

potential disclosures and evaluating the impact of adoption on the Company's condensed consolidated financial statements.

In October 2016, the FASB issued ASU No. 2016-16, Accounting for Income Taxes: Intra-Entity Asset Transfers of Assets Other than Inventory ("ASU 2016-16"). ASU 2016-16 eliminates the ability to defer the tax expense related to intra-entity asset transfers other than Inventory. Under the new standard, entities should recognize the income tax consequences on an intra-entity transfer of an asset other than inventory when the transfer occurs. ASU 2016-16 is effective for fiscal periods beginning after December 15, 2018. Early adoption is permitted. The Company does not expect the adoption of ASU 2016-16 to have a material impact on the Company's financial position or results of operations.

In October 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230) Restricted Cash ("ASU 2016-18"), which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and restricted cash or restricted cash equivalents. Therefore, amounts described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-18 is effective for fiscal years beginning after December 15, 2017, and interim periods within those years. The Company adopted this standard during the three months ended March 31, 2018. Adoption of this standard did not have a material impact on the Company's financial position or results of operations for the three months ended and as of March 31, 2018.

As a result of adopting ASU 2016-18, the Company adjusted the condensed consolidated statements of cash flows from previously reported amounts as follows:

	Three Months Ended March 31, 2017		
	As previously reported	Adjustments	As adjusted
Net change in cash, cash equivalents, and restricted cash	79,315	—	79,315
Cash, cash equivalents, and restricted cash, beginning of period	54,004	8,247	62,251
Cash, cash equivalents, and restricted cash, end of period	$ 133,319	$ 8,247	$ 141,566

In January 2017, the FASB issued ASU No. 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business ("ASU 2017-01"), to clarify the definition of a business by adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions or disposals of assets versus businesses. ASU

2017-01 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company adopted this standard during the three months ended March 31, 2018. The adoption of this standard did not have a material impact on the Company's financial position or results of operations.

In January 2017, the FASB issued ASU No. 2017-04, Intangibles—Goodwill and Other (Topic 350) ("ASU 2017-04") to simplify the accounting for goodwill impairment by removing Step 2 of the goodwill impairment test. ASU 2017-04 is effective for fiscal years beginning after December 15, 2019. Early adoption is permitted. The Company is evaluating the potential impact that the adoption of ASU 2017-04 may have on the Company's financial position and results of operations.

In May 2017, the FASB issued ASU No. 2017-09, Compensation—Stock Compensation (Topic 708) Scope of Modification Accounting ("ASU 2017-09") which provides guidance that clarifies when changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. Adoption of ASU 2017-09 is required for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The Company adopted this standard during the three months ended March 31, 2018. The adoption of this standard did not have a material impact on the Company's financial position and results of operations.

2. Net Loss Per Share

Basic and diluted net loss per common share is computed by dividing net loss by the weighted average number of common shares outstanding during the period.

Table of Contents

In June 2015, in connection with the issuance of approximately $335.7 million in aggregate principal amount of the 2022 Notes, the Company entered into convertible note hedge transactions (the "Convertible Note Hedges"). The Convertible Note Hedges are generally expected to reduce the potential dilution to the Company's Class A common stockholders upon a conversion of the 2022 Notes and/or offset any cash payments the Company is required to make in excess of the principal amount of converted 2022 Notes in the event that the market price per share of the Company's Class A common stock, as measured under the terms of the Convertible Note Hedges, is greater than the conversion price of the 2022 Notes (Note 9). The Convertible Note Hedges are not considered for purposes of calculating the number of diluted weighted average shares outstanding, as their effect would be antidilutive.

Concurrently with entering into the Convertible Note Hedges, the Company also entered into certain warrant transactions in which it sold note hedge warrants (the "Note Hedge Warrants") to the Convertible Note Hedge counterparties to acquire 20,249,665 shares of the Company's Class A common stock, subject to customary anti-dilution adjustments. The Note Hedge Warrants could have a dilutive effect on the Company's Class A common stock to the extent that the market price per share of the Class A common stock exceeds the applicable strike price of such warrants (Note 9). The Note Hedge Warrants are not considered for purposes of calculating the number of diluted weighted averages shares outstanding, as their effect would be antidilutive.

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

	Three Months Ended March 31,	
	2018	2017
Options to purchase common stock	22,973	22,274
Shares subject to repurchase	31	52
Restricted stock units	3,230	2,255
Note hedge warrants	20,250	20,250
2022 Notes	20,250	20,250
	66,734	65,081

An insignificant number of shares issuable under the Company's employee stock purchase plan were excluded from the calculation of diluted weighted average shares outstanding because their effects would be anti-dilutive.

3. Goodwill and Intangible Assets

The Company closed the Lesinurad Transaction on June 2, 2016 (the "Acquisition Date") with AstraZeneca pursuant to which the Company received an exclusive license to develop, manufacture and commercialize in the U.S. products containing lesinurad as an active ingredient, including ZURAMPIC and DUZALLO. In connection with the Lesinurad License, the Company is required to perform certain post-marketing activities required by the FDA. These post-marketing requirements for lesinurad are estimated to be less than $100.0 million over up to ten years from the Acquisition Date.

The Company concluded that the Lesinurad Transaction included inputs and processes that have the ability to create outputs and accordingly accounted for the transaction as a business combination in accordance with ASC 805. As such, the assets acquired and liabilities assumed have been recorded at fair value, with the remaining purchase price recorded as goodwill.

The purchase price consisted of the up-front payment to AstraZeneca of $100.0 million, which was made in June 2016, and the fair value of contingent consideration of approximately $67.9 million. In addition to the up-front payment, the Company will also pay a tiered royalty to AstraZeneca in the single-digits as a percentage of net sales of the Products in the U.S., as well as commercial and other milestones of up to $165.0 million over the duration of the Lesinurad License. During the year ended December 31, 2017, the Company paid a $15.0 million milestone to AstraZeneca related to the approval of DUZALLO by the FDA.

Table of Contents

The final allocation of the purchase price for the Lesinurad Transaction as of the Acquisition Date, including the contingent consideration, is summarized in the following tables (in thousands):

As of the Acquisition Date:	
Cash portion of consideration	$ 100,000
Contingent consideration	67,885
Total purchase consideration	$ 167,885

As of the Acquisition Date:	
Developed technology — ZURAMPIC	$ 22,000
IPR&D — DUZALLO	145,100
Goodwill	785
Net assets acquired	$ 167,885

In August 2017, DUZALLO was approved by the FDA for commercialization in the U.S. As a result, the Company reclassified the IPR&D – DUZALLO asset from indefinite-lived to finite-lived as development activities were completed. The amount allocated to the finite-lived intangible asset, developed technology – DUZALLO, totaled approximately $145.1 million. Developed technology – DUZALLO is being amortized on a straight-line basis to amortization of acquired intangible assets within the Company's condensed consolidated statement of operations over its estimated useful life of approximately 12 years, the period of estimated future cash flows from the approval date. The Company believes that the straight-line method of amortization represents the pattern in which the economic benefits of the asset are consumed. As of March 31, 2018, the Company recognized accumulated amortization of approximately $7.6 million with respect to the developed technology – DUZALLO intangible asset.

The Company considers the developed technology – ZURAMPIC intangible asset acquired to be developed technology, as it was approved by the FDA for commercialization as of the Acquisition Date. The developed technology – ZURAMPIC intangible asset is finite lived. The amount allocated to the developed technology – ZURAMPIC intangible asset is being amortized on a straight-line basis to amortization of acquired intangible assets within the Company's condensed consolidated statements of operations over its estimated useful life of approximately 13 years, the period of estimated future cash flows from the Acquisition Date. The Company believes that the straight-line method of amortization represents the pattern in which the economic benefits of the intangible asset are consumed. As of March 31, 2018, the Company recognized accumulated amortization of approximately $3.1 million with respect to the developed technology – ZURAMPIC intangible asset.

The estimated future amortization of developed technology – ZURAMPIC and developed technology – DUZALLO intangible assets are expected to be as follows (in thousands):

	As of March 31, 2018
2018(1)	$ 10,428
2019	13,905
2020	13,905
2021	13,905
2022 and thereafter	104,286
Total	$ 156,429

(1) For the nine months ending December 31, 2018.

The Company tests its goodwill for impairment annually as of October 1st, or more frequently if events or changes in circumstances indicate an impairment may have occurred. Additionally, the Company evaluates its finite-lived intangible assets for impairment whenever events or changes in circumstances indicate the reduction in the fair value below their respective carrying amounts. In connection with each impairment assessment in which indicators of impairment have been identified, the Company compares the fair value of the asset or asset group as of the date of the assessment with the carrying value of the asset or asset group on the Company's condensed consolidated balance sheet.

Table of Contents

The value of the Company's finite-lived intangible assets are based on the future expected net cash flows related to the Lesinurad Products, which include significant assumptions around future net sales and the respective investment to support these products. The Company believes that the following factors, among others, could trigger an impairment review: significant underperformance relative to historical or projected future operating results; significant changes in the manner of the Company's use of the acquired assets or the strategy for the Company's overall business; approval of competitive products; significant negative industry or economic trends, the Company's ability to establish, maintain and/or expand the sales, marketing, distribution and market-access capabilities, or enter into and maintain agreements necessary for commercialization with payers and third-party providers on acceptable terms. The Company expects the data received in 2018 from the systematic exploration of a more comprehensive marketing mix in select test markets to inform the future investment in the lesinurad franchise. If the estimates and assumptions about these products change significantly, including with respect to their commercial performance, the finite-lived intangible assets may become impaired and the Company may be required to recognize a material write-down in the period in which the impairment occurs. As of March 31, 2018, there was no impairment of goodwill or intangible assets.

4. Collaboration, License, Co-Promotion and Other Commercial Agreements

For the three months ended March 31, 2018, the Company had linaclotide collaboration agreements with Allergan for North America and AstraZeneca for China, Hong Kong and Macau, as well as linaclotide license agreements with Astellas for Japan and with Allergan for the Allergan License Territory. The Company also had agreements with Allergan to co-promote VIBERZI in the U.S. and to promote CANASA in the U.S. The following table provides amounts included in the Company's condensed consolidated statements of operations as collaborative arrangements revenue and sale of API attributable to transactions from these arrangements (in thousands):

	Three Months Ended March 31,	
Collaborative Arrangements Revenue	2018	2017
Linaclotide Agreements:		
Allergan (North America)	$ 61,599	$ 49,951
Allergan (Europe and other)	272	109
AstraZeneca (China, Hong Kong and Macau)	—	208
Co-Promotion and Other Agreements:		
Exact Sciences (Cologuard) (1)	—	1,140
Allergan (VIBERZI)	750	457
Other	465	—
Total collaborative arrangements revenue	$ 63,086	$ 51,865
Sale of API		
Linaclotide Agreements:		
Astellas (Japan)	$ 5,434	$ 12
Total sale of API	$ 5,434	$ 12

(1) In August 2016, the Company terminated the Exact Sciences Co-Promotion Agreement for Cologuard. Under the terms of the agreement, the Company continued to receive royalty payments through July 2017.

Accounts receivable, net and related party accounts receivable, net totaled approximately $70.2 million related to collaborative arrangements revenue and sale of API as of March 31, 2018, net of approximately $2.6 million related to related party accounts payable.

As of March 31, 2018, there were no impairment indicators for the accounts receivable recorded. During the three months ended March 31, 2018, there was no significant unusual activity in accounts receivable.

Linaclotide Agreements

Collaboration Agreement for North America with Allergan

In September 2007, the Company entered into a collaboration agreement with Allergan 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 receives non-refundable, upfront licensing fees and shares equally with

Table of Contents

Allergan all development costs as well as net profits or losses from the development and sale of linaclotide in the U.S. The Company receives royalties in the mid-teens percent based on net sales in Canada and Mexico. Allergan is solely responsible for the further development, regulatory approval and commercialization of linaclotide in those countries and funding any costs. The collaboration agreement for North America also includes contingent milestone payments, as well as a contingent equity investment, based on the achievement of specific development and commercial milestones. At March 31, 2018, $205.0 million in license fees and all six development milestone payments had been received by the Company, as well as a $25.0 million equity investment in the Company's capital stock (Note 11). The Company can also achieve up to $100.0 million in a sales-related milestone if certain conditions are met, which will be recognized as collaborative arrangements revenue when it is probable that a significant reversal of revenue would not occur and the associated constraints have been lifted.

As a result of the research and development cost-sharing provisions of the linaclotide collaboration for North America, the Company recognized approximately $1.4 million and offset approximately $0.4 million in incremental research and development costs during each of the three months ended March 31, 2018 and 2017 to reflect the obligations of each party under the collaboration to bear half of the development costs incurred.

The Company and Allergan 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 Allergan and may include gross sales net of discounts, rebates, allowances, sales taxes, freight and insurance charges, and other applicable deductions. If either party provided fewer calls on physicians in a particular year than it was contractually required to provide, such party's share of the net profits would be adjusted as set forth in the collaboration agreement for North America. During the year ended December 31, 2017, these adjustments to the share of the net profits were reduced or eliminated in connection with the co-promotion activities under the Company's agreement with Allergan to co-promote VIBERZI in the U.S., as described below in Co-Promotion Agreement with Allergan for VIBERZI. Additionally, these adjustments to the share of the net profits are eliminated, in full, in 2018 and all subsequent years under the terms of the Company's commercial agreement with Allergan entered into in January 2017 under which the Company promotes Allergan's CANASA product, as described below in Commercial Agreement with Allergan. In May 2014, CONSTELLA became commercially available in Canada and in June 2014, LINZESS became commercially available in Mexico.

The Company evaluated this collaboration arrangement under ASC 606 and concluded that all development-period performance obligations had been satisfied as of September 2012. However, 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., as well as commercial sales-based milestones 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, commercial sales-based milestones, and net profit and loss sharing payments will be recorded as collaborative arrangements revenue or expense in the period earned, in accordance with the sales-based royalty exception, as these payments relate predominately to the license granted to Allergan. 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 Allergan during the

commercialization period will be recognized as billed in accordance with the right-to-invoice exemption, as the Company's right to consideration corresponds directly with the value of the services transferred during the commercialization period.

The Company recognized collaborative arrangements revenue from the Allergan collaboration agreement for North America during the three months ended March 31, 2018 and 2017 as follows (in thousands):

	Three Months Ended March 31,	
	2018	2017
Collaborative arrangements revenue related to sales of LINZESS in the U.S.	$ 61,150	$ 49,452
Royalty revenue	449	499
Total collaborative arrangements revenue	$ 61,599	$ 49,951

Table of Contents

The collaborative arrangements revenue recognized in the three months ended March 31, 2018 and 2017 primarily represents the Company's share of the net profits and net losses on the sale of LINZESS in the U.S.

The following table presents the amounts recorded by the Company for commercial efforts related to LINZESS in the U.S. in the three months ended March 31, 2018 and 2017 (in thousands):

	Three Months Ended March 31,	
	2018	2017
Collaborative arrangements revenue related to sales of LINZESS in the U.S.(1)(2)	$ 61,150	$ 49,452
Selling, general and administrative costs incurred by the Company(1)	(10,928)	(11,109)
The Company's share of net profit	$ 50,222	$ 38,343

(1) Includes only collaborative arrangement revenue or selling, general and administrative costs attributable to the cost-sharing arrangement with Allergan for the three months ended March 31, 2018 and 2017.

(2) Certain of the unfavorable adjustments to the Company's share of the LINZESS net profits were reduced or eliminated during the three months ended March 31, 2017 in connection with the co-promotion activities under the Company's agreement with Allergan to co-promote VIBERZI in the U.S., as described below in Co-Promotion Agreement with Allergan for VIBERZI.

In May 2014, CONSTELLA became commercially available in Canada and in June 2014, LINZESS became commercially available in Mexico. In October 2015, Almirall and Allergan terminated the sublicense arrangement with respect to Mexico, returning the exclusive rights to commercialize CONSTELLA in Mexico to Allergan. CONSTELLA continues to be available to adult IBS-C patients in Mexico. The Company records royalties on sales of CONSTELLA in Canada and LINZESS in Mexico in the period earned. The Company recognized approximately $0.4 million and approximately $0.5 million of combined royalty revenues from Canada and Mexico during the three months ended March 31, 2018 and 2017, respectively.

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

In April 2009, the Company entered into a license agreement with Almirall (the "European License Agreement") to develop and commercialize linaclotide in Europe (including the Commonwealth of Independent States and Turkey) for the treatment of IBS-C, CIC and other GI conditions. In October 2015, Almirall transferred its exclusive license to develop and commercialize linaclotide in Europe to Allergan. In accordance with the European License Agreement, the Company granted Almirall a right to access its U.S. Phase III clinical trial data for the purposes of supporting European regulatory approval. Additionally, the Company was required to participate on a joint development committee during linaclotide's development period and is required to participate in a joint commercialization committee while linaclotide is commercially available.

Additionally, in October 2015, the Company and Allergan separately entered into an amendment to the European License Agreement relating to the development and commercialization of linaclotide in Europe. Pursuant to the terms of the amendment, (i) certain sales-based milestones payable to the Company under the European License Agreement were modified to increase the total milestone payments such that, when aggregated with certain commercial launch milestones, they could total up to $42.5 million, (ii) the royalties payable to the Company during the term of the European License Agreement were modified such that the royalties based on sales volume in Europe begin in the mid-single digit percent and escalate to the upper-teens percent by calendar year 2019, and (iii) Allergan assumed responsibility for the manufacturing of linaclotide API for Europe from the Company, as well as the associated costs. The Company concluded that the 2015 amendment to the European License Agreement was not a modification to the linaclotide collaboration agreement with Allergan for North America.

In January 2017, concurrently with entering into the commercial agreement as described below in Commercial Agreement with Allergan, the Company and Allergan entered into an amendment to the European License Agreement. The European License Agreement, as amended (the “Allergan License Agreement”), extended the license to develop and commercialize linaclotide in all countries other than China, Hong Kong, Macau, Japan, and the countries and territories of North America. On a country-by-country and product-by-product basis in such additional territory, Allergan is obligated to pay the Company 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

Table of Contents

country, and in the low-double digits thereafter. The royalty rate for products in 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. Allergan is also obligated to assume certain purchase commitments for quantities of linaclotide API under the Company's agreements with third-party API suppliers. The amendment to the European License Agreement did not modify any of the milestones or royalty terms related to Europe.

The Company concluded that the 2017 amendment was a material modification to the European License Agreement; however, this modification did not have a material impact on the Company's condensed consolidated financial statements as there was no deferred revenue associated with the European License Agreement. The Company also concluded that the 2017 amendment to the European License Agreement was not a material modification to the linaclotide collaboration agreement with Allergan for North America. The Company's conclusions on deliverables under ASC Topic 605-25, Revenue Recognition—Multiple-Element Arrangements ("ASC 605-25") are described below in Commercial Agreement with Allergan.

The Company evaluated the European License Agreement under ASC 606. In evaluating the terms of the 2009 European License Agreement under ASC 606, the Company determined that there are no remaining performance obligations as of September 2012. However, the Company continues to be eligible to receive consideration in the form of commercial launch milestones, sales-based milestones, and royalties.

The commercial launch milestones, sales-based milestones and royalties under the European License Agreement have historically been recognized as revenue as earned. Under ASC 606, the Company will apply the sales-based royalty exception to royalties and sales-based milestones, as these payments relate predominantly to the license granted to Allergan (formerly Almirall). Accordingly, the royalties and sales-based milestones will be recorded as revenue in the period earned. The Company records royalties on sales of CONSTELLA in Europe in the period earned based on royalty reports from its partner, if available, or the projected sales and historical trends. The commercial launch milestones will be recognized as revenue when it is probable that a significant reversal of revenue would not occur and the associated constraint has been lifted.

Additionally, the Company evaluated the terms of the January 2017 amendment under ASC 606 and determined that it would be treated as a separate contract given that it adds a distinct good or service at an amount that reflects standalone selling price. The Company determined that all performance obligations in this amendment were satisfied in January 2017 when the license for the additional territory was transferred. The Company continues to receive royalties under this agreement, which are recorded in the period earned pursuant to the sales-based royalty exception, as they related predominantly to the license granted to Allergan.

The Company recognized approximately $0.3 million and an insignificant amount of royalty revenue during the three months ended March 31, 2018 and 2017, respectively.

License Agreement for Japan with Astellas

In November 2009, the Company entered into a license agreement with Astellas, as amended, to develop and commercialize linaclotide for the treatment of IBS C, CIC and other GI conditions in Japan. Astellas is responsible for all activities relating to development, regulatory approval and commercialization in Japan as well as funding the

associated costs and the Company is required to participate on a joint development committee over linaclotide's development period. During the year ended December 31, 2017, the Company and Astellas entered into a commercial API supply agreement (the "Astellas Commercial Supply Agreement"). Pursuant to the Astellas Commercial Supply Agreement, the Company sells linaclotide API supply to Astellas at a contractually defined rate and recognizes related revenue as sale of API. Under the license agreement, the Company receives royalties which escalate based on sales volume, beginning in the low-twenties percent, less the transfer price paid for the API included in the product actually sold and other contractual deductions.

In 2009, Astellas paid the Company a non refundable, up front licensing fee of $30.0 million, which was recognized as collaborative arrangements revenue on a straight line basis over the Company's estimate of the period over which linaclotide was developed under the license agreement in accordance with ASC 605. The development period was completed in December 2016 upon approval of LINZESS by the Japanese Ministry of Health, Labor and Welfare at which point all previously deferred revenue under the agreement was recognized.

Table of Contents

The agreement also includes three development milestone payments that totaled up to $45.0 million, all of which were achieved and recognized as revenue through December 31, 2016 in accordance with ASC 605. The first milestone payment, consisting of $15.0 million upon enrollment of the first study subject in a Phase III study for linaclotide in Japan, was achieved in November 2014. The second milestone payment, consisting of $15.0 million upon filing of a New Drug Application ("NDA") for linaclotide with the Japanese Ministry of Health, Labor and Welfare, was achieved in February 2016. The third development milestone payment consisting of $15.0 million upon approval of an NDA by the Japanese Ministry of Health, Labor and Welfare to market linaclotide in Japan was achieved in December 2016.

The Company has evaluated the terms of the 2009 License Agreement with Astellas under ASC 606 and has determined that there are no remaining performance obligations as of December 2016. However, there continues to be consideration in the form of royalties on sales of LINZESS in Japan under the 2009 License Agreement. Upon adoption of ASC 606, the Company concluded that the royalties on sales of LINZESS in Japan relate predominantly to the license granted to Astellas. Accordingly, the Company applies the sales-based royalty exception and records royalties on sales of LINZESS in Japan in the period earned based on royalty reports from its partner, if available, or the projected sales and historical trends.

Additionally, under the terms of the Astellas Commercial Supply Agreement, the Company continues to have an ongoing performance obligation to supply API. Upon adoption of ASC 606, product revenue is recognized when the customer obtains control of the Company's product, which occurs at a point in time, typically upon shipment of the product to the customer. This results in earlier revenue recognition than the Company's historical accounting.

The royalty on sales of LINZESS in Japan during the three months ended March 31, 2017 relating to the quarters in arrears did not exceed the transfer price of API sold and other contractual deductions during the periods. During the three months ended March 31, 2018 and 2017, the Company recognized approximately $5.4 million and an insignificant amount, respectively, from the sale of API to Astellas under the license agreement and the Astellas Commercial Supply Agreement.

Collaboration Agreement for China, Hong Kong and Macau with AstraZeneca

In October 2012, the Company entered into a collaboration agreement with AstraZeneca (the "AstraZeneca Collaboration Agreement") to co develop and co commercialize linaclotide in China, Hong Kong and Macau (the "License Territory"). The collaboration provides AstraZeneca with an exclusive nontransferable license to exploit the underlying technology in the License Territory. The parties share responsibility for continued development and commercialization of linaclotide under a joint development plan and a joint commercialization plan, respectively, with AstraZeneca having primary responsibility for the local operational execution.

The parties agreed to an Initial Development Plan ("IDP") which includes the planned development of linaclotide in China, including the lead responsibility for each activity and the related internal and external costs. The IDP indicates that AstraZeneca is responsible for a multinational Phase III clinical trial (the "Phase III Trial"), the Company is

responsible for nonclinical development and supplying clinical trial material and both parties are responsible for the regulatory submission process. The IDP indicates that the party specifically designated as being responsible for a particular development activity under the IDP shall implement and conduct such activities. The activities are governed by a Joint Development Committee ("JDC"), with equal representation from each party. The JDC is responsible for approving, by unanimous consent, the joint development plan and development budget, as well as approving protocols for clinical studies, reviewing and commenting on regulatory submissions, and providing an exchange of data and information.

The AstraZeneca Collaboration Agreement will continue until there is no longer a development plan or commercialization plan in place, however, it can be terminated by AstraZeneca at any time upon 180 days' prior written notice. Under certain circumstances, either party may terminate the AstraZeneca Collaboration Agreement in the event of bankruptcy or an uncured material breach of the other party. Upon certain change in control scenarios of AstraZeneca, the Company may elect to terminate the AstraZeneca Collaboration Agreement and may re acquire its product rights in a lump sum payment equal to the fair market value of such product rights.

In connection with the AstraZeneca Collaboration Agreement, the Company and AstraZeneca also executed a co-promotion agreement (the "Co-Promotion Agreement"), pursuant to which the Company utilized its existing sales

Table of Contents

force to co-promote NEXIUM® (esomeprazole magnesium), one of AstraZeneca's products, in the U.S. The Co-Promotion Agreement expired in May 2014.

There are no refund provisions in the AstraZeneca Collaboration Agreement and the Co Promotion Agreement (together, the "AstraZeneca Agreements").

Under the terms of the AstraZeneca Collaboration Agreement, the Company received a $25.0 million non refundable up-front payment upon execution. The Company is also eligible for $125.0 million in additional commercial milestone payments contingent on the achievement of certain sales targets. The parties will also share in the net profits and losses associated with the development and commercialization of linaclotide in the License Territory, with AstraZeneca receiving 55% of the net profits or incurring 55% of the net losses until a certain specified commercial milestone is achieved, at which time profits and losses will be shared equally thereafter.

Activities under the AstraZeneca Agreements were evaluated in accordance with ASC 605-25, to determine if they represented a multiple element revenue arrangement. The Company identified the following deliverables in the AstraZeneca Agreements:

- an exclusive license to develop and commercialize linaclotide in the License Territory (the "License Deliverable") (the deliverable was completed upon execution and all associated revenue was recognized as of December 31, 2016),
- research, development and regulatory services pursuant to the IDP, as modified from time to time (the "R&D Services"),
- JDC services,
- obligation to supply clinical trial material, and
- co promotion services for AstraZeneca's product (the "Co Promotion Deliverable") (the deliverable was completed and all associated revenue was recognized as of December 31, 2013).

Under ASC 605, the License Deliverable is nontransferable and has certain sublicense restrictions. The Company determined that the License Deliverable had standalone value as a result of AstraZeneca's internal product development and commercialization capabilities, which would enable it to use the License Deliverable for its intended purposes without the involvement of the Company. The remaining deliverables were deemed to have standalone value based on their nature and all deliverables met the criteria to be accounted for as separate units of accounting under ASC 605 25. Factors considered in this determination included, among other things, whether any other vendors sell the items separately and if the customer could use the delivered item for its intended purpose without the receipt of the remaining deliverables.

The Company performs R&D Services and JDC services, and supplies clinical trial materials during the estimated development period. All consideration allocated to such services was being recognized as a reduction of research and development costs, using the proportional performance method, by which the amounts are recognized in proportion to the costs incurred in accordance with ASC 605. At the inception of the arrangement, the Company identified the supply of linaclotide drug product for commercial requirements and commercialization services as contingent deliverables under ASC 605 because these services are contingent upon the receipt of regulatory approval to commercialize linaclotide in the License Territory, and there were no binding commitments or firm purchase orders pending for commercial supply at the inception of the AstraZeneca Collaboration Agreement.

In August 2014, the Company and AstraZeneca, through the JDC, modified the IDP and development budget to include approximately $14.0 million in additional activities over the remaining development period, to be shared by

the Company and AstraZeneca under the terms of the AstraZeneca Collaboration Agreement. These additional activities serve to support the continued development of linaclotide in the License Territory, including the Phase III Trial. Pursuant to the terms of the modified IDP and development budget, certain of the Company's deliverables were modified, specifically the R&D Services and the obligation to supply clinical trial material. The modification did not, however, have a material impact on the Company's condensed consolidated financial statements.

Table of Contents

The total amount of the non contingent consideration allocable to the AstraZeneca Agreements was approximately $34.0 million ("Arrangement Consideration") which includes the $25.0 million non refundable up-front payment and approximately $9.0 million representing 55% of the costs for clinical trial material supply services and research, development and regulatory activities allocated to the Company in the IDP or as approved by the JDC in subsequent periods.

The Company allocated the Arrangement Consideration to the non-contingent deliverables based on management's best estimated selling price ("BESP") of each deliverable using the relative selling price method, as the Company did not have vendor-specific objective evidence or third-party evidence of selling price for such deliverables. Of the total Arrangement Consideration, approximately $29.7 million was allocated to the License Deliverable, approximately $1.8 million to the R&D Services, approximately $0.1 million to the JDC services, approximately $0.3 million to the clinical trial material supply services, and approximately $2.1 million to the Co-Promotion Deliverable in the relative selling price model.

Because the Company shares development costs with AstraZeneca, payments from AstraZeneca with respect to both research and development and selling, general and administrative costs incurred by the Company prior to the commercialization of linaclotide in the License Territory are recorded as a reduction in expense, in accordance with the Company's policy, which is consistent with the nature of the cost reimbursement. Development costs incurred by the Company that pertain to the joint development plan and subsequent amendments to the joint development plan, as approved by the JDC, are recorded as research and development expense as incurred. Payments to AstraZeneca are recorded as incremental research and development expense.

In March 2017, the Company began providing supply of linaclotide drug product and certain commercialization-related services pursuant to the AstraZeneca Collaboration Agreement. During the three months ended March 31, 2017, the Company recognized approximately $0.2 million as collaborative arrangements revenue related to linaclotide drug product, as this deliverable was no longer contingent.

Upon the adoption of ASC 606, the Company reevaluated the AstraZeneca Agreements and, consistent with its conclusions under ASC 605, identified six performance obligations including the license, R&D services, JDC services, supply of clinical trial material, co-promotion services for NEXIUM, and the JCC services. The Company determined that the supply of linaclotide drug product for commercial requirements was an optional service at inception of the arrangement and did not provide a material right to AstraZeneca.

At the adoption date, the Company had fully satisfied its obligation to transfer the license and NEXIUM co-promotion services to AstraZeneca. The following remaining performance obligations are ongoing as of the March 31, 2018:

- research, development and regulatory services pursuant to the IDP, as modified from time to time (the R&D Services),
- JDC services, and
- obligation to supply clinical trial material, and
- JCC services

Under ASC 606, the Company applied the contract modification practical expedient to the August 2014 amendment, which expanded the scope of the Company's activities under the IDP and increased the development budget. This practical expedient allows an entity to reflect the aggregate effect of all modifications that occur before the beginning of the earliest period presented. The application of this practical expedient resulted in a total transaction price of approximately $34.0 million, which was allocable to the Company's performance obligations on a relative standalone selling price ("SSP") basis.

Under ASC 606, amounts of consideration allocated to the license and NEXIUM co-promotion services would have been recognized in full prior to adoption as these performance obligations were satisfied in October 2012 and December 2013, respectively. Consideration allocated to the R&D Services will be recognized as such services are provided over the performance period using an output method based on full-time employee hours incurred.

Table of Contents

Consideration allocated to the JDC services are recognized ratably over the development period using a time-based, straight-line attribution model. Revenue from the supply of clinical trial material is recognized as the clinical trial material is delivered to the customer.

Upon commercialization, the Company's only remaining performance obligation will be JCC services. During commercialization, the Company will be entitled to receive sales-based milestone payments from AstraZeneca. Additionally, the parties will share in the net profits and losses associated with the development and commercialization of linaclotide in the License Territory, with AstraZeneca receiving 55% of the net profits or incurring 55% of the net losses until a certain specified commercial milestone is achieved; from that point, profits and losses will be shared equally thereafter. Commercial sales-based milestones and net profit and loss sharing payments will be recorded as collaborative arrangements revenue or expense in the period earned, in accordance with the sales-based royalty exception, as these payments related predominately to the license granted to AstraZeneca. Any cost reimbursements received from AstraZeneca during the commercialization period will be recognized as billed in accordance with the right-to-invoice exemption, as the Company's right to consideration corresponds directly with the value of the services transferred during the commercialization period.

During each of the three months ended March 31, 2018 and 2017, the Company offset an insignificant amount related to R&D Services and JDC services. During the three months ended March 31, 2018 and 2017, the Company recognized no revenue and approximately $0.2 million, related to linaclotide drug product, respectively, as collaborative arrangements revenue.

Co-Promotion and Other Agreements

Co-Promotion Agreement with Exact Sciences Corp. for Cologuard

In March 2015, the Company and Exact Sciences entered into an agreement to co-promote Exact Sciences' Cologuard, the first and only FDA-approved noninvasive stool DNA screening test for colorectal cancer (the "Exact Sciences Co-Promotion Agreement"). The Exact Sciences Co-Promotion Agreement was terminated by the parties in August 2016. Under the terms of the non-exclusive Exact Sciences Co-Promotion Agreement, the Company's sales team promoted and educated health care practitioners regarding Cologuard through July 2016. Exact Sciences maintained responsibility for all other aspects of the commercialization of Cologuard outside of the co-promotion. Under the terms of the Exact Sciences Co-Promotion Agreement, the Company was compensated primarily via royalties earned on the net sales of Cologuard generated from the healthcare practitioners on whom the Company called with such royalties payable through July 2017. There were no refund provisions in the Exact Sciences Co-Promotion Agreement.

During the three months ended March 31, 2017, the Company recognized approximately $1.1 million as collaborative arrangements revenue related to this arrangement in accordance with ASC 605 - 25.

The Company determined that the Exact Sciences Co-Promotion Agreement was completed prior to the adoption of ASC 606 and accordingly did not reevaluate the terms of the agreement.

Agreement with Allergan for VIBERZI

In August 2015, the Company and Allergan entered into an agreement for the co promotion of VIBERZI in the U.S., Allergan's treatment for adults suffering from IBS D (the "VIBERZI Co Promotion Agreement"). Under the terms of the VIBERZI Co Promotion Agreement, the Company's clinical sales specialists detailed VIBERZI to the same health care practitioners to whom they detail LINZESS. Allergan was responsible for all costs and activities relating to the commercialization of VIBERZI outside of the co promotion. The Company's promotional efforts under the non-exclusive co-promotion began when VIBERZI became commercially available in December 2015. The VIBERZI Co-Promotion Agreement was effective through December 31, 2017.

Under the terms of the VIBERZI Co Promotion Agreement, the Company's promotional efforts were compensated based on the volume of calls delivered by the Company's sales force, with the terms of the agreement reducing or eliminating certain of the unfavorable adjustments to the Company's share of net profits stipulated by the linaclotide collaboration agreement with Allergan for North America, provided that the Company provided a minimum number of VIBERZI calls on physicians. The Company provided the minimum number of VIBERZI calls on physicians pursuant to the VIBERZI Co-Promotion Agreement, and was compensated with the elimination of certain of the

Table of Contents

unfavorable adjustments to the Company's share of net profits stipulated by the linaclotide collaboration agreement with Allergan for North America for the years ending December 31, 2015, 2016 and 2017. In connection with these co-promotion activities, the net profit share adjustments payable to Allergan under the linaclotide collaboration agreement for North America were reduced by approximately $1.9 million during the three months ended March 31, 2017. During the three months ended March 31, 2017, the Company recognized approximately $0.5 million in collaborative arrangements revenue related to the VIBERZI Co Promotion Agreement for the performance of medical education services.

In December 2017, the Company and Allergan entered into an amendment to the commercial agreement with Allergan (the "VIBERZI Amendment"), as described below, to include the VIBERZI promotional activities through December 31, 2018. Under the terms of the VIBERZI Amendment, the Company's clinical sales specialists will continue detailing VIBERZI in the second position to the same health care practitioners to whom they detail LINZESS in the first position and provide certain medical education services. The Company has the potential to achieve a milestone payment of up to $7.5 million based on the net sales of VIBERZI during 2018, and will be compensated approximately $3.0 million over the term of the agreement for its medical education initiatives. The Company evaluated the VIBERZI Amendment in accordance with ASC 606 and determined that it would be treated as a separate contract because it adds a distinct good or service at an amount that reflects standalone selling price. The following performance obligations under the VIBERZI Amendment were identified:

- sales detailing of VIBERZI in either first or second position, and
- medical education services

The sales-based milestone payment will be recognized as collaborative arrangements revenue when it is probable that a significant reversal of revenue would not occur and the associated constraint has been lifted. The consideration related to medical education events of approximately $3.0 million will be recognized over the period of performance that medical education services are provided. During the three months ended March 31, 2018, the Company recognized approximately $0.8 million related to VIBERZI.

Commercial Agreement with Allergan

In January 2017, concurrently with entering into the amendment to the European License Agreement, the Company and Allergan entered into an agreement under which the adjustments to the Company's or Allergan's share of the net profits under the share adjustment provision of the collaboration agreement for linaclotide in North America relating to the contractually required calls on physicians in each year are eliminated, in full, in 2018 and all subsequent years (the "Commercial Agreement"). Pursuant to the Commercial Agreement, Allergan appointed the Company, on a non-exclusive basis, to promote CANASA, approved for the treatment of ulcerative proctitis, and DELZICOL, approved for the treatment of ulcerative colitis, in the U.S. for approximately two years through February 2019. Under the terms of the Commercial Agreement, the Company is obligated to perform third position sales details and offer samples of such products to gastroenterology prescribers who are on the then-current call panel for LINZESS to which the Company provides first or second position details. The Company purchases samples of CANASA and DELZICOL from Allergan at the actual manufacturing cost. On a product-by-product basis, Allergan pays the Company a royalty in the mid-teens on incremental sales of CANASA and DELZICOL above a mutually agreed upon sales baseline.

Additionally, the Company may incur a detailing shortfall penalty if it fails to meet the annual target product detail amount in any calendar year.

In December 2017, the Company and Allergan entered into the VIBERZI Amendment to the Commercial Agreement, as described above, to include and extend the VIBERZI promotional activities through December 31, 2018 and discontinue the promotion of DELZICOL effective January 1, 2018. Accordingly, promotional activities for DELZICOL terminated on December 31, 2017 and, subject to the Company's or Allergan's rights of early termination, the promotional activities for CANASA will terminate on February 26, 2019. The share adjustment relief will, in the case of Allergan's termination for convenience and certain other specified circumstances, survive termination of the commercial agreement. Under ASC 605, the Company concluded that the commercial agreement with Allergan, as amended, was not a material modification to the linaclotide collaboration agreement with Allergan for North America.

Activities under the Commercial Agreement with Allergan and the Allergan License Agreement were evaluated in accordance with ASC 605-25 upon execution, as the agreements were entered into concurrently, to determine if they represented a multiple element revenue arrangement.

Table of Contents

The Company identified the following deliverables:

- an exclusive license to develop and commercialize linaclotide in the Allergan License Territory, and
- sales detailing services for CANASA and DELZICOL.

The exclusive license for the Allergan License Territory is nontransferable and has certain sublicense restrictions. The Company determined that Allergan had the internal product development and commercialization capabilities that would enable Allergan to use the license for its intended purposes without the involvement of the Company and, therefore, the license had standalone value. The deliverable for the sales detailing services for CANASA and DELZICOL was deemed to have standalone value based on the nature of the services, and all deliverables met the criteria to be accounted for as separate units of accounting under ASC 605-25. There was no allocable arrangement consideration at the inception of the arrangement, as the consideration is in the form of royalties and the elimination of a contingent liability. During the three months ended March 31, 2017, the Company did not recognize royalty revenue related to the Commercial Agreement with Allergan to promote CANASA and DELZICOL.

Upon adoption of ASC 606, the Company evaluated the commercial agreement and the amendment to the European License Agreement under the contract combination and contract modification guidance in ASC 606. The Company determined that the agreements should be accounted for as separate contracts because each agreement adds distinct goods or services at an amount that reflects standalone selling price. The Company concluded that the CANASA and DELZICOL sales detailing deliverable under ASC 605 was also considered a performance obligation in accordance with ASC 606. Accordingly, the Company records royalties on sales of CANASA and any estimated detailing shortfall penalty over the period of performance for the sales details; collaborative arrangements revenue is recognized when it is probable that a significant reversal of revenue would not occur and the associated constraint has been lifted. The Company estimates sales detailing royalties based on royalty reports from its partner, if available, or the projected sales and historical trends. At the inception of the arrangement, the consideration associated with the agreement comprised of royalties and a sales detailing shortfall penalty are fully constrained. During the three months ended March 31, 2018, the Company did not recognize royalty revenue related to the Commercial Agreement with Allergan for sales of CANASA. As discussed above, the Company’s obligation to perform sales detailing for DELZICOL was eliminated through the VIBERZI Amendment to the Commercial Agreement with Allergan.

The VIBERZI Amendment was effective as of January 1, 2018 and evaluated in accordance with ASC 606 as described above.

Other Collaboration and License Agreements

The Company has other collaboration and license agreements that are not individually significant to its business. Pursuant to the terms of one agreement, the Company may be required to pay $7.5 million for development

milestones, of which, approximately $2.5 million had been paid as of March 31, 2018, and $18.0 million for regulatory milestones, none of which had been paid as of March 31, 2018. In addition, pursuant to the terms of another agreement, the contingent milestones could total up to $114.5 million per product to one of the Company's collaboration partners, including $21.5 million for development milestones, $58.0 million for regulatory milestones and $35.0 million for sales based milestones. Further, under such agreements, the Company is also required to fund certain research activities and, if any product related to these collaborations is approved for marketing, to pay significant royalties on future sales. The Company did not record any research and development expense associated with the Company's other collaboration and license agreements during each of the three months ended March 31, 2018 and 2017.

5. Fair Value of Financial Instruments

The tables below present information about the Company's assets that are measured at fair value on a recurring basis as of March 31, 2018 and December 31, 2017 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.

Table of Contents

The Company's investment portfolio includes 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 also invests in certain reverse repurchase agreements which are collateralized by deposits in the form of 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, 2018	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	$ 71,149	$ 71,149	$ —	$ —
U.S. Treasury securities	7,995	7,995	—	—
Repurchase agreements	66,000	66,000	—	—
Available-for-sale securities:				
U.S. Treasury securities	24,432	24,432	—	—
U.S. government-sponsored securities	25,227	—	25,227	—
Convertible Note Hedges	113,445	—	—	113,445
Total assets measured at fair value	$ 308,248	$ 169,576	$ 25,227	$ 113,445
Liabilities:				
Note Hedge Warrants	$ 96,129	$ —	$ —	$ 96,129
Contingent Consideration	31,744	—	—	31,744
Total liabilities measured at fair value	$ 127,873	$ —	$ —	$ 127,873

32

Table of Contents

		Fair Value Measurements at Reporting Date Using		
	December 31, 2017	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	$ 44,311	$ 44,311	$ —	$ —
U.S. Treasury securities	11,991	11,991	—	—
Repurchase agreements	70,000	70,000	—	—
Available-for-sale securities:				
U.S. Treasury securities	64,343	64,343	—	—
U.S. government-sponsored securities	31,336	—	31,336	—
Convertible Note Hedges	108,188	—	—	108,188
Total assets measured at fair value	$ 330,169	$ 190,645	$ 31,336	$ 108,188
Liabilities:				
Note Hedge Warrants	$ 92,188	$ —	$ —	$ 92,188
Contingent Consideration	31,258	—	—	31,258
Total liabilities measured at fair value	$ 123,446	$ —	$ —	$ 123,446

There were no transfers between fair value measurement levels during the three months ended March 31, 2018 or 2017.

Cash equivalents, accounts receivable, related party accounts receivable, prepaid expenses and other current assets, accounts payable, related party accounts payable, accrued expenses and the current portion of capital lease obligations at March 31, 2018 and December 31, 2017 are carried at amounts that approximate fair value due to their short-term maturities.

The non-current portion of the capital lease obligations at March 31, 2018 approximates fair value as it bears interest at a rate approximating a market interest rate.

Convertible Note Hedges and Note Hedge Warrants

The Company’s Convertible Note Hedges and the Note Hedge Warrants are recorded as derivative assets and liabilities, and are classified as Level 3 under the fair value hierarchy. These derivatives are not actively traded and are

valued using the Black-Scholes option-pricing model which requires the use of subjective assumptions. Significant inputs used to determine the fair value as of March 31, 2018 included the price per share of the Company's Class A common stock, time to maturity of the derivative instruments, the strike prices of the derivative instruments, the risk-free interest rate, and the volatility of the Company's Class A common stock. The Company has not paid and does not anticipate paying cash dividends on its shares of common stock in the foreseeable future; therefore, the expected dividend yield is assumed to be zero. Changes to these inputs could materially affect the valuation of the Convertible Note Hedges and Note Hedge Warrants.

Table of Contents

The following inputs were used in the fair market valuation of the Convertible Note Hedges and Note Hedge Warrants as of March 31, 2018 and December 31, 2017:

	Three Months Ended March 31, 2018		Year Ended December 31, 2017	
	Convertible Note Hedges	Note Hedge Warrants	Convertible Note Hedges	Note Hedge Warrants
Risk-free interest rate (1)	2.5 %	2.6 %	2.1 %	2.2 %
Time to maturity	4.2	4.8	4.5	5.0
Stock price (2)	$ 15.43	$ 15.43	$ 14.99	$ 14.99
Strike price (3)	$ 16.58	$ 21.50	$ 16.58	$ 21.50
Common stock volatility (4)	44.5 %	44.3 %	44.1 %	44.1 %
Dividend yield	— %	— %	— %	— %

(1) Based on U.S. Treasury yield curve, with terms commensurate with the terms of the Convertible Note Hedges and the Note Hedge Warrants.
(2) The closing price of the Company's Class A common stock on the last trading day of the quarter ended March 31, 2018 and December 31, 2017, respectively.
(3) As per the respective agreements for the Convertible Note Hedges and Note Hedge Warrants.
(4) Selected volatility based on historical volatility of the Company's Class A common stock.

The Convertible Note Hedges and the Note Hedge Warrants are recorded at fair value at each reporting period and changes in fair value are recorded in other expense, net within the Company's condensed consolidated statements of operations. Gains and losses for these derivative financial instruments are presented separately in the Company's condensed consolidated statements of cash flows.

The following table reflects the change in the Company's Level 3 convertible note derivatives from December 31, 2017 through March 31, 2018 (in thousands):

	Convertible Note Hedges	Note Hedge Warrants
Balance at December 31, 2017	$ 108,188	$ (92,188)
Change in fair value, recorded as a component of gain (loss) on derivatives	5,257	(3,941)
Balance at March 31, 2018	$ 113,445	$ (96,129)

Contingent Consideration

In connection with the Lesinurad Transaction, the Company recorded a liability of $67.9 million as of the Acquisition Date. This valuation was based on a Monte-Carlo simulation, which includes significant estimates related to probability weighted net cash outflow projections, primarily comprised of estimated future royalty and milestone payments to AstraZeneca, discounted using a yield curve equivalent to the Company's credit risk, which was the estimated cost of debt financing for market participants. Adjustments are recorded when there are changes in significant assumptions, including net sales projections, probability weighted net cash outflow projections, the discount rate, passage of time, and the yield curve equivalent to the Company's credit risk, which is based on the estimated cost of debt for market participants. This estimate represents the probability weighted analysis of expected future milestone and royalty payments based on net sales to be made to AstraZeneca. Changes to these inputs are re-evaluated each reporting period and could materially affect the valuation of the contingent consideration. The estimated fair value of contingent consideration was approximately $31.7 million as of March 31, 2018.

Table of Contents

The following table reflects the change in the Company's Level 3 contingent consideration payable from December 31, 2017 through March 31, 2018 (in thousands):

	Contingent Consideration
Fair Value at December 31, 2017	31,258
Changes in fair value	512
Payments/transfers to accrued expenses and other current liabilities	(26)
Fair value at March 31, 2018	$ 31,744

2.25% Convertible Senior Notes

In June 2015, the Company issued approximately $335.7 million of its 2022 Notes. The Company separately accounted for the liability and equity components of the 2022 Notes by allocating the proceeds between the liability component and equity component (Note 9). The fair value of the 2022 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 2022 Notes observed in market trading, which are Level 2 inputs. The estimated fair value of the 2022 Notes was approximately $395.8 million and approximately $392.8 million as of March 31, 2018 and December 31, 2017, respectively.

8.375% Notes Due 2026

In September 2016, the Company closed a direct private placement pursuant to which the Company issued $150.0 million in aggregate principal amount of the 2026 Notes in January 2017. The estimated fair value of the 2026 Notes was approximately $152.4 million and approximately $152.5 million as of March 31, 2018 and December 31, 2017, respectively. This valuation was calculated using a discounted cash flow estimate of expected interest and principal payments and was determined using Level 3 inputs, including significant estimates related to expected LINZESS sales and a discount rate equivalent to market participant interest rates.

6. Available-for-Sale Securities

The following tables summarize the available-for-sale securities held at March 31, 2018 and December 31, 2017 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
March 31, 2018				
U.S. Treasury securities	$ 24,470	$ —	$ (38)	$ 24,432
U.S. government-sponsored securities	25,280	—	(53)	25,227
Total	$ 49,750	$ —	$ (91)	$ 49,659

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2017				
U.S. Treasury securities	$ 64,378	$ —	$ (35)	$ 64,343
U.S. government-sponsored securities	31,384	—	(47)	31,337
Total	$ 95,762	$ —	$ (82)	$ 95,680

The contractual maturities of all securities held at March 31, 2018 are one year or less. There were 18 and 29 available-for-sale securities in an unrealized loss position at March 31, 2018 and December 31, 2017, respectively, none of which had been in an unrealized loss position for more than twelve months. The aggregate fair value of these securities at March 31, 2018 and December 31, 2017 was approximately $49.7 million and approximately $95.7 million, respectively. The Company reviews its investments for other-than-temporary impairment whenever the fair value of an investment is less than amortized cost and evidence indicates that an investment’s carrying amount is not recoverable within a reasonable period of time. To determine whether an impairment is other-than-temporary, the Company considers whether it has the ability and intent to hold the investment until a market price recovery and considers whether

Table of Contents

evidence indicating the cost of the investment is recoverable outweighs evidence to the contrary. The Company does not intend to sell the investments and it is not more likely than not that the Company will be required to sell the investments before recovery of their amortized cost bases, which may be maturity. The Company did not hold any securities with other-than-temporary impairment at March 31, 2018.

There were no sales of available-for-sale securities during the three months ended March 31, 2018 or 2017. Net unrealized holding gains or losses for the period that have been included in accumulated other comprehensive loss were not material to the Company's condensed consolidated results of operations.

7. Inventory

Inventory consisted of the following (in thousands):

	March 31, 2018	December 31, 2017
Raw Materials	$ 308	$ —
Work in Progress	—	—
Finished Goods	1,397	735
	$ 1,705	$ 735

The Company's inventory represents linaclotide API and drug product and Lesinurad Products finished goods that are available for commercial sale. The Company evaluates inventory levels quarterly and any inventory that has a cost basis in excess of its expected net realizable value, inventory that becomes obsolete, inventory in excess of expected sales requirements, inventory that fails to meet commercial sale specifications or is otherwise impaired is written down with a corresponding charge to the statement of operations in the period that the impairment is first identified.

No such impairments were recorded during the three months ended March 31, 2018 and 2017.

8. Accrued Expenses and Other Current Liabilities

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

	March 31, 2018	December 31, 2017
Salaries	$ 2,042	$ 4,566
Accrued vacation	4,820	4,672
Accrued incentive compensation	5,868	13,403
Other employee benefits	2,445	1,305
Professional fees	2,360	1,261
Accrued interest	2,761	873
Workforce reduction charges	1,161	—
Other	8,688	12,157
	$ 30,145	$ 38,237

As of March 31, 2018, other accrued expenses of approximately $8.7 million includes approximately $2.5 million related to linaclotide excess purchase commitments and approximately $0.2 million related to ZURAMPIC finished goods inventory. As of December 31, 2017, other accrued expenses of approximately $12.2 million included approximately $3.4 million related to linaclotide excess purchase commitments, approximately $1.3 million related to excess non-cancelable ZURAMPIC sample purchase commitments, and approximately $0.2 million related to ZURAMPIC finished goods inventory.

9. Notes Payable

8.375% Notes due 2026

On September 23, 2016, the Company closed a direct private placement, pursuant to which the Company issued $150.0 million in aggregate principal amount of 8.375% notes due 2026 on the Funding Date, January 5, 2017.

36

Table of Contents

The proceeds from the issuance of the 2026 Notes were used to redeem the outstanding principal balance of the PhaRMA Notes on the Funding Date. The Company capitalized approximately $0.5 million of debt issuance costs, which were netted against the carrying value of the 2026 Notes.

The 2026 Notes bear an annual interest rate of 8.375%, with interest payable March 15, June 15, September 15 and December 15 of each year (each an "8.375% Payment Date") which began on June 15, 2017. Principal of the 2026 Notes will be payable on the 8.375% Payment Dates beginning March 15, 2019. From March 15, 2019, the Company will make quarterly payments on the 2026 Notes equal to the greater of (i) 7.5% of net sales of linaclotide in the U.S. for the preceding quarter (the "8.375% Synthetic Royalty Amount") and (ii) accrued and unpaid interest on the 2026 Notes (the "8.375% Required Interest Amount"). Principal on the 2026 Notes will be repaid in an amount equal to the 8.375% Synthetic Royalty Amount minus the 8.375% Required Interest Amount, when this is a positive number, until the principal has been paid in full. Given the principal payments on the 2026 Notes are based on the 8.375% Synthetic Royalty Amount, which will vary from quarter to quarter, the 2026 Notes may be repaid prior to September 15, 2026, the final legal maturity date. The Company expects to pay approximately $12.0 million of the principal within twelve months following March 31, 2018.

The 2026 Notes are secured by a security interest in a segregated bank account established to receive the required quarterly payments as well as certain limited accounts receivables, payment intangibles or other rights to payment or proceeds, in each case, up to the 8.375% Synthetic Royalty Amount or estimated equivalent thereto, as applicable. Up to the amount of the required quarterly payments under the 2026 Notes, Allergan deposits its quarterly profit (loss) sharing payments due to the Company related to net sales of linaclotide in the U.S. pursuant to the collaboration agreement for North America, if any, into the segregated bank account. If the funds deposited by Allergan into the segregated bank account are insufficient to make a required payment of interest or principal on a particular 8.375% Payment Date, the Company is obligated to deposit such shortfall out of the Company's general funds into the segregated bank account.

The 2026 Notes may be redeemed at any time prior to maturity, in whole or in part, at the option of the Company. If the applicable redemption of the 2026 Notes occurs prior to March 15, 2018, the Company will pay a redemption price equal to the outstanding principal balance of the 2026 Notes being redeemed, plus (i) the difference between (A) the required interest amount that would have otherwise been payable from the date of redemption through March 15, 2018 on the outstanding principal balance of the 2026 Notes being redeemed, minus (B) the aggregate amount of interest the purchasers would earn if the outstanding principal balance of the 2026 Notes being redeemed were reinvested for the period from the date of redemption through March 15, 2018 at a rate per annum equal to the yield expressed as a rate listed in The Wall Street Journal for United States Treasury securities having a term of not greater than 12 months on the date three business days prior to the date of redemption, plus (ii) an amount equal to the redemption premium that would otherwise be payable as if such redemption had occurred at March 15, 2018. If the applicable redemption of the 2026 Notes occurs on or after March 15, 2018, the Company will pay a redemption price equal to the percentage of outstanding principal balance of the 2026 Notes being redeemed specified below for the period in which the redemption occurs (plus the accrued and unpaid interest to the redemption date on the 2026 Notes being redeemed):

Payment Dates	Redemption Percentage	
From and including March 15, 2018 to and including March 14, 2019	108.00	%
From and including March 15, 2019 to and including March 14, 2020	105.50	%
From and including March 15, 2020 to and including March 14, 2021	102.75	%
From and including March 15, 2021 and thereafter	100.00	%

The 2026 Notes contain certain covenants related to the Company's obligations with respect to the commercialization of linaclotide and the related collaboration agreement with Allergan for North America, as well as certain customary covenants, including covenants that limit or restrict the Company's ability to incur certain liens, merge or consolidate or make dispositions of assets. The 2026 Notes also specify a number of events of default (some of which are subject to applicable cure periods), including, among other things, covenant defaults, other non-payment defaults, and bankruptcy and insolvency defaults. Upon the occurrence of an event of default, subject to cure periods in certain circumstances, all amounts outstanding may become immediately due and payable.

The accounting for the 2026 Notes requires the Company to make certain estimates and assumptions about the future net sales of linaclotide in the U.S. Linaclotide has been marketed as LINZESS in the U.S. since December 2012 and the estimates of the magnitude and timing of linaclotide net sales are subject to significant variability and uncertainty. These estimates and assumptions are likely to change, which may result in future adjustments to the portion

Table of Contents

of the 2026 Notes that is classified as a current liability, the amortization of debt issuance costs and discounts as well as the accretion of the interest expense. Any such adjustments could be material to the Company's condensed consolidated financial statements.

2.25% Convertible Senior Notes due 2022

In June 2015, the Company issued approximately $335.7 million aggregate principal amount of the 2022 Notes. The Company received net proceeds of approximately $324.0 million from the sale of the 2022 Notes, after deducting fees and expenses of approximately $11.7 million. The Company used approximately $21.1 million of the net proceeds from the sale of the 2022 Notes to pay the net cost of the Convertible Note Hedges (after such cost was partially offset by the proceeds to the Company from the sale of the Note Hedge Warrants), as described below.

The 2022 Notes are governed by an indenture (the "Indenture") between the Company and U.S. Bank National Association, as the trustee. The 2022 Notes are senior unsecured obligations and bear cash interest at the annual rate of 2.25%, payable on June 15 and December 15 of each year, which began on December 15, 2015. The 2022 Notes will mature on June 15, 2022, unless earlier converted or repurchased. The Company may settle conversions of the 2022 Notes through payment or delivery, as the case may be, of cash, shares of Class A common stock of the Company 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 Indenture). The initial conversion rate for the 2022 Notes is 60.3209 shares of Class A common stock (subject to adjustment as provided for in the Indenture) per $1,000 principal amount of the 2022 Notes, which is equal to an initial conversion price of approximately $16.58 per share and 20,249,665 shares. Holders of the 2022 Notes may convert their 2022 Notes at their option at any time prior to the close of business on the business day immediately preceding December 15, 2021 in multiples of $1,000 principal amount, only under the following circumstances:

- during any calendar quarter commencing after the calendar quarter ending on September 30, 2015 (and only during such calendar quarter), if the last reported sale price of the Company's 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 2022 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 the Indenture) per $1,000 principal amount of the 2022 Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's Class A common stock and the conversion rate for the 2022 Notes on each such trading day; or

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

On or after December 15, 2021, until the close of business on the second scheduled trading day immediately preceding June 15, 2022, holders may convert their 2022 Notes, in multiples of $1,000 principal amount, at the option of the holder regardless of the foregoing circumstances.

If a make-whole fundamental change, as described in the Indenture, occurs and a holder elects to convert its 2022 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 Indenture. The Company may not redeem the 2022 Notes prior to the maturity date and no “sinking fund” is provided for by the 2022 Notes, which means that the Company is not required to periodically redeem or retire the 2022 Notes. Upon the occurrence of certain fundamental changes involving the Company, holders of the 2022 Notes may require the Company to repurchase for cash all or part of their 2022 Notes at a repurchase price equal to 100% of the principal amount of the 2022 Notes to be repurchased, plus accrued and unpaid interest.

The Indenture does 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 Indenture provides for customary events of default. In the case of an event of default with respect to the 2022 Notes arising from specified events of bankruptcy or insolvency, all outstanding 2022 Notes will become due and payable immediately without further action or notice. If any other event of default with respect to the 2022 Notes under the Indenture occurs or is continuing, the trustee or holders of at least 25% in aggregate principal amount of the then outstanding 2022 Notes may declare the principal amount of the 2022 Notes to be

Table of Contents

immediately due and payable. Notwithstanding the foregoing, the Indenture provides that, upon the Company's election, and for up to 180 days, the sole remedy for an event of default relating to certain failures by the Company to comply with certain reporting covenants in the Indenture consists exclusively of the right to receive additional interest on the 2022 Notes.

In accordance with accounting guidance for debt with conversion and other options, the Company separately accounted for the liability and equity components of the 2022 Notes by allocating the proceeds between the liability component and the embedded conversion option, or equity component, due to the Company's ability to settle the 2022 Notes in cash, its Class A common stock, or a combination of cash and Class A common stock at the option of the Company. The carrying amount of the liability component was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature. The allocation was performed in a manner that reflected the Company's non-convertible debt borrowing rate for similar debt. The equity component of the 2022 Notes was recognized as a debt discount and represents the difference between the gross proceeds from the issuance of the 2022 Notes and the fair value of the liability of the 2022 Notes on their respective dates of issuance. The excess of the principal amount of the liability component over its carrying amount, or debt discount, is amortized to interest expense using the effective interest method over seven years, or the life of the 2022 Notes. The equity component is not remeasured as long as it continues to meet the conditions for equity classification.

The Company's outstanding Convertible Note balances as of March 31, 2018 and December 31, 2017 consisted of the following (in thousands):

	March 31, 2018	December 31, 2017
Liability component:		
Principal	$ 335,699	$ 335,699
Less: unamortized debt discount	(76,796)	(80,530)
Less: unamortized debt issuance costs	(5,750)	(5,976)
Net carrying amount	$ 253,153	$ 249,193
Equity component	$ 114,199	$ 114,199

In connection with the issuance of the 2022 Notes, the Company incurred approximately $11.7 million of debt issuance costs, which primarily consisted of initial purchasers' discounts and legal and other professional fees. The Company allocated these costs to the liability and equity components based on the allocation of the proceeds. The portion of these costs allocated to the equity components totaling approximately $4.0 million were recorded as a reduction to additional paid-in capital. The portion of these costs allocated to the liability components totaling approximately $7.7 million were recorded as a reduction in the carrying value of the debt on the balance sheet and are amortized to interest expense using the effective interest method over the expected life of the 2022 Notes.

The Company determined the expected life of the 2022 Notes was equal to their seven-year term. The effective interest rate on the liability components of the 2022 Notes for the period from the date of issuance through March 31,

2018 was 9.34%. The following table sets forth total interest expense recognized related to the 2022 Notes during the three months ended March 31, 2018 and 2017 (in thousands):

	Three Months Ended March 31,	
	2018	2017
Contractual interest expense	$ 1,888	$ 1,888
Amortization of debt issuance costs	226	187
Amortization of debt discount	3,734	3,421
Total interest expense	$ 5,848	$ 5,496

Convertible Note Hedge and Warrant Transactions with Respect to 2022 Notes

To minimize the impact of potential dilution to the Company’s Class A common stockholders upon conversion of the 2022 Notes, the Company entered into the Convertible Note Hedges covering 20,249,665 shares of the Company’s Class A common stock in connection with the issuance of the 2022 Notes. The Convertible Note Hedges have an exercise price of approximately $16.58 per share and are exercisable when and if the 2022 Notes are converted. If upon conversion of the 2022 Notes, the price of the Company’s Class A common stock is above the exercise price of

Table of Contents

the Convertible Note Hedges, the counterparties are obligated to deliver shares of the Company's Class A common stock and/or cash with an aggregate value approximately equal to the difference between the price of the Company's Class A common stock at the conversion date and the exercise price, multiplied by the number of shares of the Company's Class A common stock related to the Convertible Note Hedge being exercised.

Concurrently with entering into the Convertible Note Hedges, the Company also sold Note Hedge Warrants to the Convertible Note Hedge counterparties to acquire 20,249,665 shares of the Company's Class A common stock, subject to customary anti-dilution adjustments. The strike price of the Note Hedge Warrants is initially $21.50 per share, subject to adjustment, and such warrants are exercisable over the 150 trading day period beginning on September 15, 2022. The Note Hedge Warrants could have a dilutive effect on the Class A common stock to the extent that the market price per share of the Company's Class A common stock exceeds the applicable strike price of such warrants.

The Convertible Note Hedges and the Note Hedge Warrants are separate transactions entered into by the Company and are not part of the terms of the 2022 Notes. Holders of the 2022 Notes and the Note Hedge Warrants do not have any rights with respect to the Convertible Note Hedges. The Company paid approximately $91.9 million for the Convertible Note Hedges and recorded this amount as a long-term asset on the condensed consolidated balance sheet. The Company received approximately $70.8 million for the Note Hedge Warrants and recorded this amount as a long-term liability, resulting in a net cost to the Company of approximately $21.1 million. The Convertible Note Hedges and Note Hedge Warrants are accounted for as derivative assets and liabilities, respectively, in accordance with ASC Topic 815, "Derivatives and Hedging" (Note 5).

11% PhaRMA Notes due 2024

In January 2013, the Company closed a private placement of $175.0 million in aggregate principal amount of notes due on or before June 15, 2024. The PhaRMA Notes were redeemed at par on the 2026 Notes' Funding Date, January 5, 2017, resulting in a loss on extinguishment of debt related to the write-off of the remaining PhaRMA Notes unamortized debt issuance costs of approximately $2.0 million.

10. Employee Stock Benefit Plans

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

The following table summarizes share-based compensation expense reflected in the condensed consolidated statements of operations for the three months ended March 31, 2018 and 2017 (in thousands):

	Three Months Ended March 31,	
	2018	2017
Research and development	3,322	2,625
Selling, general and administrative	5,721	4,654
	$ 9,043	$ 7,279

During the three months ended March 31, 2018, the Company reduced its field-based workforce by approximately 60 employees, primarily consisting of field-based sales representatives that promoted DUZALLO or ZURAMPIC in the first position, resulting in a modification to certain share-based payment awards. As a result of the

Table of Contents

modification, the Company recorded stock-based compensation expense of approximately $0.2 million to selling, general and administrative expense.

A summary of stock option activity for the three months ended March 31, 2018 is as follows:

	Number of Shares (in thousands)	Weighted-Average Fair Value
Outstanding at December 31, 2017	21,086	$ 12.90
Granted	2,900	14.63
Exercised	(691)	8.97
Cancelled	(322)	15.02
Outstanding at March 31, 2018	22,973	$ 13.21

The weighted-average assumptions used to estimate the fair value of the stock options using the Black-Scholes option-pricing model were as follows for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,	
	2018	2017
Expected volatility	43.6 %	46.0 %
Expected term (in years)	6.0	6.0
Risk-free interest rate	2.7 %	2.0 %
Expected dividend yield	— %	— %

The Company utilizes RSUs in addition to stock options as part of the equity compensation it provides to its employees, each RSU representing the right to receive one share of the Company’s Class A Common Stock pursuant to the terms of the applicable award agreement and granted pursuant to the terms of the Company’s 2010 Equity Plan. The RSUs generally vest 25% per year on the approximate anniversary of the date of grant until fully vested, provided the employee remains continuously employed with the Company through each vesting date. Shares of the Company’s Class A Common Stock are delivered to the employee upon vesting, subject to payment of applicable withholding taxes. The fair value of all RSUs is based on the market value of the Company’s Class A Common Stock on the date of grant. Compensation expense, including the effect of estimated forfeitures, is recognized over the applicable service period.

A summary of RSU activity for the three months ended March 31, 2018 is as follows:

	Number of Shares	Weighted-Average Grant Date Fair Value
Unvested as of December 31, 2017	2,277	$ 15.08
Granted	1,536	$ 14.61
Vested	(464)	$ 15.19
Forfeited	(119)	$ 14.83
Unvested as of March 31, 2018	3,230	$ 14.85

11. Related Party Transactions

In September 2009, Allergan became a related party when the Company sold to Allergan 2,083,333 shares of the Company's convertible preferred stock. Amounts due to and due from Allergan are reflected as related party accounts payable and related party accounts receivable, respectively. These balances are reported net of any balances due to or from the related party. The Company had approximately $65.7 million and approximately $79.0 million in related party accounts receivable, net of related party accounts payable, associated with Allergan as of March 31, 2018 and December 31, 2017, respectively.

The Company has and currently obtains health insurance services for its employees from an insurance provider whose President and Chief Executive Officer became a member of the Company's Board of Directors in April 2016. The Company paid approximately $3.3 million and approximately $3.0 million in insurance premiums to this insurance

Table of Contents

provider during the three months ended March 31, 2018 and 2017, respectively. At March 31, 2018 and December 31, 2017, the Company had no accounts payable due to this related party, respectively.

12. Workforce Reduction

On January 30, 2018, the Company commenced an initiative to evaluate the optimal mix of investments for the lesinurad franchise. As part of this effort, the Company reduced its field-based workforce by approximately 60 employees, primarily consisting of field-based sales representatives that promoted DUZALLO or ZURAMPIC in the first position.

During the three months ended March 31, 2018, the Company substantially completed the implementation of this reduction in field-based workforce and, in accordance with ASC 420, Exit or Disposal Activities, recorded approximately $2.4 million of costs including employee severance, benefits and related costs. These costs are reflected in the condensed consolidated statement of operations as approximately $2.4 million in selling, general and administrative expenses.

The following table summarizes the charges incurred in connection with the reduction in field-based workforce for the three months ended March 31, 2018 (in thousands):

	Charges	Adjustments	Amount Paid	Non-cash Expense	Amounts Accrued at March 31, 2018
Employee severance, benefits and related costs	$ 2,422	$ —	$ (1,067)	$ (194)	$ 1,161
Total	$ 2,422	$ —	$ (1,067)	$ (194)	$ 1,161

13. Subsequent Events

In April 2018, the Company and Allergan entered into a settlement agreement with a generic drug manufacturer, Aurobindo Pharma Ltd. (“Aurobindo”) and its affiliate. Pursuant to the terms of the settlement, the Company and Allergan will grant Aurobindo and its affiliate a license to market a generic version of LINZESS in the U.S. beginning on August 5, 2030 (subject to FDA approval), unless certain limited circumstances, customary for settlement

agreements of this nature, occur.

Table of Contents

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. This discussion contains forward-looking statements that involve significant risks and uncertainties. As a result of many factors, such as those set forth 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 commercial biotechnology company leveraging our proven development and commercial capabilities as we seek to bring multiple medicines to patients. We are advancing innovative product opportunities in areas of large unmet need, based upon our target-to-disease approach to development and leveraging our core areas of expertise in gastrointestinal, or GI, diseases and primary care, as well as in guanylate cyclase, or GC, pathways.

Our first commercial product, linaclotide, is available to adult men and women suffering from irritable bowel syndrome with constipation, or IBS-C, or chronic idiopathic constipation, or CIC, in certain countries around the world. Linaclotide is available under the trademarked name LINZESS® to adult men and women suffering from IBS-C or CIC in the United States, or the U.S. and Mexico, and to adult men and women suffering from IBS-C in Japan. 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 and our partner Allergan plc (together with its affiliates), or Allergan, began commercializing LINZESS in the U.S. in December 2012. Under our collaboration with Allergan for North America, total net sales of LINZESS in the U.S., as recorded by Allergan, are reduced by commercial costs incurred by each party, and the resulting amount is shared equally between us and Allergan. Allergan has an exclusive license from us to develop and commercialize linaclotide in the Allergan License Territory, which is comprised of all countries other than China, Hong Kong, Macau, Japan and the countries and territories of North America. On a country-by-country and product-by-product basis in the Allergan License Territory, Allergan pays us royalties as a percentage of net sales of products containing linaclotide as an active ingredient. In addition, Allergan has exclusive rights to commercialize linaclotide in Canada as CONSTELLA and in Mexico as LINZESS.

Astellas Pharma Inc., or Astellas, our partner in Japan, has an exclusive license to develop and commercialize linaclotide in Japan. In March 2017, Astellas began commercializing LINZESS for the treatment of adults with IBS-C in Japan, and in September 2017, Astellas submitted a supplemental new drug application for approval of LINZESS for the treatment of adult patients with chronic constipation in Japan. In October 2012, we entered into a collaboration agreement with AstraZeneca AB (together with its affiliates), or AstraZeneca, to co-develop and co-commercialize linaclotide in China, Hong Kong and Macau, with AstraZeneca having primary responsibility for the local operational execution. In December 2015, we and AstraZeneca filed for approval with the China Food and Drug Administration, or CFDA, to market linaclotide in China.

Our and Allergan's linaclotide life cycle management strategy in the U.S. includes the objective of strengthening the clinical profile of linaclotide by obtaining additional abdominal symptom claims and expanding the clinical utility of linaclotide by demonstrating the pain-relieving effect of a delayed release formulation, through the advancement of linaclotide delayed release in all forms of IBS. We and Allergan are also continuing 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.

We are also advancing another GI development program, IW-3718, a gastric retentive formulation of a bile acid sequestrant for the potential treatment of uncontrolled gastroesophageal reflux disease, or uncontrolled GERD. Our clinical research has demonstrated that reflux of bile from the intestine into the stomach and esophagus plays a key role in the ongoing symptoms of uncontrolled GERD. IW-3718 is a novel formulation of a bile acid sequestrant designed to release in the stomach over an extended period of time, bind to bile that refluxes into the stomach, and potentially provide symptomatic relief in patients with uncontrolled GERD. In July 2017, we reported positive top-line data from a

Table of Contents

Phase IIb clinical trial evaluating IW-3718 that we believe supports the advancement of this program into Phase III development.

In June 2016, we closed a transaction with AstraZeneca, or the Lesinurad Transaction, pursuant to which we received an exclusive license to develop, manufacture, and commercialize in the U.S. products containing lesinurad as an active ingredient, or the Lesinurad License, including ZURAMPIC® and DUZALLO®. Lesinurad 200mg tablets were approved as ZURAMPIC by the U.S. Food and Drug Administration, or FDA, in December 2015 for use in combination with a xanthine oxidase inhibitor, or XOI, for the treatment of hyperuricemia associated with uncontrolled gout. In October 2016, we began commercializing ZURAMPIC in the U.S. The FDA approved DUZALLO, a fixed-dose combination product of lesinurad and allopurinol, in August 2017 for the treatment of hyperuricemia associated with gout in adults who have not achieved goal serum uric acid levels with a medically appropriate daily dose of allopurinol alone. In October 2017, we began commercializing DUZALLO in the U.S. We have accounted for the Lesinurad Transaction in accordance with Accounting Standards Codification, or ASC, Topic 805, “Business Combinations”, or ASC 805, as the Lesinurad Transaction meets the requirements of a business combination. The transaction is more fully described in Note 3, Goodwill and Intangible Assets, to our condensed consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q. In January 2018, we commenced an initiative to evaluate the optimal mix of investments for our lesinurad franchise for uncontrolled gout, including DUZALLO and ZURAMPIC. As part of this effort, in 2018 we began re-allocating resources within our lesinurad franchise to systematically explore a more comprehensive marketing mix in select test markets (with paired controls), while continuing to build market presence for the lesinurad franchise across the country. We expect the data received in 2018 from these test markets to inform our investment in the lesinurad franchise.

We are also leveraging our pharmacological expertise in GC pathways gained through the discovery and development of linaclotide, a GC-C agonist, to develop a pipeline of soluble guanylate cyclase, or sGC, stimulators including praliciguat (IW-1973) and olinciguat (IW-1701). We are advancing praliciguat, our lead clinical sGC stimulator, for the potential treatment of diabetic nephropathy and the potential treatment of heart failure with preserved ejection fraction, or HFpEF. Data supported the continued advancement of praliciguat for evaluation as a potential treatment for patients with diabetic nephropathy and patients with HFpEF. Our second clinical sGC stimulator, olinciguat, is being evaluated for the potential treatment of sickle cell disease and achalasia.

As part of our strategy, we have also established development and commercial capabilities that we plan to leverage as we seek to bring multiple medicines to patients. We intend to play an active role in the development and commercialization of our products in the U.S., and to establish a strong global brand by out-licensing commercialization rights in other territories to high-performing partners.

In May 2018, we announced the intent, as authorized by our Board of Directors, to separate our sGC business from our commercial and GI business, resulting in two independent, publicly traded companies, Ironwood and a new company, or R&D Co. Following the separation, Ironwood is expected to focus on accelerating growth of its in-market products, including LINZESS, and advance development programs targeting treatments for GI diseases, uncontrolled gout, and abdominal pain. The separated R&D Co. is expected to focus on the sGC pipeline development programs for the treatment of serious and orphan diseases. The separation is expected to be completed in the first half

of 2019 and is anticipated to be tax-free.

In August 2015, we and Allergan entered into an agreement for the co-promotion of VIBERZI® (eluxadoline) in the U.S., Allergan's treatment for adults suffering from IBS with diarrhea, or IBS-D, which expired in December 2017. In January 2017, we and Allergan entered into a commercial agreement under which the adjustments to our or Allergan's share of the net profits under the share adjustment provision of the collaboration agreement for linaclotide in North America are eliminated, in full, in 2018 and all subsequent years. In addition, Allergan appointed us, on a non-exclusive basis, to promote CANASA® (mesalamine), approved for the treatment of ulcerative proctitis, and DELZICOL® (mesalamine), approved for the treatment of ulcerative colitis, in the U.S. for approximately two years. In December 2017, this agreement was amended to include the promotion of VIBERZI through December 31, 2018 and to discontinue the promotion of DELZICOL effective January 1, 2018.These agreements are more fully described in Note 4, Collaboration, License, Co-Promotion and Other Commercial Agreements, to our condensed consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q.

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.

Table of Contents

To date, we have dedicated a majority of our activities to the research, development and commercialization of linaclotide and the commercialization of lesinurad, as well as to the research and development of our other product candidates. We have incurred significant operating losses since our inception in 1998. As of March 31, 2018, we had an accumulated deficit of approximately $1.4 billion. We are unable to predict the extent of any future losses or guarantee when, or if, our company will become cash flow positive.

Financial Overview

Revenues. Our revenues are generated primarily through our collaborative arrangements and license agreements related to research and development and commercialization of linaclotide, as well as co-promotion arrangements in the U.S. and product revenue related to the commercial sale of ZURAMPIC and DUZALLO in the U.S. Effective January 1, 2018, we adopted Accounting Standards Codification, or ASC, Topic 606, Revenue from Contracts with Customers, or ASC 606, using the modified retrospective transition method. The adoption of ASC 606 represents a change in accounting principle that aims to more closely align revenue recognition with the delivery of our services and will provide financial statement readers with enhanced disclosures. In accordance with ASC 606, we recognize revenue when the customer obtains control of a promised good or service, in an amount that reflects the consideration which we expect to receive in exchange for the good or service. The reported results for the three months ended as of March 31, 2018 reflect the application of ASC 606 guidance, while the reported results for prior periods were prepared in accordance with ASC 605, Revenue Recognition, or ASC 605. Upon adoption of ASC 606, we concluded that no cumulative adjustment to the accumulative deficit as of January 1, 2018 was necessary. The adoption of ASC 606 had no impact on our condensed consolidated statement of operations, condensed consolidated balance sheets, or condensed consolidated statement of cash flows.

The terms of the collaborative research and development, license and co-promotion agreements contain multiple performance obligations which may include (i) licenses, (ii) research and development activities, (iii) the manufacture of finished drug product, active pharmaceutical ingredient, or API, or development materials for a partner which are reimbursed at a contractually determined rate, and (iv) co-promotion activities by our clinical sales specialists. Payments to us may include (i) up-front license fees, (ii) payments for research and development activities, (iii) payments for the manufacture of finished drug product, API or development materials, (iv) payments based upon the achievement of certain milestones, (v) payments for sales detailing, promotional support services and medical education initiatives and (vi) royalties on product sales. Additionally, we receive our share of the net profits or bear our share of the net losses from the sale of linaclotide in the U.S. and China.

We record our share of the net profits and losses from the sales of LINZESS in the U.S. on a net basis and present the settlement payments to and from Allergan 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 Allergan 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 or Mexican markets or any other markets where linaclotide receives approval.

Product revenue is recognized when the Distributor obtains control of our product, which occurs at a point in time, typically upon shipment of ZURAMPIC and DUZALLO, or the Lesinurad Products, to the Distributor. When we perform shipping and handling activities after the transfer of control to the Distributor (e.g., when control transfers prior to delivery), they are considered as fulfillment activities, and accordingly, the costs are accrued for when the related revenue is recognized. Taxes collected from Customers relating to product sales and remitted to governmental authorities are excluded from revenues. We expense incremental costs of obtaining contracts with Distributors as and when incurred if the expected amortization period of the asset that we would have recognized is one year or less.

We evaluate the creditworthiness of each of our Distributors to ensure it is probable that a significant reversal in the amount of the cumulative revenue recognized will not occur. We calculate our net product revenue based on the wholesale acquisition cost that we charge our Distributors for the Lesinurad Products less variable consideration. The product revenue variable consideration consists of estimates relating to (i) trade discounts and allowances, such as invoice discounts for prompt payment and distributor fees, (ii) estimated government and private payor rebates, chargebacks and discounts, such as Medicaid reimbursements, (iii) reserves for expected product returns and (iv)

Table of Contents

estimated costs of incentives offered to certain indirect customers including patients. These estimates could be adjusted based on actual results in the period such variances become known.

Cost of Revenues. Cost of revenues includes cost of collaborative arrangements revenue related to the sales of linaclotide API and drug product, as well as the cost of product revenue related to sales of the Lesinurad Products in the U.S. Cost related to the sales of linaclotide API and drug product are recognized upon shipment of linaclotide API and drug product to certain of our partners outside of the U.S. Our cost of collaborative arrangements revenue for linaclotide consists of the internal and external costs of producing such API and drug product for certain of our partners outside of the U.S. Cost of product revenue related to the sales of the Lesinurad Products in the U.S. includes the cost of producing finished goods that correspond with product revenue for the reporting period, such as third-party supply and overhead costs, as well as certain period costs related to freight, packaging, stability and quality testing, and customer acquisition.

Research and Development Expense. Research and development expense consists of expenses incurred in connection with the discovery and development of our 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, as well as licensing fees for our product candidates. We charge all research and development expenses to operations as incurred. Under our linaclotide collaboration agreements with Allergan for the U.S. and AstraZeneca for China, Hong Kong and Macau, we are reimbursed for certain research and development expenses, and we net these reimbursements against our research and development expenses as incurred. Amounts owed to Allergan or AstraZeneca for such linaclotide territories are recorded as incremental research and development expense.

The core of our research and development strategy is to leverage our development capabilities, as well as our pharmacologic expertise, to bring multiple medicines to patients. We are advancing innovative product opportunities in areas of large unmet need, including IBS-C and CIC, abdominal pain associated with lower GI disorders, hyperuricemia associated with uncontrolled gout, uncontrolled GERD, diabetic nephropathy, HFpEF and specialty diseases, including sickle cell disease and achalasia.

Linaclotide. Linaclotide is the first FDA-approved guanylate cyclase type-C, or GC-C, agonist. Linaclotide is approved and commercially available in the U.S., Japan and in a number of E.U. and other countries.

We and Allergan are exploring development opportunities in the U.S. 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 January 2017, the FDA approved a 72 mcg dose of LINZESS for adults with CIC, which became available in the U.S. in March 2017. The 72 mcg dose provides a broader range of treatment options to physicians and adult CIC patients in the U.S.

We and Allergan plan to advance linaclotide delayed release as a visceral, non-opioid, pain-relieving agent for patients suffering from all forms of IBS, and have established a plan with the FDA for clinical pediatric studies with linaclotide, as described below.

Lesinurad. Lesinurad 200mg tablets were approved as ZURAMPIC by the FDA in December 2015. In October 2016, we began commercializing ZURAMPIC in the U.S. The FDA approved DUZALLO, the fixed-dose combination product of lesinurad and allopurinol in August 2017 for the treatment of hyperuricemia associated with gout in patients who have not achieved goal serum uric acid levels with a medically appropriate daily dose of allopurinol alone. In October 2017, we began commercializing DUZALLO in the U.S.

The FDA has required a post-marketing clinical study to further evaluate the renal and cardiovascular safety of lesinurad, and has required that enrollment include patients with moderate renal impairment. The post-marketing requirements for lesinurad are estimated to be less than $100.0 million over up to ten years from June 2, 2016, or the Acquisition Date.

Development Candidates. We are advancing our uncontrolled GERD program through the development of IW-3718, a gastric retentive formulation of a bile acid sequestrant. IW-3718 is designed to release in the stomach over an extended period of time, bind to bile that refluxes into the stomach, and potentially provide symptomatic relief in patients with uncontrolled GERD. In July 2017, we reported positive top-line data from a Phase IIb clinical trial evaluating IW-3718 in adult patients with uncontrolled GERD.

Table of Contents

We are currently progressing praliciguat and olinciguat, our first two sGC stimulator candidates, in clinical development. We believe both product candidates have distinct pharmacologic profiles that may be differentiating and enable opportunities in multiple indications. Praliciguat is being evaluated as a potential treatment for diabetic nephropathy and for HFpEF. Olinciguat is being evaluated as a potential treatment for sickle cell disease and achalasia. Dysregulation of the nitric oxide, or NO, pathway is believed to be linked to multiple vascular and fibrotic diseases.

By boosting NO signaling, praliciguat and olinciguat have the potential to have a multidimensional impact by addressing the underlying causes of diabetic nephropathy, HFpEF, sickle cell disease and achalasia.

We have additional assets in early development that we continue to advance, and we are exploring strategic options for further development of these assets.

Discovery Research. Our discovery efforts are primarily focused on identifying novel clinical candidates that draw on our proprietary and expanding expertise in GI disorders and GC pathways.

The following table sets forth our research and development expenses related to our product pipeline for the three months ended March 31, 2018 and 2017. These expenses relate primarily to internal 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, laboratory supplies and certain other costs directly to programs.

	Three Months Ended March 31,	
	March 31, 2018	2017
	(in thousands)	
Linaclotide(1)	$ 7,291	$ 8,251
Lesinurad(2)	1,947	4,880
Development candidates:		
GI disorders (two compounds)(3)	5,308	5,722
Vascular and fibrotic disorders (two compounds)(3)	13,100	10,005
Central nervous system disorders (one compound)(3)	3,282	30
Total development candidates	21,690	15,757
Discovery research	5,577	4,814
Total research and development expenses	$ 36,505	$ 33,702

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

(2) Includes lesinurad in all indications, populations and formulations.
(3) Number of compounds includes clinical-stage development candidates for the three months ended March 31, 2018.

Since 2004, the date we began tracking costs by program, we have incurred approximately $436.1 million of research and development expenses related to linaclotide. The expenses for linaclotide include both our portion of the research and development costs incurred by Allergan for the U.S. and AstraZeneca for China, Hong Kong and Macau and invoiced to us under the cost-sharing provisions of our collaboration agreements, as well as the unreimbursed portion of research and development costs incurred by us under such cost-sharing provisions.

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.

In connection with the FDA approval of LINZESS, we are required to conduct certain nonclinical and clinical studies, including those aimed at understanding: (a) whether orally administered linaclotide can be detected in breast milk, (b) the potential for antibodies to be developed to linaclotide, and if so, (c) whether antibodies specific for linaclotide could have any therapeutic or safety implications. In addition, we and Allergan established a nonclinical and clinical post-marketing plan with the FDA to understand the efficacy and safety of LINZESS in pediatric patients. We and Allergan have initiated two Phase II clinical pediatric studies in IBS-C patients age seven to 17 and functional constipation patients age six to 17. We and Allergan are also exploring development opportunities 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 October 2012, we entered into a collaboration agreement with AstraZeneca to co-develop

Table of Contents

and co-commercialize linaclotide in China, Hong Kong and Macau, with AstraZeneca having primary responsibility for the local operational execution. 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 other geographic markets within IBS-C and CIC, or in additional indications, populations or formulations.

In December 2015, the FDA approved ZURAMPIC for use in conjunction with an XOI for the treatment of hyperuricemia associated with uncontrolled gout. In connection with the FDA approval, the FDA has required a post-marketing clinical study to further evaluate the renal and cardiovascular safety of lesinurad, and has required that enrollment include patients with moderate renal impairment. These post-marketing requirements are estimated to be less than $100.0 million over up to ten years from the Acquisition Date. The FDA approved DUZALLO, the fixed-dose combination product containing lesinurad and allopurinol, in August 2017 for the treatment of hyperuricemia associated with gout in patients who have not achieved goal serum uric acid levels with a medically appropriate daily dose of allopurinol alone.

We are also advancing other development programs such as IW-3718, targeting uncontrolled GERD, praliciguat targeting diabetic nephropathy and HFpEF, and olinciguat targeting sickle cell disease and achalasia.

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 or lesinurad’s utility will be expanded within their currently approved indications; if or when linaclotide or lesinurad will be developed outside of their current markets, indications, populations or formulations; or when, if ever, 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 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 discovery, 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.

- 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 “Risk Factors” in Item 1A of this Quarterly Report on Form 10-Q, we are unable to determine the duration and costs to complete current or future

Table of Contents

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 our research and development costs will be substantial for the foreseeable future. We will continue to invest in linaclotide and lesinurad, including the investigation of ways to enhance the clinical profile within their currently approved indications, and the exploration of their potential utility in other indications, populations and formulations. We will also invest in our other product candidates as we advance them through nonclinical studies and clinical trials, in addition to funding full-time equivalents for 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 the legal costs of pursuing patent protection of our intellectual property, general and administrative related facility costs, insurance costs and professional fees for accounting and legal services. As we continue to invest in the commercialization of LINZESS, ZURAMPIC and DUZALLO, we expect our selling, general and administrative expenses will be substantial for the foreseeable future. We record all selling, general and administrative expenses as incurred.

Under our AstraZeneca collaboration agreement for linaclotide, we are reimbursed for certain selling, general and administrative expenses and we net these reimbursements against our selling, general and administrative expenses as incurred. We include Allergan'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 Allergan as collaboration expense or collaborative arrangements revenue, respectively.

Amortization of Acquired Intangible Assets. Amortization expense is based on the economic consumption of intangible assets. Our amortization is related to the ZURAMPIC and DUZALLO intangible assets, which is amortized on a straight-line basis over the estimated useful life of the assets. We believe that the straight-line method of amortization represents the pattern in which the economic benefits of the intangible assets are consumed.

(Gain) Loss on Fair Value Remeasurement of Contingent Consideration. Our contingent consideration obligation related to the Lesinurad Transaction consists of the fair value of estimated future milestone and royalty payments. This liability is revalued at each reporting period. Changes in the fair value of our contingent consideration, other than changes due to payments, are recognized as a (gain)/loss on fair value remeasurement of contingent consideration in our condensed consolidated statement of operations. Adjustments are recorded when there are changes in significant assumptions, including net sales projections, probability weighted net cash outflow projections, the discount rate,

passage of time, and the yield curve equivalent to our credit risk, which is based on the estimated cost of debt for market participants.

Other (Expense) Income. Interest expense consists primarily of cash and non-cash interest costs related to the 2022 Notes and the 2026 Notes. Non-cash interest expense consists of amortization of the debt discount and associated debt issuance costs associated with the 2022 Notes and 2026 Notes. We amortize these costs using the effective interest rate method over the life of the respective note agreements as interest expense in our condensed consolidated statements of operations.

Interest income consists of interest earned on our cash, cash equivalents and marketable securities.

In June 2015, in connection with the issuance of the 2022 Notes, we entered into convertible note hedge transactions, or the Convertible Note Hedges. Concurrently with entering into the Convertible Note Hedges, we also entered into certain warrant transactions in which we sold note hedge warrants, or the Note Hedge Warrants, to the Convertible Note Hedge counterparties to acquire 20,249,665 shares of our Class A common stock, subject to customary anti-dilution adjustments. Gain (loss) on derivatives consists of the change in fair value of the Convertible Note Hedges and Note Hedge Warrants, which are recorded as derivative assets and liabilities. The Convertible Note Hedges and the Note Hedge Warrants are recorded at fair value at each reporting period and changes in fair value are recorded in our condensed consolidated statements of operations.

Table of Contents

In September 2016, we closed a direct private placement, pursuant to which we issued $150.0 million in aggregate principal amount of 8.375% notes due 2026 on January 5, 2017, or the Funding Date. The proceeds from the issuance of the 2026 Notes were used to redeem the outstanding principal balance of the PhaRMA Notes on the Funding Date. This transaction is more fully described in Note 9, Notes Payable, to our condensed consolidated financial statements appearing elsewhere in this Quarterly Report on Form 10-Q.

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 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. Significant estimates and assumptions in our condensed consolidated financial statements include those related to revenue recognition including returns, rebates, and other pricing adjustments; available-for-sale securities; inventory valuation, and related reserves; impairment of long-lived assets; including our acquired intangible assets and goodwill; initial valuation procedures for the issuance of convertible notes; fair value of derivatives; balance sheet classification of notes payable and convertible notes; income taxes, including the valuation allowance for deferred tax assets; research and development expenses; contingent consideration; contingencies and share-based compensation. 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.

Except as outlined below, during the three months ended March 31, 2018, there were no material changes to our critical accounting policies as reported in our Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the Securities and Exchange Commission, or SEC, on February 22, 2018, or the 2017 Annual Report on Form 10-K.

Revenue Recognition

Effective January 1, 2018, we adopted ASC Topic 606, Revenue from Contracts with Customers (“ASC 606”) using the modified retrospective transition method. The adoption of ASC 606 represents a change in accounting principle that aims to more closely align revenue recognition with the delivery of our services and will provide financial statement readers with enhanced disclosures. In accordance with ASC 606, we recognize revenue when the customer obtains control of a promised good or service, in an amount that reflects the consideration which we expect to receive in exchange for the good or service. The reported results for the three months ended as of March 31, 2018 reflect the application of ASC 606 guidance, while the reported results for prior periods were prepared in accordance with ASC 605. Upon adoption of ASC 606, we concluded that no cumulative adjustment to the accumulative deficit as of January 1, 2018 was necessary. There were no remaining or ongoing deliverables or unrecognized consideration as of December 31, 2017 that required an adjustment to accumulated deficit. The adoption of ASC 606 had no impact on

our condensed consolidated statement of operations, condensed consolidated balance sheets, or condensed consolidated statement of cash flows.

As part of the ASC 606 adoption, we have utilized certain practical expedients outlined in the guidance. These practical expedients include:

- Expensing as incurred incremental costs of obtaining a contract, such as sales commissions, if the amortization period of the asset would be less than one year.
- Recognizing revenue in the amount that we have the right to invoice, when consideration from the customer corresponds directly with the value to the customer of our performance completed to date.
- For contracts that were modified before the beginning of the earliest reporting period presented in accordance with the pending content that links to this paragraph, an entity need not retrospectively restate the contract for those contract modifications in accordance with paragraphs ASC 606-10-25-12 through 25-13. Instead, an entity shall reflect the aggregate effect of all modifications that occur before the beginning of the earliest period presented in accordance with the pending content that links to this

Table of Contents

paragraph when: a. Identifying the satisfied and unsatisfied performance obligations b. Determining the transaction price c. Allocating the transaction price to the satisfied and unsatisfied performance obligations.
Prior to the adoption of ASC 606, we recognized revenue when there was persuasive evidence that an arrangement existed, services had been rendered or delivery had occurred, the price was fixed or determinable, and collection was reasonably assured.

Our revenues are generated primarily through collaborative arrangements and license agreements related to the research and development and commercialization of linaclotide, as well as co-promotion arrangements in the U.S. and product revenue related to the commercial sale of ZURAMPIC and DUZALLO in the U.S. The terms of the collaborative research and development, license, co-promotion and other agreements contain multiple performance obligations which may include (i) licenses, (ii) research and development activities, including participation on joint steering committees, (iii) the manufacture of finished drug product, API, or development materials for a partner, which are reimbursed at a contractually determined rate, and (iv) co-promotion activities by our clinical sales specialists. Non-refundable payments to us under these agreements may include (i) up-front license fees, (ii) payments for research and development activities, (iii) payments for the manufacture of finished drug product, API, or development materials, (iv) payments based upon the achievement of certain milestones, (v) payments for sales detailing, promotional support services and medical education initiatives, and (vi) royalties on product sales. Additionally, we may receive our share of the net profits or bear our share of the net losses from the sale of linaclotide in the U.S. and for China, Hong Kong and Macau through our collaborations with Allergan and AstraZeneca, respectively. We have adopted a policy to recognize revenue net of tax withholdings, as applicable.

Revenue recognition under ASC 606

Upon executing a revenue generating arrangement, we assess whether it is probable we will collect consideration in exchange for the good or service it transfers to the customer. To determine revenue recognition for arrangements that we determine are within the scope of ASC 606, we perform the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) we satisfy the performance obligations. We must develop assumptions that require significant judgment to determine the stand-alone selling price for each performance obligation identified in the contract. The assumptions that are used to determine the stand-alone selling price may include forecasted revenues, development timelines, reimbursement rates for personnel costs, discount rates and probabilities of technical and regulatory success.

Collaboration, License, Co-Promotion and Other Commercial Agreements

Upon licensing intellectual property, we determine if the license is distinct from the other performance obligations identified in the arrangement. We recognize revenues from the transaction price, including non-refundable, up-front fees allocated to the license when the license is transferred to the customer if the license has distinct benefit to the customer. For licenses that are combined with other promises, we assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time. For performance obligations that are satisfied over time, we evaluate the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition.

Our license and collaboration agreements include milestone payments, such as development and other milestones. We evaluate whether the milestones are considered probable of being reached and estimate the amount to be included in the transaction price using the most likely amount method at the inception of the agreement. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our control, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation on

a relative stand-alone selling price basis, for which we recognize revenue as or when the performance obligations under the contract are satisfied. We re-evaluate the probability of achievement of such milestones and any related constraint at each reporting period, and any adjustments are recorded on a cumulative catch-up basis.

Agreements that include the supply API or drug product for either clinical development or commercial supply at the customer’s discretion are generally considered as options. We assess if these options provide a material right to its

Table of Contents

partner, and if so, they are accounted for as separate performance obligations. If we are entitled to additional payments when the customer exercises these options, any additional payments are recorded as revenue when the customer obtains control of the goods, which is typically upon shipment for sales of API and upon delivery for sales of drug product.

For agreements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, we recognize revenue when the related sales occur in accordance with the sales-based royalty exception under ASC 606-10-55-65.

Net Profit or Net Loss Sharing

In accordance with ASC 808 Topic, Collaborative Arrangements ("ASC 808"), we considered the nature and contractual terms of the arrangement and the nature of our business operations to determine the classification of payments under our collaboration agreements. While ASC 808 provides guidance on classification, the standard is silent on matters of separation, initial measurement, and recognition. Therefore, we, consistent with our accounting policies prior to the adoption of ASC 606, apply the separation, initial measurement, and recognition principles of ASC 606 to our collaboration agreements.

Our collaborative arrangements revenue generated from sales of LINZESS in the U.S. are considered akin to sales-based royalties. In accordance with the sales-based royalty exception, we recognize our share of the pre-tax commercial net profit or net loss generated from the sales of LINZESS in the U.S. in the period the product sales are earned, as reported by Allergan, and related cost of goods sold and selling, general and administrative expenses are incurred by us and our collaboration partner. These amounts are partially determined based on amounts provided by Allergan and involve the use of estimates and judgments, such as product sales allowances and accruals related to prompt payment discounts, chargebacks, governmental and contractual rebates, wholesaler fees, product returns, and co-payment assistance costs, which could be adjusted based on actual results in the future. We are highly dependent on Allergan for timely and accurate information regarding any net revenues realized from sales of LINZESS in the U.S. in accordance with both ASC 808 and ASC 606, and the costs incurred in selling it, in order to accurately report its results of operations. If we do not receive timely and accurate information or incorrectly estimate activity levels associated with the collaboration at a given point in time, we could be required to record adjustments in future periods.

In accordance with ASC 606-10-55, Principal Agent Considerations, we record revenue transactions as net product revenue in our condensed consolidated statements of operations if it is deemed the principal in the transaction, which includes being the primary obligor, retaining inventory risk, and control over pricing. Given that we are not the primary obligor and do not have the inventory risks in the collaboration agreement with Allergan for North America, we record our share of the net profits or net losses from the sales of LINZESS in the U.S. on a net basis and presents the settlement payments to and from Allergan as collaboration expense or collaborative arrangements revenue, as applicable. We and Allergan settle the cost sharing quarterly, such that our statement of operations reflects 50% of the pre-tax net profit or loss generated from sales of LINZESS in the U.S.

Product revenue, net

Net product revenue is derived from sales of the Lesinurad Products in the U.S. We sell the Lesinurad Products principally to a limited number of national wholesalers and selected regional wholesalers (the "Distributors"). The Distributors resell the Lesinurad Products to retail pharmacies and healthcare providers, who then sell to patients.

Net product revenue is recognized when the Distributor obtains control of our product, which occurs at a point in time, typically upon shipment of Lesinurad Products to the Distributor. When we perform shipping and handling activities after the transfer of control to the Distributor (e.g., when control transfers prior to delivery), they are considered as

fulfillment activities, and accordingly, the costs are accrued for when the related revenue is recognized. We expense incremental costs of obtaining a contract as and when incurred if the expected amortization period of the asset that we would have recognized is one year or less.

We evaluate the creditworthiness of each of its Distributors to determine whether it is probable that a significant reversal in the amount of the cumulative revenue recognized will not occur. We calculate our net product revenue based on the wholesale acquisition cost that we charge our Distributors for the Lesinurad Products less variable consideration. The product revenue variable consideration consists of estimates relating to (i) trade discounts and allowances, such as invoice discounts for prompt payment and distributor fees, (ii) estimated government and private payor rebates,

Table of Contents

chargebacks and discounts, such as Medicaid reimbursements, (iii) reserves for expected product returns and (iv) estimated costs of incentives offered to certain indirect customers including patients. These estimates could be adjusted based on actual results in the period such variances become known.

Trade Discounts and Allowances: We generally provide invoice discounts on sales of Lesinurad Products to our Distributors for prompt payment and pay fees for distribution services and for certain data that Distributors provide to us. Consistent with historical industry practice, we expect our Distributors to earn these discounts and fees, and accordingly deducts the full amount of these discounts and fees from our gross product revenues at the time such revenues are recognized.

Rebates, Chargebacks and Discounts: We contract with Medicaid, other government agencies and various private organizations ("Third-party Payors") to allow for eligible purchases of the Lesinurad Products at partial or full reimbursement from such Third-party Payors. We estimate the rebates, chargebacks and discounts we will be obligated to provide to Third-party Payors and deduct these estimated amounts from our gross product revenue at the time the revenue is recognized. Based upon (i) our contracts with these Third-party Payors, (ii) the government-mandated discounts applicable to government-funded programs, (iii) information obtained from our Distributors and third-parties regarding the payor mix for Lesinurad Products and (iv) historical industry information regarding the payor mix for analog products, we estimate the rebates, chargebacks and discounts that we will be obligated to provide to Third-party Payors.

Product Returns: We estimate the amount of Lesinurad Products that will be returned and deduct these estimated amounts from our gross revenue at the time the revenue is recognized. Our Distributors have the right to return unopened, unprescribed Lesinurad Products beginning six months prior to the labeled expiration date and ending twelve months after the labeled expiration date. The expiration date for the Lesinurad Products is at least 24 months after it has been converted into tablet form, which is the last step in the manufacturing process for Lesinurad Products and generally occurs within a few months before Lesinurad Products are delivered to us. We currently estimate product returns based on data provided to us by our Distributors and by other third parties, historical industry information regarding rates for similar pharmaceutical products, the estimated remaining shelf life of the Lesinurad Products previously shipped and currently being shipped to Distributors, and contractual agreements with our Distributors intended to limit the amount of inventory they maintain. Reporting from the Distributors includes Distributor sales and inventory held by Distributors, which provides us with visibility into the distribution channel in order to determine which products, if any, were eligible to be returned.

Other Incentives: Incentives that we offer include voluntary patient assistance programs, such as co-pay assistance programs which are intended to provide financial assistance to qualified commercially insured patients with prescription drug co-payments required by payors. The calculation of the accrual for co-pay assistance is based on an estimate of claims and the cost per claim that we expect to receive associated with product that has been recognized as revenue.

Product revenue is recorded net of the trade discounts, allowances, rebates, chargebacks, discounts, product returns, and other incentives. Certain of these adjustments are recorded as an accounts receivable reserve.

Other

We produce linaclotide finished drug product, API and development materials for certain of our partners.

We recognize revenue on linaclotide finished drug product, API and development materials when control has transferred to the partner, which generally occurs upon shipment for sales of API and upon delivery for drug product, after the material has passed all quality testing required for collaborator acceptance. As it relates to development materials and API produced for Astellas, we are reimbursed at a contracted rate. Such reimbursements are considered as part of revenue generated pursuant to the Astellas license agreement and are presented as collaborative arrangements revenue. Any linaclotide finished drug product, API and development materials currently produced for Allergan for the U.S. or AstraZeneca for China, Hong Kong and Macau are recognized in accordance with the cost-sharing provisions of the Allergan and AstraZeneca collaboration agreements, respectively.

Table of Contents

Revenue recognition prior to the adoption of ASC 606

Agreements Entered into Prior to January 1, 2011

For arrangements that include multiple deliverables and were entered into prior to January 1, 2011, we followed the provisions of ASC Topic 605-25, Revenue Recognition—Multiple-Element Arrangements, or ASC 605-25, in accounting for these agreements. Under ASC 605 25, we were required to identify the deliverables included within the agreement and evaluate which deliverables represent separate units of accounting. Collaborative research and development and licensing agreements that contained multiple deliverables were divided into separate units of accounting when the following criteria were met:

- Delivered element(s) had value to the collaborator on a standalone basis,
- There was objective and reliable evidence of the fair value of the undelivered obligation(s), and
- If the arrangement included a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) was considered probable and substantially within our control.

We allocated arrangement consideration among the separate units of accounting either on the basis of each unit's respective fair value or using the residual method, and applied the applicable revenue recognition criteria to each of the separate units. If the separation criteria were not met, revenue of the combined unit of accounting was recorded based on the method appropriate for the last delivered item.

Agreements Entered into or Materially Modified on or after January 1, 2011 and prior to January 1, 2018

We evaluated revenue from multiple element agreements entered into on or after January 1, 2011 under ASU No. 2009 13, Multiple-Deliverable Revenue Arrangements ("ASU 2009 13"), or ASC 605, until the adoption of ASC 606. We also evaluated whether amendments to its multiple element arrangements were considered material modifications that were subject to the application of ASU 2009 13. This evaluation required management to assess all relevant facts and circumstances and to make subjective determinations and judgments.

When evaluating multiple element arrangements under ASU 2009 13, we considered whether the deliverables under the arrangement represented separate units of accounting. This evaluation required subjective determinations and required management to make judgments about the individual deliverables and whether such deliverables were separable from the other aspects of the contractual relationship. In determining the units of accounting, management evaluated certain criteria, including whether the deliverables had standalone value, based on the consideration of the relevant facts and circumstances for each arrangement. Factors considered in this determination included the research, manufacturing and commercialization capabilities of the partner and the availability of relevant research and manufacturing expertise in the general marketplace. In addition, we considered whether the collaborator can use the license or other deliverables for their intended purpose without the receipt of the remaining elements, and whether the value of the deliverable was dependent on the undelivered items and whether there were other vendors that could provide the undelivered items.

The consideration received was allocated among the separate units of accounting using the relative selling price method, and the applicable revenue recognition criteria were applied to each of the separate units.

We determined the estimated selling price for deliverables using vendor specific objective evidence ("VSOE") of selling price, if available, third party evidence ("TPE") of selling price if VSOE was not available, or best estimate of selling price ("BESP") if neither VSOE nor TPE was available.

Up Front License Fees prior to January 1, 2018

When management believed the license to its intellectual property had stand-alone value, we generally recognized revenue attributed to the license upon delivery. When management believed the license to its intellectual property did not have stand alone value from the other deliverables to be provided in the arrangement, it was combined with other deliverables and the revenue of the combined unit of accounting was recorded based on the method appropriate for the last delivered item.

Table of Contents

Milestones prior to January 1, 2018

At the inception of each arrangement that included pre-commercial milestone payments, we evaluated whether each pre-commercial milestone was substantive, in accordance with ASU No. 2010-17, Revenue Recognition—Milestone Method ("ASU 2010-17"), prior to the adoption of ASC 606. This evaluation included an assessment of whether (a) the consideration was commensurate with either (1) the entity's performance to achieve the milestone, or (2) the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from the entity's performance to achieve the milestone, (b) the consideration relates solely to past performance and (c) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. We evaluated factors such as the scientific, clinical, regulatory, commercial and other risks that must be overcome to achieve the respective milestone, the level of effort and investment required and whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment. At December 31, 2017, we had no pre-commercial milestones that were deemed substantive.

Commercial milestones were accounted for as royalties and are recorded as revenue upon achievement of the milestone, assuming all other revenue recognition criteria are met.

Net Profit or Net Loss Sharing prior to January 1, 2018

In accordance with ASC 808 Topic, Collaborative Arrangements, and ASC 605 45, Principal Agent Considerations, we considered the nature and contractual terms of the arrangement and the nature of our business operations to determine the classification of the transactions under our collaboration agreements. We recorded revenue transactions gross in the condensed consolidated statements of operations if it is deemed the principal in the transaction, which includes being the primary obligor and having the risks and rewards of ownership.

We recognized our share of the pre tax commercial net profit or net loss generated from the sales of LINZESS in the U.S. in the period the product sales are reported by Allergan and related cost of goods sold and selling, general and administrative expenses are incurred by us and our collaboration partner. These amounts were partially determined based on amounts provided by Allergan and involve the use of estimates and judgments, such as product sales allowances and accruals related to prompt payment discounts, chargebacks, governmental and contractual rebates, wholesaler fees, product returns, and co payment assistance costs, which could be adjusted based on actual results. For the periods covered in the condensed consolidated financial statements presented, there have been no material changes to prior period estimates of revenues, cost of goods sold or selling, general and administrative expenses associated with the sales of LINZESS in the U.S.

We record our share of the net profits or net losses from the sales of LINZESS in the U.S. on a net basis and present the settlement payments to and from Allergan as collaboration expense or collaborative arrangements revenue, as applicable, as we are not the primary obligor and do not have the risks and rewards of ownership in the collaboration agreement with Allergan for North America. We and Allergan settle the cost sharing quarterly, such that our statement of operations reflects 50% of the pre tax net profit or loss generated from sales of LINZESS in the U.S.

Royalties on Product Sales prior to January 1, 2018

We received royalty revenues under certain of the Company's license or collaboration agreements. We recorded these revenues as earned.

Product Revenue, Net prior to January 1, 2018

As noted above, net product revenue is derived from sales of the Lesinurad Products in the U.S.

We recognized net product revenue from sales of the Lesinurad Products in accordance with ASC 605, when persuasive evidence of an arrangement exists, delivery has occurred and title of the product and associated risk of loss has passed to the customer, the price is fixed or determinable, and collection from the customer has been reasonably assured. ASC 605 required, among other criteria, that future returns could be reasonably estimated in order to recognize revenue.

Table of Contents

We began commercializing ZURAMPIC in October 2016 and DUZALLO in October 2017 in the U.S. Initially, upon the product launch of each of the Lesinurad Products, we determined that it was not able to reliably make certain estimates, including returns, necessary to recognize product revenue upon delivery to Distributors. As a result, through September 30, 2017, we recorded net product revenue for the Lesinurad Products using a deferred revenue recognition model (sell-through). Under the deferred revenue model, we did not recognize revenue until the respective product was prescribed to an end-user. Accordingly, we recognized net product revenue when the Lesinurad Products were prescribed to the end-user, using estimated prescription demand and pharmacy demand from third party sources and the Company's analysis of third party market research data, as well as other third-party information through September 30, 2017.

During the three months ended December 31, 2017, we concluded we had sufficient volume of historical activity and visibility into the distribution channel, in order to reasonably make all estimates required under ASC 605 to recognize product revenue upon delivery to the Distributor. During the three months and year ended December 31, 2017, product revenue is recognized upon delivery of the Lesinurad Products to the Distributors. We evaluated the creditworthiness of each of its Distributors to determine whether revenue can be recognized upon delivery, subject to satisfaction of the other requirements, or whether recognition was required to be delayed until receipt of payment. In order to conclude that the price is fixed or determinable, we must be able to (i) calculate our gross product revenue from the sales to Distributors and (ii) reasonably estimate our net product revenue. We calculated gross product revenue based on the wholesale acquisition cost that the Company charged its Distributors for ZURAMPIC and DUZALLO. We estimated its net product revenue by deducting from our gross product revenue (i) trade discounts and allowances, such as invoice discounts for prompt payment and distributor fees, (ii) estimated government and private payor rebates, chargebacks and discounts, such as Medicaid reimbursements, (iii) reserves for expected product returns and (iv) estimated costs of incentives offered to certain indirect customers including patients. These estimates could be adjusted based on actual results in the period such variances become known.

Other

We supply linaclotide finished drug product, API and development materials for certain of our partners.

We recognized revenue on linaclotide finished drug product, API and development materials when the material had passed all quality testing required for collaborator acceptance, delivery had occurred, title and risk of loss had transferred to the partner, the price was fixed or determinable, and collection was reasonably assured.

Table of Contents

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,	
	2018	2017
	(in thousands)	
Revenues:		
Collaborative arrangements revenue	$ 63,086	$ 51,865
Product revenue, net	635	289
Sale of active pharmaceutical ingredient	5,434	12
Total revenues	69,155	52,166
Cost and expenses:		
Cost of revenues, excluding amortization of acquired intangible assets	2,607	531
Research and development	36,505	33,702
Selling, general and administrative	61,923	55,604
Amortization of acquired intangible assets	3,476	420
Loss on fair value remeasurement of contingent consideration	512	1,614
Total cost and expenses	105,023	91,871
Loss from operations	(35,868)	(39,705)
Other (expense) income:		
Interest expense	(9,273)	(8,983)
Interest and investment income	681	395
Gain (loss) on derivatives	1,316	(2,199)
Loss on extinguishment of debt	—	(2,009)
Other expense, net	(7,276)	(12,796)
Net loss	$ (43,144)	$ (52,501)

Three Months Ended March 31, 2018 Compared to Three Months Ended March 31, 2017

Revenues

	Three Months Ended March 31,		Change	
	2018	2017	$	%
	(dollars in thousands)			

Revenues:					
Collaborative arrangements revenue	$ 63,086	$ 51,865	$ 11,221	22	%
Product revenue, net	635	289	346	120	%
Sale of active pharmaceutical ingredient	5,434	12	5,422	45,183	%
Total revenues	$ 69,155	52,166	16,989	33	%

Collaborative Arrangements Revenue. The increase in revenue from collaborative arrangements of approximately $11.2 million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017 was primarily related to an approximately $11.7 million increase in our share of the net profits from the sale of LINZESS in the U.S. driven by increased prescription demand; and an approximately $0.6 million increase in royalty payments. The increases were partially offset by an approximately $1.1 million decrease attributable to the decrease in revenue under the Cologuard Co-Promotion Agreement with Exact Sciences due to the end of the royalty period.

Product Revenue, net. The increase in net product revenue of approximately $0.3 million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017, respectively, is due to the recognition of net product sales of ZURAMPIC and DUZALLO in the U.S. in 2017 based on prescription demand. We began commercializing ZURAMPIC in the U.S. in October 2016 and DUZALLO in September 2017.

Sale of active pharmaceutical ingredient. The increase in sale of API of approximately $5.4 million for the three months ended March 31, 2018, compared to the three months ended March 31, 2017 was primarily due to

Table of Contents

increased shipments of linaclotide API to Astellas for Japan. In March 2017, Astellas began commercializing LINZESS for the treatment of adults with IBS-C in Japan.

Cost and Expenses

	Three Months Ended March 31,		Change	
	2018	2017	$	%
	(dollars in thousands)			
Cost and expenses:				
Cost of revenues, excluding amortization of acquired intangible assets	$ 2,607	$ 531	$ 2,076	391 %
Research and development	36,505	33,702	2,803	8 %
Selling, general and administrative	61,923	55,604	6,319	11 %
Amortization of acquired intangible assets	3,476	420	3,056	728 %
Loss on fair value remeasurement of contingent consideration	512	1,614	(1,102)	(68) %
Total cost and expenses	$ 105,023	$ 91,871	$ 13,152	14 %

Cost of Revenue, excluding amortization of acquired intangible assets. The increase of approximately $2.1 million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017 was primarily related to an increase of approximately $2.4 million due to higher sales of linaclotide API to Astellas in Japan, offset by approximately $0.4 million related to one-time period related costs associated with the Lesinurad Product sales.

Research and Development Expense. The increase in research and development expense of approximately $2.8 million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017 was primarily related to an increase of approximately $3.1 million in compensation, benefits and other employee-related expenses primarily associated with increased headcount; an increase of approximately $1.5 million in research costs related to our early-stage pipeline candidates; an increase of approximately $1.3 million in operating costs including facilities; and an increase of approximately $0.8 million in professional services, including consulting and contractor expenses. These increases were partially offset by a decrease of $2.4 million related to lesinurad development; and a decrease of approximately $1.6 million in external costs related to the development of linaclotide, net of reimbursements, related to our linaclotide collaboration with Allergan for North America.

Selling, General and Administrative Expense. Selling, general and administrative expenses increased approximately $6.3 million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017 primarily as a result of an approximately $2.9 million increase in costs associated with selling expenses and marketing programs; an increase of approximately $2.4 million increase in workforce reduction expense related to an initiative to evaluate the optimal mix of investments for the lesinurad franchise; an increase of approximately $1.9 million in

compensation, benefits and other employee-related expenses; an approximately $1.5 million increase in external consulting costs and other service costs; and an approximately $0.8 million increase in costs related to facilities and information technology infrastructure, including rent. These increases were partially offset by a decrease of approximately $2.0 million in costs associated with transitional support services related to the Lesinurad Transaction; and a decrease of approximately $1.6 million in sample expenses.

Amortization of Acquired Intangible Assets. The increase in amortization of acquired intangible assets expense of approximately $3.1 million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017, was primarily due to the DUZALLO intangible asset which began amortizing in August 2017 upon FDA approval. The amount allocated to the ZURAMPIC and DUZALLO intangible assets will be amortized on a straight-line basis over their estimated useful lives of approximately 13 years from Acquisition Date and 12 years from approval date, respectively, the period of estimated future cash flows.

Loss on Fair Value remeasurement of contingent consideration. Fair value remeasurement of contingent consideration includes significant estimates related to probability weighted net cash outflow projections, discounted using a yield curve equivalent to our credit risk which estimates the probability weighted analysis of expected future milestone and royalty payments based on net sales to be made to AstraZeneca in connection with the Lesinurad Transaction. Changes to these inputs are re-evaluated each reporting period. The decrease in the loss on fair value of the contingent consideration obligation of approximately $1.1 million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017, was primarily due to the passage of time.

Table of Contents

Other (Expense) Income, Net

	Three Months Ended March 31,		Change	
	2018	2017	$	%
	(dollars in thousands)			
Other (expense) income:				
Interest expense	$ (9,273)	$ (8,983)	$ (290)	3 %
Interest and investment income	681	395	286	72 %
Gain (loss) on derivatives	1,316	(2,199)	3,515	160 %
Loss on extinguishment of debt	—	(2,009)	2,009	100 %
Total other expense, net	$ (7,276)	$ (12,796)	$ 5,520	43 %

Interest expense increased by approximately $0.3 million during the three months ended March 31, 2018 compared to the three months ended March 31, 2017, mainly due to an increase of approximately $0.4 million and $0.2 million in interest expense associated with the 2026 Notes and 2022 Notes, respectively, partially offset by a decrease of approximately $0.2 million in interest expense associated with the redemption of the PhaRMA Notes in January 2017.

Interest and investment income increased by approximately $0.3 million during the three months ended March 31, 2018 compared to the three months ended March 31, 2017, respectively, mainly due to an increase in higher yield return on investment securities in 2018.

For the three months ended March 31, 2018, we recorded a gain on derivatives of approximately $1.3 million resulting from an approximately $5.2 million increase in the fair value of the Convertible Note Hedges and an approximately $3.9 million increase in the fair value of the Note Hedge Warrants. For the three months ended March 31, 2017, we recorded a loss on derivatives of approximately $2.2 million resulting from an approximately $18.0 million increase in the fair value of the Convertible Note Hedges and an approximately $20.2 million increase in the fair value of the Note Hedge Warrants.

Loss on extinguishment of debt was approximately $2.0 million during the three months ended March 31, 2017. This is due to the write-off of the remaining unamortized debt issuance costs on the PhaRMA Notes as part of the redemption in January 2017.

Liquidity and Capital Resources

At March 31, 2018, we had approximately $194.4 million of unrestricted cash, cash equivalents and available-for-sale securities. Our cash equivalents include amounts held in money market funds and repurchase agreements. Our available-for-sale securities include amounts held in U.S. Treasury securities and U.S. government-sponsored securities. We invest cash in excess of immediate requirements in accordance with our investment policy, which limits the amounts we may invest in any one type of investment 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.

During the three months ended March 31, 2018, our balances of cash, cash equivalents and available-for-sale securities decreased approximately $27.0 million. This decrease is primarily due to approximately $30.9 million of cash used to operate our business, including payments related to, among other things, research and development, and selling, general and administrative expenses as we continue to invest in our research pipeline and support the continued commercialization of our products. We also invested approximately $1.5 million in capital expenditures, and made payments of approximately $0.8 million on capital lease obligations. These cash outflows were partially offset by approximately $6.2 million in proceeds from the exercise of stock options.

In September 2016, we closed a direct private placement, pursuant to which we issued $150.0 million in aggregate principal amount of 8.375% notes due 2026 on January 5, 2017. The proceeds from the issuance of the 2026 Notes were used to redeem the outstanding principal balance of the PhaRMA Notes on the Funding Date. We began making interest payments on June 15, 2017. From March 15, 2019, we are obligated to make quarterly payments on the 2026 Notes. Given the principal payments on the 2026 Notes will vary from quarter to quarter, the 2026 Notes may be repaid prior to September 15, 2026, the final legal maturity date.

Table of Contents

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, 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 incurred losses since our inception in 1998 and, as of March 31, 2018, we had an accumulated deficit of approximately $1.4 billion. 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, including approximately $203.2 million of net proceeds from our initial public offering, or IPO, in February 2010, and approximately $413.4 million of net proceeds from our follow-on public offerings; payments received under our strategic collaborative arrangements, including upfront and milestone payments, royalties and our share of net profits, as well as reimbursement of certain expenses; and debt financings, including approximately $324.0 million of net proceeds from the private placement of our 2022 Notes in June 2015 and approximately $11.2 million of net proceeds, after fees and the redemption of the PhaRMA Notes, from the issuance of $150.0 million in aggregate principal amount of the 2026 Notes in January 2017.

Funding Requirements

We began commercializing LINZESS in the U.S. with our collaboration partner, Allergan, in the fourth quarter of 2012, and we currently derive substantially all of our revenue from this collaboration. Additionally, we began commercializing ZURAMPIC and DUZALLO in the U.S. for the treatment of uncontrolled gout in the fourth quarter of 2016 and the fourth quarter of 2017, respectively. We are also deploying significant resources to advance product opportunities in IBS-C and CIC, abdominal pain associated with lower GI disorders, uncontrolled GERD, diabetic nephropathy, HFpEF, and specialty diseases, including sickle cell disease and achalasia, as well as to fulfill FDA requirements for linaclotide and lesinurad. Our goal is to become cash flow positive, driven by increased revenue generated through sales of LINZESS, the Lesinurad Products and financial discipline. However, we have not achieved positive cash flows from operations to date.

Under our collaboration with Allergan for North America, total net sales of LINZESS in the U.S., as recorded by Allergan, are reduced by commercial costs incurred by each party, and the resulting amount is shared equally between us and Allergan. Additionally, we receive royalties from Allergan 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 Allergan 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 including sales of ZURAMPIC, DUZALLO and any other product, will enable us to become cash flow positive, 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., China and other markets, develop and commercialize lesinurad in the U.S., and continue to invest in our pipeline and potentially other external opportunities. We believe that our cash

on hand as of March 31, 2018 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 estimates regarding the costs to develop our product candidates and obtain regulatory approvals and the costs to commercialize linaclotide in the U.S., China and other markets, and develop and commercialize lesinurad in the U.S., as well as our goal to become cash flow positive, 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 in the “Risk Factors” section of this Quarterly Report on Form 10-Q. 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, lesinurad and our other product

Table of Contents

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, CONSTELLA, ZURAMPIC, DUZALLO and any other products;

- the rate of progress and cost of our commercialization activities, including the expense we incur in marketing and selling LINZESS, ZURAMPIC, DUZALLO and any other products;

- the success of our third-party manufacturing activities;

- the time and costs involved in developing, and obtaining regulatory approvals