IRONWOOD PHARMACEUTICALS INC Form 10-Q April 23, 2013 Table of Contents

# **UNITED STATES**

# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# **FORM 10-Q**

(Mark One)

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

For the quarterly period ended March 31, 2013

OR

# 0 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 x No o

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 x No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer x

Non-accelerated filer o (Do not check if a smaller reporting company)

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

As of April 09, 2013, there were 82,286,938 shares of Class A common stock outstanding and 26,479,272 shares of Class B common stock outstanding.

Accelerated filer o

Smaller reporting company o

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#### 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 statement is not forward-looking. These forward-looking statements include, among other things, statements about:

the market potential for LINZESS (linaclotide) in the U.S. and Constella® (linaclotide) in the E.U.;

• the timing, investment and associated activities involved in commercializing linaclotide by us and Forest Laboratories, Inc. in the U.S. and by our partners in other countries in the world;

• the timing and execution of the launch of Constella in the E.U.;

• the ability of our partners and third party manufactures to manufacture and distribute sufficient amounts of linaclotide on a commercial scale;

• our expectations regarding U.S. and foreign regulatory requirements, including our post-approval, nonclinical and clinical post-marketing plan with the FDA to understand linaclotide s efficacy and safety in pediatric patients;

• our partners ability to obtain foreign regulatory approval of linaclotide and the ability of all of our product candidates to meet existing or future regulatory standards;

- the safety profile and related adverse events of linaclotide;
- the ability of our partners to perform their obligations under our collaboration and license agreements with them;

• the therapeutic benefits and effectiveness of our product candidates;

• our plans with respect to the development, manufacture or sale of our product candidates, as well as the in-licensing or acquisition of externally discovered programs;

• our expectations as to future financial performance, expense levels, capital raising and liquidity sources;

• 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 health care reform;
- trends and challenges in our potential markets;
- our ability to attract and motivate key personnel; 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.

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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 United States Securities and Exchange Commission, or the SEC after the date of this Quarterly Report on Form 10-Q.

#### NOTE REGARDING TRADEMARKS

LINZESS and Constella® are trademarks of Ironwood Pharmaceuticals, Inc. Any other trademarks referred to in this Form 10-Q are the property of their respective owners. All rights reserved.

# IRONWOOD PHARMACEUTICALS, INC.

# **QUARTERLY REPORT ON FORM 10-Q**

# FOR THE QUARTER ENDED MARCH 31, 2013

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#### PART I FINANCIAL INFORMATION

Item 1. Financial Statements

#### Ironwood Pharmaceuticals, Inc.

#### **Condensed Consolidated Balance Sheets**

#### (In thousands, except share and per share amounts)

#### (unaudited)

	March 31,		December 31,
	2013		2012
Assets			
Current assets:			
Cash and cash equivalents	\$ 105,302	\$	136,700
Available-for-sale securities	136,727		31,528
Accounts receivable	12		457
Related party accounts receivable, net	36		1,030
Inventory	19,704		6,699
Prepaid expenses and other current assets	13,853		8,026
Total current assets	275,634		184,440
Restricted cash	8,147		7,647
Property and equipment, net	36,100		37,537
Other assets	5,212		283
Total assets	\$ 325,093	\$	229,907
Liabilities and Stockholders Equity			
Current liabilities:			
Accounts payable	\$ 3,303	\$	14,217
Related party accounts payable, net	26,441		7,509
Accrued research and development costs	6,184		5,664
Accrued expenses	20,464		21,171
Current portion of capital lease obligations	242		261
Current portion of deferred rent	2,749		2,735
Current portion of deferred revenue	3,299		3,381
Total current liabilities	62,682		54,938
Capital lease obligations, net of current portion	254		308
Deferred rent, net of current portion	10,907		11,593
Deferred revenue, net of current portion	17,217		18,024
Notes payable	174,601		
Other liabilities	909		992
Commitments and contingencies			
Stockholders equity:			
Preferred stock, \$0.001 par value, 75,000,000 shares authorized, no shares issued and			
outstanding at March 31, 2013 and December 31, 2012			
Class A common stock, \$0.001 par value, 500,000,000 shares authorized and 82,236,205 and	82		78

78,253,074 shares issued and outstanding at March 31, 2013 and December 31, 2012,

respectively		
Class B common stock, \$0.001 par value, 100,000,000 shares authorized and 26,479,272 and		
29,512,253 shares issued and outstanding at March 31, 2013 and December 31, 2012,		
respectively	27	30
Additional paid-in capital	657,320	648,955
Accumulated deficit	(598,918)	(505,016)
Accumulated other comprehensive income	12	5
Total stockholders equity	58,523	144,052
Total liabilities and stockholders equity	\$ 325,093 \$	229,907

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

#### Ironwood Pharmaceuticals, Inc.

# **Condensed Consolidated Statements of Operations**

#### (In thousands, except share and per share amounts)

#### (unaudited)

		Three Months Ended March 31,		
		2013		2012
Collaborative arrangements revenue		\$ 3,255	\$	12,248
Cost and expenses:				
Cost of revenue		1,231		
Research and development		32,753		29,510
Selling, general and administrative		33,374		16,319
Collaboration expense		24,730		2,055
Total cost and expenses		92,088		47,884
Loss from operations		(88,833)		(35,636)
Other income (expense):				
Interest expense		(5,121)		(14)
Interest and investment income		52		49
Other income (expense), net		(5,069)		35
Net loss		\$ (93,902)	\$	(35,601)
Net loss per share - basic and diluted		\$ (0.87)	\$	(0.34)
Weighted average number of common shares used in net loss per share	basic and diluted:	108,072,643		103,751,060

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

#### Ironwood Pharmaceuticals, Inc.

# **Condensed Consolidated Statements of Comprehensive Loss**

#### (In thousands, except share and per share amounts)

#### (unaudited)

	Three Months Ended March 31,				
	2013		2012		
Net loss	\$ (93,902)	\$	(35,601)		
Other comprehensive income (loss):					
Unrealized gains (losses) on available-for-sale securities	7		(3)		
Total other comprehensive income (loss)	7		(3)		
Comprehensive loss	\$ (93,895)	\$	(35,604)		

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

#### Ironwood Pharmaceuticals, Inc.

# **Condensed Consolidated Statements of Cash Flows**

#### (In thousands)

# (unaudited)

	Three Months Ended March 31,			
	March 2013	2012		
Cash flows from operating activities:	2015		2012	
Net loss	\$ (93,902)	\$	(35,601)	
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	2,788		2,680	
Loss on disposal of property and equipment	,		1	
Share-based compensation expense	5,275		3,721	
Accretion of discount/premium on investment securities	387		309	
Non-cash interest expense	453			
Changes in assets and liabilities:				
Accounts receivable and related party accounts receivable	1,439		543	
Restricted cash	(500)			
Prepaid expenses and other current assets	(3,911)		(1,149)	
Inventory	(13,005)			
Other assets	20		14	
Accounts payable and accrued expenses	8,897		(2,227)	
Accrued research and development costs	520		948	
Deferred revenue	(889)		(12,138)	
Deferred rent	(672)		(163)	
Other liabilities	(83)			
Net cash used in operating activities	(93,183)		(43,062)	
Cash flows from investing activities:				
Purchases of available-for-sale securities	(118,869)		(23,339)	
Sales and maturities of available-for-sale securities	13,290		29,265	
Purchases of property and equipment	(2,936)		(4,642)	
Proceeds from sale of property and equipment			4	
Net cash provided by (used in) investing activities	(108,515)		1,288	
Cash flows from financing activities:				
Proceeds from issuance of common stock			85,228	
Proceeds from issuance of notes payable	175,000			
Costs associated with issuance of notes payable	(7,717)			
Proceeds from exercise of stock options and employee stock purchase plan	3,090		945	
Payments on capital leases	(73)		(69)	
Net cash provided by financing activities	170,300		86,104	
Net increase (decrease) in cash and cash equivalents	(31,398)		44,330	
Cash and cash equivalents, beginning of period	136,700		87,282	
Cash and cash equivalents, end of period	\$ 105,302	\$	131,612	

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

#### Ironwood Pharmaceuticals, Inc.

#### Notes to Condensed Consolidated Financial Statements

(unaudited)

1. Nature of Business

Overview

Ironwood Pharmaceuticals, Inc. (the Company ) is an entrepreneurial pharmaceutical company focused on the discovery, development and commercialization of medicines that improve patients lives.

The Company s lead product, linaclotide, is being marketed in the United States (U.S.) under the trademarked name of LINZESS. On August 30, 2012, the United States Food and Drug Administration (FDA) approved LINZESS as a once-daily treatment for adult men and women suffering from irritable bowel syndrome with constipation (IBS-C) or chronic idiopathic constipation (CIC). LINZESS is the first FDA-approved guanylate cyclase type-C (GC-C) agonist. The Company and its collaboration partner, Forest Laboratories, Inc. (Forest) began commercial sale of LINZESS in December 2012.

In November 2012, the European Commission granted marketing authorization to linaclotide (Constella®) for the symptomatic treatment of moderate to severe IBS-C in adults. Constella is the first and only drug approved in the E.U. for IBS-C. The Company s European partner, Almirall, S.A. (Almirall), will market Constella in Europe (including the Commonwealth of Independent States and Turkey).

Astellas Pharma Inc. ( Astellas ), the Company s partner for Japan, is developing linaclotide for the treatment of patients with IBS-C in its territory. In October 2012, Astellas initiated in Japan a double-blind, placebo controlled, dose-ranging Phase II clinical trial of linaclotide in adult patients with IBS-C.

In October 2012, the Company entered into a collaboration agreement with AstraZeneca AB ( AstraZeneca ) to co-develop and co-commercialize linaclotide for IBS-C in China, Hong Kong and Macau. In January 2013, China s State Food and Drug Administration approved the Clinical Trial Application ( CTA ) submitted by the Company for a Phase III trial of linaclotide in patients with IBS-C.

The Company continues to assess alternatives to bring linaclotide to IBS-C and CIC sufferers in the parts of the world outside of its partnered territories.

In conjunction with its partners, the Company is also exploring development opportunities to strengthen the clinical profile of LINZESS within its indicated population and to expand the product label for additional patient populations and indications, as well as exploring the potential for linaclotide-based combination products. As part of this strategy, the Company and Forest initiated a Phase IIIb clinical trial to further characterize the effect of linaclotide on abdominal symptoms in patients with CIC.

In addition to exploring further linaclotide development opportunities, the Company s research and development team has generated a pipeline of early development candidates and discovery research in multiple therapeutic areas, including gastrointestinal disease, central nervous system disorders, allergic conditions and cardiovascular disease.

#### **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. (GAAP). 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 filed with the Securities and Exchange Commission on February 21, 2013.

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, 2013, results of its operations for the three months ended March 31, 2013 and 2012 and its cash flows for the three months ended March 31, 2013 and 2012. The results of operations for the three months ended March 31, 2013 are not necessarily indicative of the results that may be expected for the full year or any other subsequent interim period. Certain prior-period amounts were reclassified to conform to the current year s presentation.

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#### 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.

#### Use of Estimates

The preparation of condensed consolidated financial statements requires the Company s management to make estimates and judgments that may affect the reported amounts of assets, liabilities, revenues, expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, the Company s management evaluates its estimates, including those related to revenue recognition, available-for-sale securities, inventory valuation and related reserves, impairment of long-lived assets, income taxes including the valuation allowance for deferred tax assets, research and development expense, 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 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 2012 Annual Report on Form 10-K.

#### New Accounting Pronouncements

For a discussion of recent accounting pronouncements please refer to Note 2, Summary of Significant Accounting Policies, in the 2012 Annual Report on Form 10-K. The Company did not adopt any new accounting pronouncements during the three months ended March 31, 2013 that had a material effect on the Company s condensed consolidated financial statements.

#### 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.

The following potentially dilutive securities have been excluded from the computation of diluted weighted average shares outstanding as they would be anti-dilutive:

	<b>Three Months Ended</b>			
	March 31,			
	2013	2012		
Options to purchase common stock	20,838,549	18,631,592		
Shares subject to repurchase	67,500	140,000		
	20,906,049	18,771,592		

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

#### 3. Collaboration and License Agreements

#### Forest Laboratories, Inc.

In September 2007, the Company entered into a collaboration agreement with Forest to develop and commercialize linaclotide for the treatment of IBS-C, CIC and other gastrointestinal conditions in North America. Under the terms of this collaboration agreement, the Company shares equally with Forest all development costs as well as future net profits or losses from the development and sale of linaclotide in the U.S. The Company will also receive royalties in the mid-teens based on net sales in Canada and Mexico. Forest is solely responsible for the further development, regulatory approval and commercialization of linaclotide in those countries and funding any costs. In September 2012, Forest sublicensed the commercialization rights in Mexico to Almirall.

Forest made non-refundable, up-front payments totaling \$70.0 million to the Company in order to obtain rights to linaclotide in North America. Because the license to jointly develop and commercialize linaclotide did not have a standalone value without



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research and development activities provided by the Company, the Company recorded the up-front license fee as collaborative arrangements revenue on a straight-line basis through September 30, 2012, the period over which linaclotide was jointly developed under the collaboration. The collaboration agreement 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, 2013, \$205.0 million in license fees and development milestone payments had been received by the Company, as well as a \$25.0 million equity investment in the Company s capital stock. The Company can also achieve up to approximately \$100.0 million in a sales related milestone if certain conditions are met.

The collaboration agreement included a contingent equity investment, in the form of a forward purchase contract, which required Forest to purchase shares of the Company s convertible preferred stock upon achievement of a specific development milestone. At the inception of the arrangement, the Company valued the contingent equity investment and recorded a \$9.0 million asset and incremental deferred revenue. The \$9.0 million of incremental deferred revenue was recognized as collaborative arrangements revenue on a straight-line basis over the period of the Company s continuing involvement through September 30, 2012. In July 2009, the Company achieved the development milestone triggering the equity investment and reclassified the forward purchase contract as a reduction to convertible preferred stock. On September 1, 2009, the Company issued 2,083,333 shares of convertible preferred stock to Forest (Note 10).

The Company achieved all six development milestones under this agreement. In September 2008 and July 2009, the Company achieved development milestones which triggered \$10.0 million and \$20 million milestone payments, respectively. These development milestones were recognized as collaborative arrangements revenue through September 2012. In October 2011, the Company achieved two development milestone payments of \$20.0 million from Forest. In August 2012, the Company achieved two additional development milestones upon the FDA s approval of the linaclotide NDA for both IBS-C and CIC and received milestone payments of \$85.0 million from Forest in September 2012, accordingly. In accordance with ASU 2010-17, adopted in January 2011, these four development milestones were recognized as collaborative arrangements. The remaining milestone payment received from Forest upon the achievement of sales targets will be recognized as collaborative arrangements revenue as earned.

The Company recognized collaborative arrangements revenue from the Forest collaboration agreement totaling \$0 and \$5.5 million during the three months ended March 31, 2013 and 2012, respectively.

As a result of the development cost-sharing arrangements under the collaboration, the Company recognized approximately \$3.0 million in incremental research and development costs and offset approximately \$0.8 million against research and development expense during the three months ended March 31, 2013 and March 31, 2012, respectively, to reflect its obligation under the collaboration to bear half of the development cost incurred by both parties.

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., provided, however, that if either party provides fewer calls on physicians in a particular year than it is contractually required to provide, such party s share of the net profits will be reduced as stipulated by the collaboration agreement. Net profits or net losses consist of net sales to third-party customers and sublicense income in the U.S. less the cost to manufacture LINZESS as well as distribution, selling, and marketing expenses. Net sales are calculated and recorded by Forest and include gross sales net of discounts, rebates, allowances, sales taxes, freight and insurance charges, and other applicable deductions.

The Company and Forest began commercial sale of LINZESS in December 2012. The following table presents the amounts recorded by the Company for commercial efforts related to LINZESS in the three months ended March 31, 2013 and 2012 (in thousands):

	Three Months Ended March 31,						
		2013		2012			
Collaboration expense	\$	24,730		2,055			
Selling and marketing costs incurred by Ironwood (1)		8,539		1,182			
Ironwood s share of net loss	\$	33,269	\$	3,237			

(1) Includes only selling and marketing costs attributable to the cost-sharing arrangement with Forest.

# Almirall, S.A.

In April 2009, the Company entered into a license agreement with Almirall to develop and commercialize linaclotide in Europe (including the Commonwealth of Independent States and Turkey) for the treatment of IBS-C, CIC and other gastrointestinal

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conditions. Under the terms of the license agreement, Almirall is responsible for the expenses associated with the development and commercialization of linaclotide in the European territory and the Company is required to participate on a joint development committee over linaclotide s development period.

In May 2009, the Company received a \$38.0 million payment from Almirall representing a \$40.0 million non-refundable up-front payment net of foreign withholding taxes. The Company elected to record the non-refundable up-front payment net of taxes withheld. The Company recognized the up-front license fee as collaborative arrangements revenue on a straight-line basis through September 30, 2012, the period over which linaclotide was developed under the license agreement.

The license agreement also includes contingent milestone payments, as well as a contingent equity investment, that could total up to \$55.0 million upon achievement of specific development and sales milestones. At March 31, 2013, \$19.0 million, net of foreign withholding taxes, in development milestone payments has already been received, as well as a \$15.0 million equity investment in the Company s capital stock. Remaining milestone payments consist of \$4.0 million due upon the first commercial launch in each of the five major European Union countries set forth in the agreement and will be recognized as earned.

The license agreement included a contingent equity investment, in the form of a forward purchase contract, which required Almirall to purchase shares of the Company s convertible preferred stock upon achievement of a specific development milestone. At the inception of the arrangement, the Company valued the contingent equity investment and recorded a \$6.0 million asset and incremental deferred revenue. The \$6.0 million of incremental deferred revenue was recognized as collaborative arrangements revenue through September 2012. In November 2009, the Company achieved the development milestone triggering the equity investment and reclassified the forward purchase contract as a reduction to convertible preferred stock. On November 13, 2009, the Company received \$15.0 million from Almirall for the purchase of 681,819 shares of convertible preferred stock (Note 10).

In November 2010, the Company achieved a development milestone under the Almirall license agreement, which resulted in a \$19.0 million payment, representing a \$20.0 million milestone, net of foreign withholding taxes. This development milestone was recognized as collaborative arrangements revenue through September 2012.

The Company recognized approximately \$2.2 million and \$5.9 million in total collaborative arrangements revenue from the Almirall license agreement during the three months ended March 31, 2013 and 2012, respectively, including approximately \$2.2 million and \$0 from the sale of active pharmaceutical ingredient ( API ) to Almirall.

In November 2012, Constella was approved by the European Commission for the treatment of IBS-C in adults. At March 31, 2013, Constella was not commercially available in the European territory. The Company will receive royalties which escalate based on Constella s sales volume, beginning in the mid-twenties, less the transfer price paid for the API included in the product actually sold.

Astellas Pharma Inc.

In November 2009, the Company entered into a license agreement with Astellas to develop and commercialize linaclotide for the treatment of IBS-C, CIC and other gastrointestinal conditions in Japan, South Korea, Taiwan, Thailand, the Philippines and Indonesia. As a result of an amendment executed in March 2013, the Company regained rights to linaclotide in South Korea, Taiwan, Thailand, the Philippines and Indonesia. The Company did not consider this amendment to be a material modification of the license agreement. Astellas continues to be responsible for all activities relating to development, regulatory approval and commercialization in Japan as well as funding any costs and the Company is required to participate on a joint development committee over linaclotide s development period.

In 2009, Astellas paid the Company a non-refundable, up-front licensing fee of \$30.0 million, which is being recognized as collaborative arrangements revenue on a straight-line basis over the Company s estimate of the period over which linaclotide will be developed under the license agreement. In March 2013, the Company revised its estimate of the development period from 115 months to 85 months based on the Company s assessment of approval timelines for Japan.

The agreement also includes additional development milestone payments that could total up to \$45.0 million. These milestone payments consist of \$15.0 million upon initiation of a Phase III study for linaclotide in Japan, \$15.0 million upon filing of the Japanese equivalent of an NDA with the relevant regulatory authority in Japan, and \$15.0 million upon approval of such equivalent by the relevant regulatory authority. In addition, the Company will receive royalties which escalate based on sales volume, beginning in the low-twenties, less the transfer price paid for the API included in the product actually sold.

At March 31, 2013, approximately \$20.3 million of the up-front license fee remains deferred. During the three months ended March 31, 2013 and 2012, the Company recognized approximately \$0.8 million and \$0.9 million, respectively, in collaborative

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arrangements revenue from the Astellas license agreement, including \$12,000 and \$0.1 million, respectively, from the sale of API to Astellas.

#### AstraZeneca AB

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, including 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 will 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 FTE and external costs. The IDP indicates that AstraZeneca is responsible for a multinational Phase III clinical trial, Ironwood 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 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, Ironwood 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 Ironwood will utilize its existing sales force to co-promote NEXIUM® (esomeprazole magnesium), one of AstraZeneca s products, in the U.S. The Co-Promotion Agreement expires upon the earlier of May 27, 2014 or the date on which a generic version of AstraZeneca s product is first sold in the U.S. The Company may terminate the Co-Promotion Agreement on or after December 31, 2013 upon written notice to AstraZeneca.

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 upfront 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 ),
- research, development and regulatory services pursuant to the IDP (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 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

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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 identified the supply of linaclotide drug product for commercial requirements and commercialization services as contingent deliverables 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. As these deliverables are contingent, and are not at an incremental discount, they are not evaluated as deliverables at the inception of the arrangement. These contingent deliverables will be evaluated and accounted for separately as each related contingency is resolved. As of March 31, 2013, no contingent deliverables were provided by the Company under the AstraZeneca Agreements.

The total amount of the non-contingent consideration allocable to the AstraZeneca Agreements of \$26.9 million (Arrangement Consideration) includes the \$25.0 million non-refundable upfront payment and 55% of the costs for clinical trial material supply services and research, development and regulatory activities allocated to Ironwood in the IDP, or \$1.9 million. The Company allocated the Arrangement Consideration of \$26.9 million to the non-contingent deliverables based on management s best estimate of 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. The Company estimated the BESP for the License Deliverable using a multi-period excess-earnings method under the income approach which utilized cash flow projections, the key assumptions of which included the following market conditions and entity-specific factors: (a) the specific rights provided under the license to develop and commercialize linaclotide; (b) the potential indications for linaclotide pursuant to the license; (c) the likelihood linaclotide will be developed for more than one indication; (f) the market size by indication; (g) the expected product life of linaclotide assuming commercialization; (h) the competitive environment, and (i) the estimated development and commercialization costs of linaclotide in the License Territory. The Company utilized a discount rate of 11.5% in its analysis, representing the weighted average cost of capital derived from returns on equity for comparable companies. The Company determined its BESP for the remaining deliverables based on the nature of the services to be performed and estimates of the associated effort and cost of the services adjusted for a reasonable profit margin such that they represented estimated market rates for similar services sold on a standalone basis.

The Company concluded that a change in key assumptions used to determine BESP for each deliverable would not have a significant effect on the allocation of the Arrangement Consideration, as the estimated selling price of the License Deliverable significantly exceeds the other deliverables.

Of the \$26.9 million Arrangement Consideration, \$24.7 million was allocated to the License Deliverable, approximately \$0.3 million to the R&D Services, approximately \$28,000 to the JDC services, approximately \$0.1 million to the clinical trial material supply services, and \$1.8 million to the Co-Promotion Deliverable in the relative selling price model. The Company recognized all \$24.7 million allocated to the License Deliverable as revenue upon the execution of the AstraZeneca Agreements as the associated unit of accounting had been delivered and there is no general right of return. At inception, the remaining \$0.3 million of the Arrangement Consideration received, and allocated to the remaining deliverables based on their relative selling prices, was deferred. No additional contingent payments were received through March 31, 2013.

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 Ironwood prior to the commercialization of linaclotide in the License Territory are recorded as a reduction to expense, in accordance with the Company s policy, which is consistent with the nature of the cost reimbursement. Development costs incurred by Ironwood that pertain to the IDP are recorded as research and development expense as incurred.

The Company will perform the R&D Services, JDC services and supply clinical trial materials during the estimated development period of approximately 44 months. All Arrangement Consideration allocated to such services is 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. As a result of the cost-sharing arrangements under the collaboration, the Company recognized approximately \$0.1 million in incremental research and development costs during the three months ended March 31, 2013. As of March 31, 2013, no clinical trial material has been delivered to AstraZeneca; therefore, no reduction of research and development expense was recorded related to this deliverable.

The amount allocated to the Co-Promotion Deliverable is being recognized as collaborative arrangements revenue using the proportional performance method, which approximates recognition on a straight-line basis beginning on the date that Ironwood began to co-promote AstraZeneca s product, through December 31, 2013 (the earliest cancellation date). During the three months ended March 31, 2013, the Company recognized approximately \$0.2 million in revenue related to this deliverable.

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The Company reassesses the periods of performance for each deliverable at the end of each reporting period.

Milestone payments received from AstraZeneca upon the achievement of sales targets will be recognized as earned.

#### **Protagonist Therapeutics, Inc.**

The Company entered into a collaboration agreement with Protagonist Therapeutics, Inc. and Protagonist Pty Ltd. (collectively Protagonist ) in January 2011. Under this agreement, Protagonist will use its proprietary technology platform to discover peptides against certain targets and the Company has the rights to develop and commercialize these peptides. In connection with entering into the agreement, the Company made an up-front payment to Protagonist of approximately \$2.8 million, which was expensed as research and development expense. The Company also funds full-time equivalents for Protagonist s drug discovery activities, and will make certain milestone and royalty payments for each product pending the achievement of certain development and commercialization milestones. These contingent milestones could total up to approximately \$114.5 million per product if all milestones are achieved. The Company will expense these payments as incurred. During the three months ended March 31, 2013 and 2012, the Company recorded approximately \$0.7 million and \$0.7 million, respectively, in research and development expense.

#### **Bionomics Limited**

On January 4, 2012, the Company entered into a collaboration, research and license agreement with Bionomics Limited (Bionomics) in which it licensed the rights to Bionomics investigational anti-anxiety compound, BNC210, which Ironwood designates as IW-2143. Under the terms of the agreement, the Company and Bionomics will collaborate on initial research and the Company will be responsible for worldwide development and commercialization of any resulting products, including funding of clinical trials. In connection with entering into the agreement, the Company made an up-front payment to Bionomics of \$3.0 million, which was expensed as research and development expense. The Company also funds full-time equivalents for Bionomics to perform certain drug discovery activities, will make certain milestone payments pending the achievement of certain development and regulatory milestones, and will make royalty payments if IW-2143 is ever successfully commercialized. Pending achievement of certain development and regulatory milestones, Bionomics could receive up to \$345.0 million in up-front and milestone payments and research funding, as well as royalties on sales of products incorporating IW-2143 and other related compounds. The Company will expense these payments as incurred. During the three months ended March 31, 2013 and 2012, the Company recorded approximately \$0.3 million, respectively, in research and development expense, including the up-front payment, associated with the Bionomics agreement.

#### Other

The Company has other collaborations that are not individually significant to its business. Pursuant to the terms of those agreements, the Company may be required to pay up to \$25.5 million upon the achievement of various development, regulatory and commercial milestones. The Company may also incur significant research and development costs if the related product candidate were to advance to late stage clinical trials. In addition, if any products related to these collaborations are approved for sale, the Company may be required to pay significant royalties on future sales. The payment of these amounts, however, is contingent upon the occurrence of various future events, which have a high degree of uncertainty of occurring. During the three months ended March 31, 2013 and 2012, the Company incurred \$0 and \$1.0 million in research and

development expense associated with one of the Company s other collaboration agreements.

#### 4. 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, 2013 and December 31, 2012 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, interest rates and yield curves. Fair values determined by Level 3 inputs utilize unobservable data points in which there is little or no market data, which require the Company to develop its own assumptions for the asset or liability.

The Company s investment portfolio includes many 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 were 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 following tables present the assets the Company has measured at fair value on a recurring basis (in thousands):

			Fair Value Measurements at Reporting Date Using					
Description	Ν	Aarch 31, 2013		Quoted Prices in Active Markets for Identical Assets (Level 1)	Si	gnificant Other Observable Inputs (Level 2)		Significant Jnobservable Inputs (Level 3)
Cash and cash equivalents:								
Money market funds	\$	82,323	\$	82,323	\$		\$	
U.S. government-sponsored securities		15,623				15,623		
Available-for-sale securities:								
U.S. Treasury securities		21,546		21,546				
U.S. government-sponsored securities		115,181				115,181		
Total	\$	234,673	\$	103,869	\$	130,804	\$	

			Fair Value Measurements at Reporting Date Using						
	Dec	ember 31,		Quoted Prices in Active Markets for Identical Assets		gnificant Other Observable Inputs	Significant Unobservable Inputs		
Description		2012		(Level 1)		(Level 2)	(Level 3)		
Cash and cash equivalents:									
Money market funds	\$	111,368	\$	111,368	\$		\$		
U.S. government-sponsored securities		2,500				2,500			
Available-for-sale securities:									
U.S. Treasury securities		15,052		15,052					
U.S. government-sponsored securities		16,476				16,476			
Total	\$	145,396	\$	126,420	\$	18,976	\$		

There were no transfers between Level 1 and Level 2 of the fair value hierarchy during the three months ended March 31, 2013 and 2012.

Cash equivalents, accounts receivable, including related party accounts receivable, prepaid expenses and other current assets, accounts payable, accrued expenses and the current portion of capital lease obligations at March 31, 2013 and December 31, 2012 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, 2013 and December 31, 2012 approximates fair value as it bears interest at a rate approximating a market interest rate.

#### 5. Available-for-Sale Securities

The following tables summarize the available-for-sale securities held at March 31, 2013 and December 31, 2012 (in thousands):

	Amo	rtized Cost	Gross Unrealized Gains		Gross Unrealized Losses		Fair Value
March 31, 2013:							
U.S. government-sponsored securities	\$	115,169 \$	5	15	\$	(3) \$	115,181
U.S. Treasury securities		21,546					21,546
Total	\$	136,715 \$	5	15	\$	(3) \$	136,727

	Amor	tized Cost	Gross Unrealized Gains		Gross Unrealized Losses		Fair Value
December 31, 2012:							
U.S. government-sponsored securities	\$	16,472 \$		5	\$	(1) \$	16,476
U.S. Treasury securities		15,051		1			15,052
Total	\$	31,523 \$		6	\$	(1) \$	31,528

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The contractual maturities of all securities held at March 31, 2013 are one year or less. There were thirteen and three investments in an unrealized loss position at March 31, 2013 and December 31, 2012, 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, 2013 and December 31, 2012 was approximately \$40.1 million and \$3.0 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 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, 2013.

There were no sales of available-for-sale securities during the three months ended March 31, 2013 and 2012. Gross realized gains and losses on the sales of available-for-sale securities that have been included in other income (expense), net unrealized holding gains or losses for the period that have been included in accumulated other comprehensive income as well as gains and losses reclassified out of accumulated other comprehensive income (expense) have not been material to the Company s consolidated results of operations. The cost of securities sold or the amount reclassified out of the accumulated other comprehensive income into other income (expense) is based on the specific identification method for purposes of recording realized gains and losses.

#### 6. Inventory

Inventory consisted of the following at (in thousands):

	Ma	March 31,		December 31,	
		2013		2012	
Raw materials	\$	19,704	\$	6,699	

In the third quarter of 2012, the Company began capitalizing inventory costs for linaclotide manufactured in preparation for its launch in the U.S. and Europe. Inventory at March 31, 2013 represents API that is available for commercial sale.

#### 7. Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	March 31,	December 31,	
	2013	2012	
Salaries and benefits	\$ 9,950	\$ 14,594	
Professional fees	1,269	1,031	
Accrued interest	4,652		

Other	4,593	5,546
	\$ 20,464 \$	21,171

#### 8. Notes Payable

On January 4, 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 Legal Maturity Date ). The notes bear an annual interest rate of 11%, with interest payable March 15, June 15, September 15 and December 15 of each year (each a Payment Date ) beginning June 15, 2013. Principal of the notes will be payable on Payment Dates from and after March 15, 2014. All outstanding principal will be paid on the Legal Maturity Date.

From March 15, 2014, the Company will make quarterly payments on the notes equal to the greater of (i) 7.5% of net sales of LINZESS in the U.S. for the preceding quarter (the Synthetic Royalty Amount ) and (ii) accrued and unpaid interest on the notes (the Required Interest Amount ). Principal on the notes will be repaid in an amount equal to the Synthetic Royalty Amount minus the Required Interest Amount, when this is a positive number, until the principal has been paid in full. Given the principal payments on the notes are based on the Synthetic Royalty Amount, which will vary from quarter to quarter, the notes may be repaid prior to the Legal Maturity Date. The Company estimates that no principal payments will be made within twelve months following March 31, 2013, and as such, the outstanding principal balance is classified as a long term liability as of March 31,2013.

The notes are secured solely by a security interest in a segregated bank account established to receive the required quarterly payments. Up to the amount of the required quarterly payments under the notes, Forest will deposit its quarterly profit (loss) sharing

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payments due to the Company under the collaboration agreement, if any, into the segregated bank account. If the funds deposited by Forest into the segregated bank account are insufficient to make a required payment of interest or principal on a particular Payment Date, the Company is obligated to deposit such shortfall out of the Company s general funds into the segregated bank account.

The 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 notes occurs prior to January 1, 2014, the Company will pay a redemption price equal to the greater of (i) the outstanding principal balance of the notes being redeemed or (ii) the present value, discounted at the rate on U.S. Treasury obligations with a comparable maturity to the remaining expected terms of the notes being redeemed plus 1.00%, of such principal payment amounts and interest on the outstanding principal balance, plus the accrued and unpaid interest to the redemption date on the notes being redeemed. If the applicable redemption of the notes occurs on or after January 1, 2014, the Company will pay a redemption price equal to the percentage of outstanding principal balance of the 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 notes being redeemed):

Payment Dates	<b>Redemption Percentage</b>
From and including January 1, 2014 to and including December 31, 2014	112.00%
From and including January 1, 2015 to and including December 31, 2015	105.50%
From and including January 1, 2016 to and including December 31, 2016	102.75%
From and including January 1, 2017 and thereafter	100.00%

The notes contain certain covenants related to the Company s obligations with respect to the commercialization of LINZESS and the related collaboration agreement with Forest, 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 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, 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 upfront cash proceeds of \$175.0 million, less a discount of \$0.4 million for payment of legal fees incurred on behalf of the noteholders, were recorded as notes payable at issuance. The Company also capitalized \$7.3 million of debt issuance costs, which are included in prepaid expenses and other current assets and in other assets on the Company s consolidated balance sheet. The debt issuance costs and discount are being amortized over the estimated term of the obligation using the effective interest method. The repayment provisions represent embedded derivatives that are clearly and closely related to the notes and as such do not require separate accounting treatment.

The accounting for the notes requires the Company to make certain estimates and assumptions about the future net sales of LINZESS in the U.S. LINZESS has only been marketed since December 2012 and the estimates of the magnitude and timing of LINZESS net sales are subject to significant variability due to the recent product launch and the extended time period associated with the financing transaction, and thus subject to significant uncertainty. Therefore, these estimates and assumptions are likely to change as the Company gains experience marketing LINZESS, which may result in future adjustments to the portion of the debt that is classified as a current liability, the amortization of debt issuance costs and discount as well as the accretion of the interest expense. Any such adjustments could be material.

The fair value of the notes was estimated to be \$178.5 million as of March 31, 2013 and was determined using Level 3 inputs, including a quoted rate.

#### 9. Employee Stock Benefit Plans

The Company has several share-based compensation plans under which stock options, restricted stock, restricted stock units, 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, 2013 and 2012 (in thousands):

	<b>Three Months Ended</b>			
	March 31,			
		2013		2012
Research and development	\$	2,224	\$	1,951
Selling, general and administrative		3,051		1,770
	\$	5,275	\$	3,721

A summary of stock option activity for the three months ended March 31, 2013 is as follows:

	Number of Shares	Weighted-Average Exercise Price
Outstanding at December 31, 2012	19,539,429	\$ 7.75
Granted	2,419,570	13.08
Exercised	(941,409)	3.22
Cancelled	(179,041)	12.34
Outstanding at March 31, 2013	20,838,549	\$ 8.53

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, 2013 and 2012:

	Three Months Ended March 31,		
	2013	2012	
Expected volatility	46.25%	50.3%	
Expected term (in years)	6.5	6.5	
Risk-free interest rate	1.39%	1.3%	
Expected dividend yield	%	%	

#### **10. Related Party Transactions**

The Company has and currently obtains legal services from a law firm that is an investor in the Company. The Company paid approximately \$37,000 and \$152,000 in legal fees to this investor during the three months ended March 31, 2013 and 2012, respectively. At March 31, 2013 and December 31, 2012, the Company had approximately \$21,000 and \$23,000 of accounts payable due to this related party, respectively.

In September 2009, Forest became a related party when the Company sold to Forest 2,083,333 shares of the Company s convertible preferred stock and in November 2009, Almirall became a related party when the Company sold to Almirall 681,819 shares of the Company s convertible preferred stock (Note 3). These shares of preferred stock converted to the Company s Class B common stock on a 1:1 basis upon the completion of the Company s initial public offering in February 2010. Amounts due to and due from Forest and Almirall 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. At March 31, 2013, the Company had approximately \$36,000 in related party accounts receivable associated with Almirall and \$26.4 million in related party accounts payable, net of related party accounts receivable, associated with Forest. At December 31, 2012, the Company had approximately \$1.0 million in related party accounts receivable associated with Almirall and approximately \$7.5 million in related party accounts receivable, associated with Forest.

#### 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 notes thereto 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 an entrepreneurial pharmaceutical company focused on the discovery, development and commercialization of medicines that improve patients lives. We have one marketed product, linaclotide, which is available in the United States, or U.S., under the trademarked name LINZESSTM and was recently approved in the European Union, or E.U, under the trademarked name Constella®. Linaclotide is also being developed in other parts of the world by certain of our partners. We are exploring development opportunities to strengthen the clinical profile of LINZESS within its indicated population and to expand the product label for additional patient populations and indications, as well as exploring the potential for linaclotide-based combination products. In addition to exploring additional development opportunities, we also have a pipeline of early development candidates and discovery research programs in multiple therapeutic areas.

In August 2012, the United States Food and Drug Administration, or FDA, approved LINZESS as a once-daily treatment for adult men and women suffering from irritable bowel syndrome with constipation, or IBS-C, or chronic idiopathic constipation, or CIC. LINZESS is being commercialized in the U.S. by us and our collaboration partner, Forest Laboratories, Inc., or Forest. We and Forest began commercializing LINZESS in the U.S. during December 2012.

In November 2012, the European Commission granted marketing authorization to Constella for the symptomatic treatment of moderate to severe IBS-C in adults. Constella is the first and only drug approved in the E.U. for IBS-C. Our European partner, Almirall, S.A., or Almirall, will market Constella in Europe (including the Commonwealth of Independent States and Turkey).

Astellas Pharma Inc., or Astellas, our partner in Japan, is developing linaclotide for the treatment of patients with IBS-C. In October 2012, Astellas initiated a double-blind, placebo controlled, dose-ranging Phase II clinical trial of linaclotide in adult patients with IBS-C.

In October 2012, we entered into a collaboration agreement with AstraZeneca AB, or AstraZeneca, to co-develop and co-commercialize linaclotide for IBS-C in China, Hong Kong and Macau. In January 2013, China s State Food and Drug Administration approved the Clinical Trial Application, or CTA, submitted by us for a Phase III trial of linaclotide in patients with IBS-C.

We continue to assess alternatives to bring linaclotide to IBS-C and CIC sufferers in the parts of the world outside of our partnered territories.

In conjunction with our partners, we are also exploring development opportunities to strengthen the clinical profile of LINZESS within its indicated population and to expand the product label for additional patient populations and indications, as well as exploring the potential for linaclotide-based combination products. As part of this strategy, we and Forest initiated a Phase IIIb clinical trial to further characterize the effect of linaclotide on abdominal symptoms in patients with CIC.

In addition to exploring further linaclotide development opportunities, our research and development team has generated a pipeline of early development candidates and discovery research in multiple therapeutic areas, including gastrointestinal disease, central nervous system, or CNS, disorders, allergic conditions and cardiovascular disease.

To date, we have dedicated substantially all of our activities to the research, development and commercialization of linaclotide, our lead product and product candidate, as well as research and development of our other product candidates. We have incurred significant operating losses since our inception in 1998. As of March 31, 2013, we had an accumulated deficit of approximately \$598.9 million and we expect to incur losses for the foreseeable future.

In February 2012, we sold 6,037,500 shares of our Class A common stock through a firm commitment, underwritten public offering at a price to the public of \$15.09 per share. As a result of the offering, we received aggregate net proceeds, after underwriting discounts and commissions and other offering expenses, of approximately \$85.2 million.

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On January 4, 2013, we closed a private placement of \$175.0 million in aggregate principal amount of 11% notes due on or before June 15, 2024. The notes bear an annual interest rate of 11%, with interest paid quarterly beginning June 15, 2013, and principal expected to be paid quarterly beginning June 15, 2014. As a result of the debt offering, we received aggregate net proceeds, after offering expenses, of approximately \$167.3 million. We intend to use the net proceeds from this debt financing to fund our research and development efforts and to support the commercial launch of LINZESS, in addition to general corporate purposes.

#### **Financial Overview**

*Revenue*. Revenue to date has been generated primarily through our collaboration agreements with Forest and AstraZeneca, and our license agreements with Almirall and Astellas. The terms of these agreements contain multiple deliverables which may include (i) licenses, (ii) research and development activities, and (iii) the manufacture of active pharmaceutical ingredient, or API, finished drug product, and development materials for the collaborative partners. Payments to us may include one or more of the following: nonrefundable license fees; payments for research and development activities, payments for the manufacture of API, finished drug product and development materials, payments based upon the achievement of certain milestones and royalties on product sales. Additionally, we will 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. LINZESS launched in the U.S. in the fourth quarter of 2012 and Constella is expected to be commercially available in certain European countries in the second quarter of 2013.

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 as collaborative arrangements revenue or collaboration expense, as applicable. Net profits or losses consist of net sales to third-party customers in the U.S. less the cost to manufacture LINZESS as well as selling and marketing expenses. Although we expect net sales to increase during the launch phase, the settlement payments between Forest and us, resulting in collaborative arrangements revenue or collaboration expense, are subject to fluctuation based on the ratio of selling and marketing expenses incurred by each party. In addition, our collaborative arrangements revenue may fluctuate as a result of 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 Constella in the European market. One instance of this potential fluctuation relates to the challenging environment in the European pharmaceutical sector. As challenges in obtaining adequate pricing and reimbursement for pharmaceutical products in Europe have grown recently, it has become clear to us and our partner Almirall that revising certain aspects of our current partnership may benefit the potential for linaclotide. We are currently in active discussions with Almirall regarding the various financial incentives and structure of our current collaboration, and pending the results of these discussions, this could result in a rebalance of certain short term financial compensation, including the five \$4-million launch milestones, in exchange for additional new sales-based incentives and a more favorable royalty structure at certain sales thresholds.

*Cost of Revenue.* Cost of revenue is recognized upon shipment of linaclotide API to certain of our licensing partners. Our cost of revenue consists of the costs of producing such API. We expensed most of the manufacturing costs of API as research and development expenses in the periods prior to July 1, 2012, at which date we began capitalizing linaclotide-related inventory costs as their realizability became probable. As of December 31, 2012, the previously expensed API inventory that was commercially saleable was fully utilized. We expect our cost of revenue to increase in future periods.

*Research and Development Expense.* Research and development expense consists of expenses incurred in connection with the discovery, development, manufacture and distribution 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 research, formulation, manufacturing, nonclinical study and clinical trial activities as well as licensing fees for our product candidates prior to regulatory approval. We charge all research and development expenses to operations as incurred. Under our Forest and AstraZeneca collaboration agreements, we are reimbursed for certain research and development expenses, and we net these reimbursements against our research and development expenses as incurred. Payments to Forest or AstraZeneca are recorded as incremental research and development expenses.

Our lead product is linaclotide, and it represents the largest portion of our research and development expense for our product candidates. Linaclotide is the first FDA-approved guanylate cyclase type-C, or GC-C, agonist and is our only product, or product candidate, that has demonstrated clinical proof of concept. A New Drug Application, or NDA, for LINZESS with respect to both IBS-C and CIC was approved by the FDA in August 2012. In November 2012, the European Commission approved Constella for the treatment of IBS-C in adults.

We are also exploring development opportunities to strengthen the clinical profile of LINZESS within its indicated population and to expand the product label for additional patient populations and indications, and we are exploring the potential for linaclotide-based combination products. As part of this strategy, we and Forest initiated a Phase IIIb clinical trial to further characterize the effect of linaclotide on abdominal symptoms in patients with CIC.

In addition to exploring further linaclotide development opportunities, we also have a pipeline focused on both research and development of early development candidates and discovery research in multiple therapeutic areas, including gastrointestinal disease, CNS disorders, allergic conditions and cardiovascular disease.

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The following table sets forth our research and development expenses related to our product pipeline for the three months ended March 31, 2013 and 2012. These expenses relate primarily to external costs associated with manufacturing, including supply chain development, nonclinical studies and clinical trial costs. Costs related to facilities, depreciation, share-based compensation and research and development support services are not directly charged to programs.

		Three Months Ended					
		March 31,					
		2013 2012					
Demonstrated clinical proof of concept	\$	10,588	\$	10,145			
Early stage, pre-proof of concept		5,297		6,093			
Early stage, nonclinical		2,907		3,570			

Since 2004, the date we began tracking costs by program, we have incurred approximately \$184.4 million of research and development expenses related to linaclotide. The expenses for linaclotide include both reimbursements to us by Forest and AstraZeneca as well as our portion of research and development costs incurred by Forest or AstraZeneca for linaclotide and invoiced to us under the cost-sharing provisions of our collaboration agreements.

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 August 2012, the FDA approved our NDA for LINZESS as a once-daily treatment for adult men and women suffering from IBS-C and CIC. In connection with the FDA approval, we are required to conduct certain nonclinical and clinical studies 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 Forest established a nonclinical and clinical post-marketing plan with the FDA to understand LINZESS s efficacy and safety in pediatric patients. In October 2012, we entered into a collaboration agreement with AstraZeneca under which we will jointly develop and commercialize linaclotide in China, Hong Kong and Macau. We also are exploring the expansion of linaclotide in other parts of the world outside of our currently partnered territories, as well as the potential for linaclotide in other populations and indications and the potential for linaclotide-based combination products. Therefore, 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 in pediatrics, for other geographic markets or additional indications. We also continue to advance our pipeline focused on early development candidates and discovery research in multiple therapeutic areas, including gastrointestinal disease, CNS disorders, allergic conditions and cardiovascular disease. Given the inherent uncertainties that come with the development of pharmaceutical products, we cannot estimate with any degree of certainty how these 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 will be developed in pediatrics or for other indications or markets, 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 are actively engaged in evaluating externally-discovered drug candidates at all stages of development. In evaluating potential assets, we apply the same 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 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.

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- The costs, timing and outcome of regulatory review of a product candidate may not be favorable.
- The emergence of competing technologies and products and other adverse market developments may negatively impact us.

As a result of the uncertainties discussed above, we are unable to determine the duration and costs to complete current or future nonclinical and clinical stages of our product candidates or when, or to what extent, we will generate revenues from the commercialization and sale of our product candidates. Development timelines, probability of success and development costs vary widely. We anticipate that we will make determinations as to which additional programs to pursue and how much funding to direct to each program on an ongoing basis in response to the data of each product candidate, the competitive landscape and ongoing assessments of such product candidate s commercial potential. As a result of the regulatory approvals in 2012, LINZESS began generating sales in the fourth quarter of 2012 upon commercial launch in the U.S. and Constella is expected to be commercially available in the European market in the second quarter of 2013.

We expect our research and development costs will be substantial for the foreseeable future. We will continue to invest in linaclotide including the areas of its supply chain and the exploration of its utility in other indications and other patient populations. 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 and human resource functions. Other costs include the legal costs of pursuing patent protection of our intellectual property, general and administrative related facility costs and professional fees for accounting and legal services. We anticipate substantial increases in expenses related to developing and maintaining the organization necessary to further support the commercial launch of LINZESS, including expanding our commercial and sales force teams. We charge all selling, general and administrative expenses to operations as incurred.

Under our Forest and AstraZeneca collaboration agreements, we are reimbursed for certain selling and marketing expenses and we net these reimbursements against our selling, general and administrative expenses as incurred. Beginning in the fourth quarter of 2012, we include Forest s selling and marketing 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 Forest as collaboration expense or collaborative arrangements revenue, respectively. The selling and marketing cost-sharing payment to Forest for the three months ended March 31, 2012 was reclassified to conform to the current year s presentation.

*Collaboration Expense.* Collaboration expense represents 50% of LINZESS net sales in the U.S. as well as cost of revenue and selling and marketing cost-sharing settlement between us and Forest. Prior to the fourth quarter of 2012, selling and marketing cost-sharing payments were presented within selling, general and administrative expenses. The cost-sharing payment to Forest for the three months ended March 31, 2012 was reclassified to conform to the current year s presentation. We expect our collaboration expense to vary in the short term due to the effects of the net profit or loss sharing arrangement under the collaboration with Forest.

**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 generally accepted accounting principles in the U.S., or GAAP. 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 related disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reported periods. These estimates and assumptions, including those related to revenue recognition, inventory valuation and related reserves, research and development expenses and share-based compensation, are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates could occur in the future. We base our estimates on historical experience, trends in the industry, and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from our estimates under different assumptions or conditions. During the three months ended March 31, 2013, 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, 2012, which was filed with the Securities and Exchange Commission, or SEC, on February 21, 2013.

### **Results of Operations**

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

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	Three Months Ended March 31,					
	2	2013	2012			
		(in thou				
Collaborative arrangements revenue:	\$	3,255	\$	12,248		
Cost and expenses:						
Cost of revenue		1,231				
Research and development		32,753		29,510		
Selling, general and administrative		33,374		16,319		
Collaboration expense		24,730		2,055		
Total cost and expenses		92,088		47,884		
Other income (expense):						
Interest expense		(5,121)		(14)		
Interest and investment income		52		49		
Other income (expense), net		(5,069)		35		
Net Loss	\$	(93,902)	\$	(35,601)		

## Three Months Ended March 31, 2013 Compared to Three Months Ended March 31, 2012

#### Revenue

	Three Mo Mar	nths H ch 31,		Change			
	2013		2012	\$	%		
Collaborative arrangements							
revenue	\$ 3,255	\$	12,248	\$ (8,993)	(73)%		

*Collaborative Arrangements Revenue.* The decrease in revenue from collaborative arrangements of approximately \$9.0 million for the three months ended March 31, 2013 compared to the three months ended March 31, 2012 was primarily related to a \$11.4 million decrease in the amortization of deferred revenue associated with the development phase of the arrangements with Forest and Almirall as the performance periods ended in the third quarter of 2012 offset by a \$2.2 million increase in revenue from the shipment of API material and a \$0.2 million increase in revenue recognized under the collaboration with AstraZeneca.

#### Cost and Expenses

	Three Mor Mare	nths E ch 31,	nded	Change			
	2013 2012				\$	%	
Cost and expenses:							
Cost of revenue	\$ 1,231	\$		\$	1,231	100%	
Research and development	32,753		29,510		3,243	11%	
	33,374		16,319		17,055	105%	

Selling, general and administrative				
Collaboration expense	24,730	2,055	22,675	1,103%
Total cost and expenses	\$ 92,088	\$ 47,884	\$ 44,204	92%

*Cost of Revenue*. The increase in cost of revenue of approximately \$1.2 million for the three months ended March 31, 2013 compared to the three months ended March 31, 2012 was related to the cost of API sold to our licensing partners. We expensed most of the manufacturing costs of API for linaclotide as research and development expenses in the periods prior to July 1, 2012. In the third quarter of 2012, we began capitalizing inventory costs for linaclotide API manufactured in preparation for its planned launch in the U.S. and Europe. As of December 31, 2012, the previously expensed API inventory that was commercially saleable was fully utilized.

*Research and Development Expense.* The increase in research and development expense of approximately \$3.2 million for the three months ended March 31, 2013 compared to the three months ended March 31, 2012 was primarily related to an increase of \$3.8 million in costs related to the collaboration with Forest, consisting of higher expenses associated with Phase IIIb trials, and decreased reimbursements from Forest due to lower contract manufacturing costs associated with validation of batches of linaclotide API; an increase of approximately \$1.0 million in compensation, benefits, and employee related expenses associated mainly with increased headcount and increased health care costs; an increase of \$0.7 million in information technology and other operating costs allocated to research and development; an increase of \$0.3 million in share-based compensation expense primarily related to increased

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headcount and our annual stock option grant made in February 2013; an increase of \$0.1 million in costs related to the collaboration with AstraZeneca; partially offset by a decrease of \$2.3 million in research costs related to our early stage pipeline candidates and a decrease of \$0.4 million in facility costs, including rent and amortization of leasehold improvements allocated to research and development.

Selling, General and Administrative Expense. Selling, general and administrative expenses increased approximately \$17.1 million for the three months ended March 31, 2013 compared to the three months ended March 31, 2012 primarily as a result of increases in our workforce expenses and infrastructure due to the commercial launch of LINZESS in the U.S. These increases include approximately \$10.5 million in compensation, benefits and other employee related expenses associated with increased headcount, mainly due to a newly hired field sales force; approximately \$3.4 million in costs associated with selling expenses and marketing programs; approximately \$1.3 million in share-based compensation expense primarily related to increased headcount and our annual stock option grant made in February 2013; approximately \$1.3 million in selling, general and administrative related facilities and information technology infrastructure costs associated with operating our 301 Binney Street facility, including rent and amortization of leasehold improvements; and approximately \$0.6 million in external consulting and other service costs primarily associated with developing and maintaining the infrastructure to support linaclotide.

*Collaboration Expense.* Collaboration expense increased approximately \$22.7 million for the three months ended March 31, 2013 compared to the three months ended March 31, 2012 primarily as a result of higher selling and marketing expenses incurred by us and Forest under our collaboration agreement, partially offset by our share of LINZESS net sales in the U.S.

Other Income (Expense), Net

	Three Months Ended March 31,				Change			
	2013 2012				\$ %			
Other income (expense):								
Interest expense	\$	(5,121)	\$	(14)	\$ (5,107)	36,479%		
Interest and investment								
income		52		49	3	6%		
Total other income (expense),								
net	\$	(5,069)	\$	35	\$ (5,104)	-14,583%		

*Interest Expense.* Interest expense increased approximately \$5.1 million for the three months ended March 31, 2013 compared to the three months ended March 31, 2012 primarily due to interest on the \$175 million notes issued on January 4, 2013.

*Interest and Investment Income.* The increase in interest and investment income for the three months ended March 31, 2013 compared to the three months ended March 31, 2012 was primarily related to higher average cash and investment balances during the three months ended March 31, 2013.

## Liquidity and Capital Resources

At March 31, 2013, we had approximately \$242.0 million of unrestricted cash, cash equivalents and available-for-sale securities. Our cash equivalents include amounts held in money market funds, stated at cost plus accrued interest, which approximates fair market value and amounts held in certain U.S. government sponsored securities. 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 maturity when purchased of less than twelve months, so as to primarily achieve liquidity and capital preservation.

During the three months ended March 31, 2013, our balances of cash and available-for-sale securities increased approximately \$73.8 million. This increase is primarily due to \$167.3 million in net proceeds from the debt financing in January 2013 and approximately \$3.1 million in proceeds from the exercise of stock options and the issuance of shares pursuant to our employee stock purchase plan. These sources of cash were partially offset by the cash used to operate our business, as we made payments related to, among other things, research and development and selling, general and administrative expenses as we continue to increase headcount and build infrastructure to support the commercial launch of LINZESS in the U.S. and as we continue to invest in our research pipeline. We also invested approximately \$13.0 million in net additions of API inventory and \$2.9 million in capital expenditures.

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### Sources of Liquidity

We have incurred losses since our inception in 1998 and, as of March 2013, had an accumulated deficit of approximately \$598.9 million. 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 \$85.2 million of net proceeds from our follow-on public offering in February 2012; payments received under our strategic collaborative arrangements, including upfront and milestone payments as well as reimbursement of certain expenses; debt financings, including approximately \$167.3 million of net proceeds from the private placement of our notes in January 2013; strategic sale of assets or businesses and interest earned on investments.

#### **Funding Requirements**

In August 2012, we received regulatory approval for LINZESS in the U.S. and, in December 2012, commenced our commercial launch with our collaboration partner, Forest. While we began commercializing LINZESS in the fourth quarter of 2012, we have not achieved profitability. In November 2012, our European partner, Almirall, also received approval for Constella for the treatment of IBS-C in adults, which will be marketed in Europe by Almirall and is expected to become commercially available in certain countries in the second quarter of 2013. Our partnership with Forest requires total net sales of LINZESS to be reduced by commercial costs incurred by each party, and such resulting net profit or net loss attributable to LINZESS will be shared equally between us and Forest. Additionally, we will receive royalties which escalate based on Constella s sales volume, beginning in the mid-twenties, less the transfer price paid for the API included in the product actually sold. We cannot anticipate when, if ever, proceeds generated from sales of LINZESS and Constella will enable the Company to become cash flow positive. We 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 and China as well as in other markets, and continue to invest in our pipeline. In addition, we are generally required to make cash expenditures to manufacture linaclotide API in advance of selling it to our collaboration partners and collecting payments for such inventory sales, which may result in significant periodic uses of cash. We believe that our cash on hand as of March 31, 2013 will be sufficient to meet our projected operating needs at least through the next twelve months.

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 obtain regulatory approval and the costs to commercialize linaclotide in the U.S., China and other markets, is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially and negatively 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 of our product candidates, we are unable to estimate precisely the amounts of capital outlays and operating expenditures necessary to complete the development of, and to obtain regulatory approval for, linaclotide (other than in the U.S. and E.U.) and our other product candidates for all of the indications for which we believe each product candidate is suited. Our funding requirements will depend on many factors, including, but not limited to, the following:

the rate of progress and cost of our commercialization activities;

- the expenses we incur in marketing and selling LINZESS and our other product candidates;
  - the revenue generated by sales of LINZESS, Constella and our other product candidates;
- the success of our third-party manufacturing activities;

•

- the time and costs involved in obtaining regulatory approvals for our product candidates;
- the success of our research and development efforts;
- the emergence of competing or complementary developments;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the terms and timing of any additional collaborative, licensing or other arrangements that we may establish; and
- the acquisition of businesses, products and technologies.
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#### **Financing Strategy**

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

#### **Contractual Commitments and Obligations**

The disclosure of our contractual obligations and commitments was reported in our Annual Report on Form 10-K for the year ended December 31, 2012. There have been no material changes from the contractual commitments and obligations previously disclosed in that Annual Report on Form 10-K other than the commitments described in Note 8, Notes Payable, in this Quarterly Report on Form 10-Q.

#### **Off-Balance Sheet Arrangements**

We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, that would have been established for the purpose of facilitating off-balance sheet arrangements (as that term is defined in Item 303(a)(4)(ii) of Regulation S-K) or other contractually narrow or limited purposes. As such, we are not exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in those types of relationships. We enter into guarantees in the ordinary course of business related to the guarantee of our own performance and the performance of our subsidiaries.

#### **New Accounting Pronouncements**

For a discussion of recent accounting pronouncements please refer to Note 2, Summary of Significant Accounting Policies, in the 2012 Annual Report on Form 10-K. We did not adopt any new accounting pronouncements during the three months ended March 31, 2013 that had a material effect on our condensed consolidated financial statements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

**Interest Rate Risk** 

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

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

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

Our capital lease and debt obligations bear interest at a fixed rate and therefore have minimal exposure to changes in interest rates; however, because these interest rates are fixed, we may be paying a relatively higher interest rate in the future if our credit rating improves or other circumstances change.

## **Foreign Currency Risk**

We have no significant operations outside the U.S. We are not impacted significantly by foreign currency fluctuations and we have no other derivative financial instruments.

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#### **Effects of Inflation**

We do not believe that inflation and changing prices over the three months ended March 31, 2013 and 2012 had a significant impact on our results of operations.

Item 4. Controls and Procedures

#### **Evaluation of Disclosure Controls and Procedures**

As required by Rule 13a-15(b) of the Securities Exchange Act of 1934, or the Exchange Act, our management, including our principal executive officer and our principal financial officer, conducted an evaluation as of the end of the period covered by this Quarterly Report on Form 10-Q of the effectiveness of the design and operation of our disclosure controls and procedures. Based on that evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures are effective at the reasonable assurance level in ensuring that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports to be disclosed by us in the reports we file under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

#### **Changes in Internal Control**

As required by Rule 13a-15(d) of the Exchange Act, our management, including our principal executive officer and our principal financial officer, conducted an evaluation of the internal control over financial reporting to determine whether any changes occurred during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, our principal executive officer and principal financial officer concluded no such changes during the period covered by this Quarterly Report on Form 10-Q materially affected, or were reasonably likely to materially affect, our internal control over financial reporting.

### PART II OTHER INFORMATION

## Item 1A. Risk Factors

In addition to the other information in this Quarterly Report on Form 10-Q, any of the factors described below could significantly and negatively affect our business, financial condition, results of operations or prospects. The trading price of our Class A common stock may

decline due to these risks.

## **Risks Related to Our Business and Industry**

We are highly dependent on the commercial success of LINZESS in the U.S. for the foreseeable future; we may be unable to attain profitability and positive cash flow from operations.

In August 2012, the FDA approved LINZESS as a once-daily treatment for adult men and women suffering from IBS-C or CIC. LINZESS is the first FDA-approved GC-C agonist. We and our partner, Forest, began commercial sale of LINZESS in the U.S. during December 2012. The commercial success of LINZESS will depend on a number of factors, including:

- the effectiveness of LINZESS as a treatment for adult patients with IBS-C or CIC;
- the effectiveness of the sales, managed markets and marketing efforts by us and Forest;

• the adoption of LINZESS by physicians, which depends on whether physicians view it as a safe and effective treatment for adult patients with IBS-C and CIC;

• our success in educating and activating IBS-C and CIC patients to enable them to more effectively communicate their symptoms and treatment history to their physicians;

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• our ability to both secure adequate reimbursement for, and optimize patient access to, LINZESS by providing third party payers with a strong value proposition based on the existing burden of illness associated with IBS-C and CIC and the benefits of LINZESS;

• the effectiveness of our partners distribution networks;

• the occurrence of any side effects, adverse reactions or misuse, or any unfavorable publicity in these areas, associated with LINZESS; and

• the development or commercialization of competing products or therapies for the treatment of IBS-C or CIC, or their associated symptoms.

Our revenues from the commercialization of LINZESS are subject to these factors, and therefore may be unpredictable from quarter-to-quarter. Ultimately, we may never generate sufficient revenues from LINZESS to reach or maintain profitability or sustain our anticipated levels of operations.

## Linaclotide may cause undesirable side effects or have other properties that could limit its commercial potential.

The most common adverse reactions in IBS-C and CIC patients in the placebo-controlled trials that supported the U.S. NDA approval of LINZESS were diarrhea, abdominal pain, flatulence and abdominal distension, with diarrhea being the most common. Severe diarrhea was reported in 2% of the linaclotide- treated patients, and the incidence of diarrhea was similar between the IBS-C and CIC populations in these trials. If we or others identify previously unknown side effects, if known side effects are more frequent or severe than in the past, or if we or others detect unexpected safety signals for LINZESS or any products perceived to be similar to LINZESS, then in any of these circumstances:

sales of LINZESS may be impaired;

- regulatory approvals for linaclotide may be restricted or withdrawn;
- we may decide to, or be required to, send product warning letters or field alerts to physicians, pharmacists and hospitals;

• reformulation of the product, additional nonclinical or clinical studies, changes in labeling or changes to or reapprovals of manufacturing facilities may be required;

• we may be precluded from pursuing additional development opportunities to strengthen the clinical profile of LINZESS within its indicated population or to expand the product label for additional patient populations and indications, including the potential for linaclotide-based combination products;

• our reputation in the marketplace may suffer; and

government investigations or lawsuits, including class action suits, may be brought against us.

Any of the above occurrences would harm or prevent sales of LINZESS, increase our expenses and impair our ability to successfully commercialize LINZESS.

Furthermore, now that LINZESS is commercially available, it will be used in a wider population and in a less rigorously controlled environment than in clinical studies. As a result, regulatory authorities, healthcare practitioners, third party payers or patients may perceive or conclude that the use of LINZESS is associated with serious adverse effects, undermining our commercialization efforts.

Finally, the FDA-approved label for LINZESS contains a boxed warning about its use in pediatric patients LINZESS is contraindicated in patients up to 6 years of age and physicians are cautioned to avoid use in patients 6 through 17 years of age. This warning resulted from nonclinical data from studies in young juvenile mice approximately equivalent to human pediatric patients less than 2 years of age. We and Forest have established a nonclinical and clinical post-marketing plan with the FDA. The first step in the plan is to complete additional nonclinical studies to further understand the results of the earlier neonatal mouse study and to understand the tolerability of LINZESS in older juvenile mice. Until these studies are performed, we cannot initiate pediatric studies, and we may be precluded from ever being able to expand the indication to pediatrics depending on the results from these studies and the view of the FDA on whether the results support studying the safety and efficacy of LINZESS in pediatrics.

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We rely entirely on contract manufacturers and our collaboration partners to manufacture and distribute linaclotide. If they are unable to comply with applicable regulatory requirements, or experience manufacturing or distribution difficulties, or are unable to manufacture sufficient quantities to meet demand, our commercialization efforts may be materially harmed.

We have no internal manufacturing or distribution capabilities. Instead, we rely on a combination of contract manufacturers and our partners to manufacture linaclotide API and final linaclotide drug product, and to distribute that drug product to third party purchasers. We have commercial supply agreements with independent third parties to manufacture the linaclotide API used to support all of our partnered and unpartnered territories. Each of Forest, Almirall and Astellas is responsible for drug product manufacturing of linaclotide and making it into finished goods (including bottling and packaging) for its respective territory, and distributing the finished goods to wholesalers. We are responsible for drug product manufacturing and finished goods for China as part of our collaboration with AstraZeneca. We also have an agreement with another independent third party to serve as a second source of drug product manufacturing of linaclotide for our partnered territories. Among our drug product manufacturers, only Forest and Almirall have manufactured linaclotide on a commercial scale, and they only recently began commercial manufacture for their respective territories.

Each of our linaclotide API and drug product manufacturers must comply with current good manufacturing practices, or GMP, and other stringent regulatory requirements enforced by the FDA and foreign regulatory authorities in other jurisdictions. These requirements include, among other things, quality control, quality assurance and the maintenance of records and documentation, which occur in addition to our quality release of linaclotide API. Manufacturers of linaclotide may be unable to comply with these GMP requirements and with other regulatory requirements. We have little control over our manufacturers or collaboration partners compliance with these regulations and standards.

Our manufacturers may experience problems with their respective manufacturing and distribution techniques and processes, including for example, quality issues, including product specification and stability failures, quality procedural deviations, improper equipment installation or operation, utility failures, contamination and natural disasters. In addition, our API manufacturers acquire the raw materials necessary to make linaclotide API from a limited number of sources. Any delay or disruption in the availability of these raw materials or a change in raw material suppliers could result in production disruptions, delays or higher costs with consequent adverse effects on us.

The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of pharmaceutical products often encounter difficulties in commercial production. These problems include difficulties with production costs and yields, quality control, including stability of the product and quality assurance testing, and shortages of qualified personnel, as well as compliance with federal, state and foreign regulations and the challenges associated with complex supply chain management. Even if our manufacturers do not experience problems and commercial manufacturing is achieved, their maximum manufacturing capacities may be insufficient to meet commercial demand. Finding alternative manufacturers or adding additional manufacturers could take a significant amount of time and involve significant expense. New manufacturers would need to develop and implement the necessary production techniques and processes, which along with their facilities, would need to be inspected and approved by the regulatory authorities in each applicable territory.

If our API or drug product manufacturers fail to adhere to applicable GMP or other regulatory requirements or experience manufacturing problems, we will suffer significant consequences, including product seizures or recalls, loss of product approval, fines and sanctions, reputational damage, shipment delays, inventory shortages, inventory write-offs and other product-related charges and increased manufacturing costs. If we experience any of these results, or if our manufacturers maximum capacities are insufficient to meet demand, we may not be able to successfully commercialize linaclotide.

We must work effectively and collaboratively with Forest to market and sell LINZESS in the U.S. in order for it to achieve its maximum commercial potential.

We are working closely with Forest to implement our joint commercialization plan for LINZESS. The commercialization plan includes an agreed upon marketing campaign that targets the physicians who see patients who could benefit from LINZESS treatment and the adult men and women who suffer from IBS-C or CIC. It also includes an integrated call plan for our sales forces to optimize the education of specific gastroenterologists and primary care physicians on whom our and Forest s sales representatives call, and the frequency with which the representatives meet with them. We and Forest began implementing this call plan in the middle of December 2012.

In order to optimize the commercial potential of LINZESS, we and Forest must execute upon this commercialization plan effectively and efficiently. In addition, we and Forest must continually assess and modify our commercialization plan in a coordinated

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and integrated fashion in order to adapt to the promotional response. In addition, we and Forest must continue to focus and refine our marketing campaign to ensure a clear and understandable physician-patient dialogue around IBS-C, CIC and the potential for LINZESS as an appropriate therapy. Further, we and Forest must provide our sales forces with the highest quality support, guidance and oversight in order for them to continue to effectively promote LINZESS to gastroenterologists and primary care physicians. If we and Forest fail to perform these commercial functions in the highest quality manner, LINZESS will not achieve its maximum commercial potential.

# We are subject to uncertainty relating to pricing and reimbursement policies which, if not favorable for linaclotide, could hinder or prevent linaclotide s commercial success.

Our ability to commercialize LINZESS in the U.S. successfully will depend in part on the coverage and reimbursement levels set by governmental authorities, private health insurers and other third-party payers. Third-party payers are increasingly challenging the effectiveness of and prices charged for medical products and services. We may not obtain adequate third-party coverage or reimbursement for LINZESS, or we may not be able to sell LINZESS at a profitable price.

We expect that private insurers will consider the efficacy, cost effectiveness and safety of LINZESS in determining whether to approve reimbursement for LINZESS and at what level. Obtaining these approvals can be a time consuming and expensive process. Our business would be materially adversely affected if we do not receive approval for reimbursement of LINZESS from private insurers on a timely or satisfactory basis. Our business could also be adversely affected if private insurers, including managed care organizations, the Medicare program or other reimbursing bodies or payers limit the indications for which LINZESS will be reimbursed.

We expect to experience pricing pressures in connection with the sale of linaclotide and our future products due to the healthcare reforms discussed below, as well as the trend toward programs aimed at reducing health care costs, the increasing influence of health maintenance organizations, the ongoing debates on reducing government spending and additional legislative proposals.

In some foreign countries, particularly Canada and the countries of Europe, the pricing and payment of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take six to 12 months or longer after the receipt of regulatory approval and product launch. To obtain favorable reimbursement for the indications sought or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our products, including linaclotide, to other available therapies. In addition, in countries in which linaclotide is only approved therapy for a particular indication, such as Constella as the only product approved for the symptomatic treatment of moderate to severe IBS-C in adults in Europe, there may be disagreement as to what the most comparable product is, or if there even is one. Further, several European countries have implemented government measures to either freeze or reduce pricing of pharmaceutical products. Many third-party payers and governmental authorities also consider the price for which the same product is being sold in other countries to determine their own pricing and reimbursement in other countries. If reimbursement for our products is unavailable in any country, this could result in similarly low pricing and reimbursement in other countries. If reimbursement for our products is unavailable in any country in which reimbursement is sought, limited in scope or amount, or if pricing is set at unsatisfactory levels, our business could be materially harmed.

If the pricing and reimbursement of Constella in the E.U. is low, our royalty revenues from Almirall based on sales of Constella will be adversely affected.

In November 2012, the European Commission granted marketing authorization to Constella for the symptomatic treatment of moderate to severe IBS-C in adults. This approval followed the positive recommendation received from the European Committee for Medicinal Products for Human Use in September 2012. Almirall plans to launch Constella in certain E.U. countries in the second quarter of 2013.

The pricing and reimbursement strategy is a key component of Almirall s commercialization plan for Constella in the E.U. Reimbursement sources are different in each country, and each country may include a combination of distinct potential payers, including private insurance and governmental payers. Countries in the E.U. may restrict the range of medicinal products for which their national health insurance systems provide reimbursement and control the prices of medicinal products for human use. Our revenues may suffer if Almirall is unable to successfully and timely conclude reimbursement, price approval or funding processes and market Constella in key member states of the E.U., or if coverage and reimbursement for Constella is limited or reduced. If Almirall is not able to obtain coverage, pricing or reimbursement on acceptable terms or at all, or if such terms change in any countries in its territory, Almirall may not be able to, or may decide not to, sell Constella in such countries. Further, Almirall could sell Constella at a low price. Since we receive royalties on net sales of Constella in the E.U., which is correlated directly to the price at which Almirall

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sells Constella in the E.U., our royalty revenues could be limited should Almirall sell Constella at a low price or elect not to launch in a certain country within the E.U.

Because we work with partners to develop, manufacture and commercialize linaclotide, we are dependent upon third parties, and our relationships with those third parties, in our efforts to commercialize LINZESS and to obtain regulatory approval for, and to commercialize, linaclotide in our other partnered territories.

Forest played a significant role in the conduct of the clinical trials for linaclotide and in the subsequent collection and analysis of data, and Forest holds the NDA for LINZESS. In addition, we are commercializing LINZESS in the U.S. with Forest. Forest is responsible for the further development, regulatory approval and commercialization of linaclotide in Canada and Mexico. Almirall holds the marketing authorization for Constella in the E.U. and is responsible for obtaining regulatory approval of linaclotide in the other countries in its territory. Astellas, our partner in Japan, is responsible for completing the clinical programs and obtaining regulatory approval of linaclotide in its territory. We will co-develop and co-commercialize linaclotide in China, Hong Kong and Macau through our collaboration with AstraZeneca. Upon any approval, each of Almirall, Astellas and AstraZeneca is responsible for commercializing linaclotide in its respective territory, and each has agreed to use commercially reasonable efforts to do so. Each of our partners is responsible for reporting adverse event information from its territory to us. Finally, each of our partners, other than AstraZeneca, is responsible for drug product manufacturing of linaclotide and making it into finished goods (including bottling and packaging) for its respective territory. The integration of our efforts with our partners efforts is subject to the uncertainty of the markets for pharmaceutical products in each partner s respective territories, and accordingly, these relationships must evolve to meet any new challenges that arise in those regions.

These integrated functions may not be carried out effectively and efficiently if we fail to communicate and coordinate with our partners, and vice versa. Our partnering strategy imposes obligations, risks and operational requirements on us as the central node in our global network of partners. If we do not effectively communicate with each partner and ensure that the entire network is making integrated and cohesive decisions focused on the global brand for linaclotide, linaclotide will not achieve its maximum commercial potential. As the holder of the global safety database for linaclotide, we are responsible for coordinating the safety surveillance and adverse event reporting efforts worldwide. If we are unsuccessful in doing so due to poor process, execution, oversight, communication or adjudication, then our and our partner s ability to obtain and maintain regulatory approval of linaclotide will be at risk.

Employees of our partners are not our employees, and we have limited ability to control the amount or timing of resources that they devote to linaclotide. If any of our partners fails to devote sufficient time and resources to linaclotide, or if its performance is substandard, it will delay the potential submission or approval of regulatory applications for linaclotide, as well as the manufacturing and commercialization of linaclotide in the particular territory. A material breach by any of our partners of our collaboration or license agreement with such partner, or a significant disagreement between us and a partner, could also delay the regulatory approval and commercialization of linaclotide, potentially lead to costly litigation, and could have a material adverse impact on our financial condition. Moreover, although we have non-compete restrictions in place with each of our partners, they may have relationships with other commercial entities, some of which may compete with us. If any of our partners assists our competitors, it could harm our competitive position.

If any of our partners undergoes a change in control or in management, this may adversely affect our collaborative relationship or success of the launch of LINZESS in the U.S. or Constella in the E.U., or the ability to achieve regulatory approval and commercialize linaclotide in our other partnered territories.

We work jointly and collaboratively with Forest, Almirall, Astellas and AstraZeneca on many aspects of the development, manufacturing and commercialization of linaclotide. In doing so, we have established relationships with several key members of the management teams of Forest, Almirall, Astellas and AstraZeneca in functional areas such as development, quality, regulatory, drug safety and pharmacovigilance, operations, marketing, sales, field operations and medical science. The success of our collaborations is highly dependent on the resources, efforts and skills of our partners and their key employees. As we commercialize LINZESS in the U.S., prepare for the launch of Constella in the E.U. and transition linaclotide from development to commercialization in other parts of the world, the drug s success becomes more dependent on us maintaining highly collaborative and well aligned partnerships. If a partner undergoes a change of control or a change of management, we will need to reestablish many of these relationships, and we will need to regain alignment of our development and commercialization strategy for linaclotide. Given the inherent uncertainty and disruption that arises in a change of control, we cannot be sure that we would be able to successfully execute these courses of action. Finally, any change of control or in management may result in a reprioritization of linaclotide within a partner s portfolio, or such partner may fail to maintain the financial or other resources necessary to continue supporting its portion of the development, manufacturing or commercialization of linaclotide.

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If any of our partners undergoes a change of control and the acquirer either is unable to perform such partner s obligations under its collaboration or license agreement with us or has a product that competes with linaclotide that such acquirer does not divest, we have the right to terminate the collaboration or license agreement and reacquire that partner s rights with respect to linaclotide. If we elect to exercise these rights in such circumstances, we will need to either establish the capability to develop, manufacture and commercialize linaclotide in that partnered territory on our own or we will need to establish a relationship with a new partner. We have assembled a team of specialists in manufacturing, quality, sales, marketing, payer, pricing and field operations, and specialized medical scientists, who represent the functional areas necessary for a successful commercial launch of a high potential, gastrointestinal therapy and who support the commercialization of LINZESS in the U.S. If Forest was subject to a change of control that allowed us to continue LINZESS s commercialization in the U.S. on our own, and we chose to do so, we would need to enhance each of these functional aspects to replace the capabilities that Forest was previously providing to the collaboration. Any such transition might result in a period of reduced efficiency or performance by our operations and commercialization teams, which could adversely affect our ability to commercialize LINZESS.

Although many members of our global operations, commercial and medical affairs teams have strategic oversight of, and a certain level of involvement in, their functional areas globally, we do not have corresponding operational capabilities in these areas outside of the U.S. If Forest, Almirall, Astellas or AstraZeneca was subject to a change of control that allowed us to continue linaclotide s development or commercialization anywhere outside of the U.S. on our own, and we chose to do so rather than establishing a relationship with a new partner, we would need to build operational capabilities in the relevant territory. In any of these situations, the timeline and likelihood of achieving regulatory approval and, ultimately, the commercialization of linaclotide could be negatively impacted.

# Even though LINZESS has been approved by the FDA for the treatment of adults with IBS-C or CIC, it faces future post-approval development and regulatory requirements, which will present additional challenges.

On August 30, 2012, the FDA approved LINZESS as a once-daily treatment for adult men and women suffering from IBS-C or CIC. LINZESS will be subject to ongoing FDA requirements governing the labeling, packaging, storage, advertising, promotion, recordkeeping and submission of safety and other post-market information.

LINZESS is contraindicated in pediatric patients up to 6 years of age based on nonclinical data from studies in neonatal mice approximately equivalent to human pediatric patients less than 2 years of age. Physicians are also instructed to avoid the use of LINZESS in pediatric patients 6 through 17 years of age based on this nonclinical data and the lack of clinical safety and efficacy data in pediatric patients. We and Forest have established a nonclinical and clinical post-marketing plan with the FDA to understand LINZESS safety and efficacy in pediatric patients. The first nonclinical studies are to further understand the results of the neonatal mouse study and to understand the tolerability of LINZESS in older juvenile mice. We expect these nonclinical studies to be complete later this year. We and Forest are also working with the FDA on a plan for clinical pediatric studies, which are contingent on the outcome of the nonclinical post marketing requirements.

We and Forest have also committed to certain nonclinical and clinical studies 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. We expect to complete these studies over the next three to five years.

These post-approval requirements will impose burdens and costs on us. Failure to complete the required studies and meet our other post-approval commitments would lead to negative regulatory action at the FDA, which could include withdrawal of regulatory approval of LINZESS for the treatment of adults with IBS-C or CIC.

Manufacturers of drug products and their facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with GMP regulations. If we or a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with a facility where the product is manufactured, a regulatory agency may impose restrictions on that product or the manufacturer, including requiring implementation of a risk evaluation and mitigation strategy program, withdrawal of the product from the market or suspension of manufacturing. If we, our partners or the manufacturing facilities for LINZESS fail to comply with applicable regulatory requirements, a regulatory agency may:

• issue warning letters or untitled letters;

• impose civil or criminal penalties;

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- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve pending applications or supplements to applications submitted by us;
- impose restrictions on operations, including costly new manufacturing requirements; or
- seize or detain products or require us to initiate a product recall.

# Even though LINZESS has been approved for marketing in the U.S. and Constella has been approved for marketing in the E.U., we or our collaborators may never receive approval to commercialize linaclotide in the other parts of the world.

We have out-licensed the rights to develop and commercialize linaclotide in Canada and Mexico to Forest, in Europe to Almirall, and in Japan to Astellas, and we will co-develop and co-commercialize linaclotide in China, Hong Kong and Macau with AstraZeneca. In the future, we may seek to commercialize linaclotide in foreign countries outside of these countries with other parties or by ourselves.

In order to market any products outside of the U.S., we or our partners must comply with numerous and varying regulatory requirements of other jurisdictions regarding safety and efficacy. Approval procedures vary among jurisdictions and can involve product testing and administrative review periods different from, and greater than, those in the U.S. and the E.U. Potential risks include that the regulatory authorities:

• may not deem linaclotide safe and effective;

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- may not find the data from nonclinical studies and clinical trials sufficient to support approval;
- may not approve of manufacturing processes and facilities;
  - may not approve linaclotide for any or all indications for which approval is sought;

may require significant warnings or restrictions on use to the product label for linaclotide; or

• may change their approval policies or adopt new regulations.

Regulatory approval in one jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory processes in others. If linaclotide is not approved for all indications or with the label requested, this would limit the uses of linaclotide and have an adverse effect on its commercial potential or require costly post-marketing studies.

## We face potential product liability exposure, and, if claims brought against us are successful, we could incur substantial liabilities.

The use of our product candidates in clinical trials and the sale of marketed products expose us to product liability claims. If we do not successfully defend ourselves against product liability claims, we could incur substantial liabilities. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- decreased demand for approved products;
- impairment of our business reputation;
- withdrawal of clinical trial participants;
- initiation of investigations by regulators;
- litigation costs;
- distraction of management s attention from our primary business;

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- substantial monetary awards to patients or other claimants;
- loss of revenues; and
- the inability to commercialize our product candidates.

We currently have product liability insurance coverage for the commercial sale of LINZESS and for the clinical trials of our product candidates which is subject to industry-standard terms, conditions and exclusions. Our insurance coverage may not be sufficient to reimburse us for expenses or losses associated with claims. Moreover, insurance coverage is becoming increasingly expensive, and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. On occasion, large judgments have been awarded in lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims could cause our stock price to decline and, if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

# We may face competition in the IBS-C and CIC marketplace, and new products may emerge that provide different or better alternatives for treatment of gastrointestinal conditions.

Linaclotide will compete globally with certain prescription therapies and over the counter products for the treatment of IBS-C and CIC, or their associated symptoms. The availability of prescription competitors and over the counter products for gastrointestinal conditions could limit the demand, and the price we are able to charge, for linaclotide unless we are able to differentiate linaclotide on the basis of its actual or perceived benefits. New developments, including the development of other drug technologies and methods of preventing the incidence of disease, occur in the pharmaceutical and medical technology industries at a rapid pace. These developments may render linaclotide obsolete or noncompetitive.

We believe other companies are developing products which could compete with linaclotide, should they be approved by the FDA or foreign regulatory authorities. Currently, there are compounds in late stage development and other potential competitors are in earlier stages of development for the treatment of patients with either IBS-C or CIC. If our potential competitors are successful in completing drug development for their drug candidates and obtain approval from the FDA or foreign regulatory authorities, they could limit the demand for linaclotide.

Certain of our competitors have substantially greater financial, technical and human resources than us. Mergers and acquisitions in the pharmaceutical industry may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances made in the commercial applicability of technologies and greater availability of capital for investment in these fields.

We will incur significant liability if it is determined that we are promoting any off-label use of LINZESS.

Physicians are permitted to prescribe drug products for uses that are not described in the product s labeling and that differ from those approved by the FDA or other applicable regulatory agencies. Such off-label uses are common across medical specialties. Although the FDA and other regulatory agencies do not regulate a physician s choice of treatments, the FDA and other regulatory agencies do restrict communications on the subject of off-label use. Companies are not permitted to promote drugs for off-label uses. Accordingly, we may not promote LINZESS in the U.S. for use in any indications other than IBS-C or CIC or in any patient populations other than adult men and women. The FDA and other regulatory and enforcement authorities actively enforce laws and regulations prohibiting promotion of off-label uses and the promotion of products for which marketing approval has not been obtained. A company that is found to have improperly promoted off-label uses will be subject to significant liability, including civil and administrative remedies as well as criminal sanctions.

Notwithstanding the regulatory restrictions on off-label promotion, the FDA and other regulatory authorities allow companies to engage in truthful, non-misleading, and non-promotional scientific exchange concerning their products. We intend to engage in medical education activities and communicate with healthcare providers in compliance with all applicable laws, regulatory guidance and industry best practices. Although we have put together a robust compliance program designed to ensure that all such activities are performed in a legal and compliant manner, LINZESS is our first commercial product, so we are now just beginning to utilize the program in connection with commercialization activities.

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If we fail to comply with healthcare regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.

As a manufacturer of pharmaceuticals, even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid or other third-party payers, certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients rights are and will be applicable to our business. We will be subject to healthcare fraud and abuse and patient privacy regulation by both the federal government and the states in which we conduct our business. The regulations include:

• federal healthcare program anti-kickback laws, which prohibit, among other things, persons from soliciting, receiving or providing remuneration, directly or indirectly, to induce either the referral of an individual, for an item or service or the purchasing or ordering of a good or service, for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs;

• federal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payers that are false or fraudulent, and which may apply to entities like us which provide coding and billing advice to customers;

• the federal Health Insurance Portability and Accountability Act of 1996, which prohibits executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters and which also imposes certain requirements relating to the privacy, security and transmission of individually identifiable health information;

• the Federal Food, Drug, and Cosmetic Act, which among other things, strictly regulates drug product marketing, prohibits manufacturers from marketing drug products for off-label use and regulates the distribution of drug samples;

• state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payer, including commercial insurers, and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by federal laws, thus complicating complica

• the federal Foreign Corrupt Practices Act which prohibits corporations and individuals from paying, offering to pay, or authorizing the payment of anything of value to any foreign government official, government staff member, political party, or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity; and

• the federal Physician Payments Sunshine Act, which was passed as part of the Patient Protection and Affordable Care Act of 2010, and similar state laws in certain states, that require pharmaceutical and medical device companies to monitor and report payments, gifts, the provision of samples and other remuneration made to physicians and other health care professional and health care organizations.

If our operations are found to be in violation of any of the laws described above or any governmental regulations that apply to us, we will be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial results.

In preparation for the commercial launch of LINZESS, we assembled an experienced compliance team who compiled a program based on industry best practices that is designed to ensure that our commercialization of LINZESS complies with all applicable laws, regulations and industry standards. We also hire, manage and incentivize our employees around a culture of compliance, trust, respect and ownership. Our program is relatively new and the requirements in this area are constantly evolving, we cannot be certain that our program will eliminate all areas of potential exposure. Although compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, the risks cannot be entirely eliminated. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management s attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security, fraud and reporting laws may prove costly.

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# Healthcare reform and other governmental and private payer initiatives may have an adverse effect upon, and could prevent, our product candidates commercial success.

The U.S. government and individual states are aggressively pursuing healthcare reform, as evidenced by the passing of the Patient Protection and Affordable Healthcare Act, as modified by the Health Care and Education Reconciliation Act of 2010. These healthcare reform laws contain several cost containment measures that could adversely affect our future revenue, including, for example, increased drug rebates under Medicaid for brand name prescription drugs, extension of Medicaid rebates to Medicaid managed care plans, and extension of so-called 340B discounted pricing on pharmaceuticals sold to certain health care providers. Additional provisions of the health care reform laws that may negatively affect our future revenue and prospects for profitability include the assessment of an annual fee based on our proportionate share of sales of brand name prescription drugs to certain government programs, including Medicare and Medicaid, as well as mandatory discounts on pharmaceuticals sold to certain Medicare Part D beneficiaries.

In addition to governmental efforts in the U.S., foreign jurisdictions as well as private health insurers and managed care plans are likely to continue challenging manufacturers ability to obtain reimbursement, as well as the level of reimbursement, for pharmaceuticals and other healthcare related products and services. These cost-control initiatives could significantly decrease the available coverage and the price we might establish for linaclotide and our other potential products, which would have an adverse effect on our financial results.

The Food and Drug Administration Amendments Act of 2007 also provides the FDA enhanced post-marketing authority, including the authority to require post-marketing studies and clinical trials, labeling changes based on new safety information, and compliance with risk evaluations and mitigation strategies approved by the FDA. We and Forest have established a nonclinical and clinical post-marketing plan with the FDA to understand LINZESS s efficacy and safety in pediatrics. The FDA s exercise of this authority will result in increased development-related costs following LINZESS s commercial launch for the treatment of adult men and women suffering from IBS-C or CIC, and could result in potential restrictions on the sale and/or distribution of LINZESS, even in its approved indications and patient populations.

In pursuing our growth strategy, we will incur a variety of costs and may devote resources to potential opportunities that are never completed or for which we never receive the benefit. Our failure to successfully discover, acquire, develop and market additional product candidates or approved products would impair our ability to grow.

As part of our growth strategy, we intend to explore further linaclotide development opportunities, and to develop and market additional products and product candidates. We are exploring development opportunities to strengthen the clinical profile of LINZESS within its indicated population and to expand the product label for additional patient populations and indications, and we are exploring the potential for linaclotide-based combination products. These development efforts may fail or may not increase the revenues that we generate from LINZESS based on the currently-approved product label. Furthermore, they may result in adverse events in certain patient populations that are then attributed to the currently approved patient population, which may result in adverse regulatory action at the FDA or in other countries, and therefore our revenues from linaclotide may be materially harmed.

We are pursuing various other programs through our pipeline. We may spend several years completing our development of any particular current or future internal product candidate, and failure can occur at any stage. The product candidates to which we allocate our resources may not end up being successful. Our business depends entirely on the successful development and commercialization of our product candidates.

In addition, because our internal research capabilities are limited, we may be dependent upon pharmaceutical and biotechnology companies, academic scientists and other researchers to sell or license products or technology to us. The success of this strategy depends partly upon our ability to identify, select, discover and acquire promising pharmaceutical product candidates and products.

The process of proposing, negotiating and implementing a license or acquisition of a product candidate or approved product is lengthy and complex. Other companies, including some with substantially greater financial, marketing and sales resources, may compete with us for the license or acquisition of product candidates and approved products. We have limited resources to identify and execute the acquisition or in-licensing of third-party products, businesses and technologies and integrate them into our current infrastructure. Moreover, we may devote resources to potential acquisitions or in-licensing opportunities that are never completed, or we may fail to realize the anticipated benefits of such efforts. We may not be able to acquire the rights to additional product candidates on terms that we find acceptable, or at all.

In addition, future acquisitions may entail numerous operational and financial risks, including:

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- exposure to unknown liabilities;
- disruption of our business and diversion of our management s time and attention to develop acquired products or technologies;
- incurrence of substantial debt, dilutive issuances of securities or depletion of cash to pay for acquisitions;
- higher than expected acquisition and integration costs;
- difficulty in combining the operations and personnel of any acquired businesses with our operations and personnel;
- increased amortization expenses;
- impairment of relationships with key suppliers or customers of any acquired businesses due to changes in management and ownership; and
- inability to motivate key employees of any acquired businesses.

Further, any product candidate that we acquire may require additional development efforts prior to commercial sale, including extensive clinical testing and approval by the FDA and applicable foreign regulatory authorities. All product candidates are prone to risks of failure typical of pharmaceutical product development, including the possibility that a product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities.

# Delays in the completion of clinical testing of any of our product candidates could result in increased costs and delay or limit our ability to generate revenues.

Delays in the completion of clinical testing could significantly affect our product development costs. We do not know whether planned clinical trials will be completed on schedule, if at all. The commencement and completion of clinical trials can be delayed for a number of reasons, including delays related to:

• obtaining regulatory approval to commence a clinical trial;

• reaching agreement on acceptable terms with prospective clinical research organizations, or CROs, and trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;

- manufacturing sufficient quantities of a product candidate for use in clinical trials;
- obtaining institutional review board approval to conduct a clinical trial at a prospective site;

• recruiting and enrolling patients to participate in clinical trials for a variety of reasons, including competition from other clinical trial programs for the treatment of similar conditions; and

• maintaining patients who have initiated a clinical trial but may be prone to withdraw due to side effects from the therapy, lack of efficacy or personal issues, or who are lost to further follow-up.

Clinical trials may also be delayed as a result of ambiguous or negative interim results. In addition, a clinical trial may be suspended or terminated by us, an institutional review board overseeing the clinical trial at a clinical trial site (with respect to that site), the FDA, or other regulatory authorities due to a number of factors, including:

• failure to conduct the clinical trial in accordance with regulatory requirements or the study protocols;

• inspection of the clinical trial operations or trial sites by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;

unforeseen safety issues; or

• lack of adequate funding to continue the clinical trial.

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Additionally, changes in regulatory requirements and guidance may occur, and we may need to amend clinical trial protocols to reflect these changes. Each protocol amendment requires institutional review board review and approval, which may adversely impact the costs, timing or successful completion of the associated clinical trials. If we experience delays in completion, or if we terminate any of our clinical trials, the commercial prospects for our product candidate may be harmed, and our ability to generate product revenues will be delayed. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval.

# We may not be able to manage our business effectively if we lose any of our current management team or if we are unable to attract and motivate key personnel.

We may not be able to attract or motivate qualified management and scientific, clinical, operations and commercial personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses, particularly in the greater-Boston area. If we are not able to attract and motivate necessary personnel to accomplish our business objectives, we will experience constraints that will significantly impede the achievement of our objectives.

We are highly dependent on the drug discovery, development, regulatory, commercial and financial expertise of our management, particularly Peter M. Hecht, Ph.D., our chief executive officer; Mark G. Currie, Ph.D., our senior vice president, chief scientific officer and president of research and development; Michael J. Higgins, our senior vice president, chief operating officer and chief financial officer; and Thomas A. McCourt, our senior vice president, marketing and sales and chief commercial officer. If we lose any members of our management team in the future, we may not be able to find suitable replacements, and our business may be harmed as a result. In addition to the competition for personnel, the Boston area in particular is characterized by a high cost of living. As such, we could have difficulty attracting experienced personnel to our company and may be required to expend significant financial resources in our employee recruitment efforts.

We also have scientific and clinical advisors who assist us in formulating our product development, clinical strategies and our global supply chain plans, as well as sales and marketing advisors who have assisted us in our commercialization strategy and brand plan for linaclotide. These advisors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us, or may have arrangements with other companies to assist in the development and commercialization of products that may compete with ours.

# Security breaches and other disruptions could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

In the ordinary course of our business, we collect and store sensitive data, including intellectual property, our proprietary business information and that of our suppliers and business partners, as well as personally identifiable information of LINZESS patients, clinical trial participants and employees. Similarly, our business partners and third party providers possess certain of our sensitive data. The secure maintenance of this information is critical to our operations and business strategy. Despite our security measures, our information technology and infrastructure may be vulnerable to attacks by hackers or breached due to employee error, malfeasance or other disruptions. Any such breach could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information, including our data being breached at our business partners or third-party providers, could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, disrupt our operations, and damage our reputation which could adversely affect our business.

Our business involves the use of hazardous materials, and we must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our activities involve the controlled storage, use and disposal of hazardous materials. We are subject to federal, state, city and local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. Although we believe that the safety procedures we use for handling and disposing of these materials comply with the standards prescribed by these laws and regulations, we cannot eliminate the risk of accidental contamination or injury from these materials. In the event of an accident, local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. We do not currently maintain hazardous materials insurance coverage.

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#### **Risks Related to Intellectual Property**

Limitations on our patent rights relating to our product candidates may limit our ability to prevent third parties from competing against us.

Our success will depend on our ability to obtain and maintain patent protection for our product candidates, preserve our trade secrets, prevent third parties from infringing upon our proprietary rights and operate without infringing upon the proprietary rights of others.

The strength of patents in the pharmaceutical industry involves complex legal and scientific questions and can be uncertain. Patent applications in the U.S. and most other countries are confidential for a period of time until they are published, and publication of discoveries in scientific or patent literature typically lags actual discoveries by several months or more. As a result, we cannot be certain that we were the first to conceive inventions covered by our patents and pending patent applications or that we were the first to file patent applications for such inventions. In addition, we cannot be certain that our patent applications will be granted, that any issued patents will adequately protect our intellectual property or that such patents will not be challenged, narrowed, invalidated or circumvented.

Our U.S. Patent 7,704,947, which covers a group of peptides including LINZESS and related molecules, is currently undergoing an inter partes reexamination instigated by a third party request at the United States Patent and Trademark Office, or the USPTO. We cannot be certain that the validity of this patent will be upheld until the reexamination process is completed by the USPTO. This patent is one of several issued patents and pending applications in the U.S. related to LINZESS, including a LINZESS composition of matter and methods of use patent (U.S. Patent 7,304,036) as well as additional patents and applications covering processes for making LINZESS, formulations, and dosing regimens. Although none of our other issued patents currently is subject to a patent reexamination, we cannot guarantee that they will not be subject to reexamination or review by the USPTO in the future. If any or all of our LINZESS-related patents were invalidated, we would still have at least five years of marketing exclusivity under the Hatch-Waxman Act from FDA approval of LINZESS. We believe that each of the patents in our linaclotide patent portfolio was rightfully issued and the portfolio gives us sufficient freedom to operate, however, if any of our present or future patents is invalidated, this could have an adverse effect on our business and financial results, particularly for the period beyond five years following marketing approval.

In March 2013, an opposition to one of our granted patents covering linaclotide was filed in Europe. We believe that this patent was appropriately granted and will be upheld by the European Patent Office but we cannot be certain of this until the opposition period is complete. While the opposition is ongoing, we will incur additional expense and be required to focus additional efforts on the proceedings. However, even if this patent were found to be invalid, we have other composition of matter- and use-related linaclotide patents that are granted and in force, and we believe these patents provide strong and sufficient patent protection in Europe.

Furthermore, the America Invents Act, which was signed into law in 2011, has made several major changes in the U.S. patent statutes. These changes will permit third parties to challenge our patents more easily and will create uncertainty with respect to the interpretation and practice of U.S. patent law for the foreseeable future.

We also rely upon unpatented trade secrets, unpatented know-how and continuing technological innovation to develop and maintain our competitive position, which we seek to protect, in part, by confidentiality agreements with our employees and our collaborators and consultants. We also have agreements with our employees and selected consultants that obligate them to assign their inventions to us. It is possible that

technology relevant to our business will be independently developed by a person that is not a party to such an agreement. Furthermore, if the employees and consultants that are parties to these agreements breach or violate the terms of these agreements, we may not have adequate remedies, and we could lose our trade secrets through such breaches or violations. Further, our trade secrets could otherwise become known or be independently discovered by our competitors.

In addition, the laws of certain foreign countries do not protect proprietary rights to the same extent or in the same manner as the U.S., and, therefore, we may encounter problems in protecting and defending our intellectual property in certain foreign jurisdictions.

If we are sued for infringing intellectual property rights of third parties, it will be costly and time consuming, and an unfavorable outcome in such litigation could have a material adverse effect on our business.

Our commercial success will depend upon our ability, and the ability of our collaborators, to develop, manufacture, market and sell our products and use our proprietary technologies without infringing the proprietary rights of third parties. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we and our

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collaborators are developing products. As the biotechnology and pharmaceutical industry expands and more patents are issued, the risk increases that our potential products may give rise to claims of infringement of the patent rights of others. There may be issued patents of third parties of which we are currently unaware that may be infringed by LINZESS or our product candidates. Because patent applications can take many years to issue, there may be currently pending applications which may later result in issued patents that LINZESS or our product candidates may infringe.

We may be exposed to, or threatened with, litigation by third parties alleging that LINZESS or our product candidates infringe their intellectual property rights. If LINZESS or one of our product candidates is found to infringe the intellectual property rights of a third party, we or our collaborators could be enjoined by a court and required to pay damages and could be unable to commercialize the applicable product candidate unless we obtain a license to the intellectual property rights. A license may not be available to us on acceptable terms, if at all. In addition, during litigation, the counter- party could obtain a preliminary injunction or other equitable relief which could prohibit us from making, using or selling our products, pending a trial on the merits, which may not occur for several years.

There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries generally. If a third party claims that we or our collaborators infringe its intellectual property rights, we may face a number of issues, including, but not limited to:

• infringement and other intellectual property claims which, regardless of merit, may be expensive and time-consuming to litigate and may divert our management s attention from our core business;

• substantial damages for infringement, which we may have to pay if a court decides that the product at issue infringes on or violates the third party s rights, and, if the court finds that the infringement was willful, we could be ordered to pay treble damages and the patent owner s attorneys fees;

• a court prohibiting us from selling our product unless the third party licenses its rights to us, which it is not required to do;

• if a license is available from a third party, we may have to pay substantial royalties, fees or grant cross-licenses to our intellectual property rights; and

• redesigning our products so they do not infringe, which may not be possible or may require substantial monetary expenditures and time.

We may become involved in lawsuits to protect or enforce our patents, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents or may assert our patents are invalid. To counter ongoing or potential infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. Litigation with generic manufacturers has become increasingly common in the biotechnology and pharmaceutical industries. In addition, in an infringement or invalidity proceeding, a court or patent administrative body may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference proceedings brought by the USPTO may be necessary to determine the priority of inventions with respect to our patents and patent applications or those of our collaborators. An unfavorable outcome could require us to cease using the technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if a prevailing party does not offer us a license on terms that are acceptable to us. Litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distraction of our management and other employees. We may not be able to prevent, alone or with our collaborators, misappropriation of our proprietary rights, particularly in countries where the laws may not protect those rights as fully as in the U.S.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceeding or developments.

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## **Risks Related to Our Finances and Capital Requirements**

# We have incurred significant operating losses since our inception and anticipate that we will incur continued losses for the foreseeable future.

In recent years, we have focused primarily on developing, manufacturing and commercializing linaclotide. Although we launched LINZESS in the U.S. in December 2012, we believe that it will take us some time to attain profitability and positive cash flow from operations. We have financed our operations to date primarily through the issuance of equity, our collaboration and license arrangements and the recent issuance of debt securities related to the sales of LINZESS in the U.S., and we have incurred losses in each year since our inception in 1998. We incurred net losses attributable to Ironwood Pharmaceuticals, Inc. of approximately \$72.6 million, \$64.9 million and \$53.0 million in the years ended December 31, 2012, 2011 and 2010, respectively. As of December 31, 2012, we had an accumulated deficit of approximately \$505.0 million. Our prior losses and expected future losses, have had and will continue to have an adverse effect on our stockholders equity and working capital. We expect our expenses to increase in connection with our efforts to commercialize linaclotide and our research and development of our other product candidates. As a result, we expect to continue to incur significant and operating losses for the foreseeable future. Because of the numerous risks and uncertainties associated with developing pharmaceutical products, we are unable to predict the extent of any future losses or when, or if, we will become profitable.

# We may need additional funding and may be unable to raise capital when needed, which could force us to delay, reduce or eliminate our product development programs or commercialization efforts.

We recently completed the offering of \$175.0 million in debt securities related to the sales of LINZESS in the U.S. However, marketing and selling a primary care drug, purchasing commercial quantities of pharmaceutical products, developing product candidates and conducting clinical trials are expensive and uncertain. Circumstances, our strategic imperatives, or opportunities to create or acquire new programs could require us to, or we may choose to, seek to raise additional funds. The amount and timing of our future funding requirements will depend on many factors, including, but not limited to:

• the level of underlying demand for LINZESS by prescribers and patients in the U.S. and for Constella by prescribers and patients in the E.U.;

- the costs associated with commercializing LINZESS in the U.S.;
- the costs of maintaining and expanding our sales, marketing and distribution capabilities;

• the regulatory approval of linaclotide in other countries in the world and the timing of commercial launches in those countries, as well as the associated development and commercial milestones and royalties;

• the rate of progress and cost of our clinical trials and other product development programs, including our post-approval nonclinical and clinical studies of LINZESS in pediatrics and our investment to strengthen the clinical profile of LINZESS within its indicated population and to expand the product label for additional patient populations and indications, as well as the potential for linaclotide-based combination products;

- the costs and timing of in-licensing additional product candidates or acquiring other complementary companies;
- the status, terms and timing of any collaboration, licensing, co-commercialization or other arrangements; and
- the timing of any regulatory approvals of our product candidates.

Additional funding may not be available on acceptable terms or at all. If adequate funds are not available, we may be required to delay, reduce the scope of our commercialization efforts or reduce or eliminate one or more of our development programs.

Our ability to pay principal of and interest on our recently-issued debt securities will depend in part on the receipt of payments from Forest under the collaboration agreement that are equal to or in excess of our quarterly payment obligations on each payment date.

In January 2013, we issued \$175.0 million in debt securities bearing an annual interest rate of 11%. Interest and principal on these securities will be payable commencing June 15, 2013 and March 15, 2014, respectively. After the interest-only period, we will make quarterly payments equal to the greater of (i) 7.5% of net sales of LINZESS in the U.S. for the preceding quarter and (ii) accrued

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and unpaid interest on the debt securities. If the cash flows derived from the net quarterly payments that we receive from Forest under the collaboration agreement are insufficient on any particular payment date to fund the quarterly interest payment, at a minimum, we will be obligated to pay the amounts of such shortfall out of our general funds. We expect that for the next few years, at a minimum, the net quarterly payments from Forest will be our primary source of cash flow from operations. The determination of whether Forest will be obligated to make a net quarterly payment to us in respect of a particular quarterly period is a function of the revenue generated by LINZESS in the U.S. as well as the development, manufacturing and commercialization expenses incurred by each of us and Forest under the collaboration agreement. Accordingly, since we believe that it will take us some time to attain profitability and positive cash flow from operations, we cannot guarantee that (i) we will have the available funds to fund the quarterly interest payment, at a minimum, in the event that there is a deficiency in the net quarterly payment received from Forest, (ii) there will be a net quarterly payment from Forest at all or (iii) we are not also required to make a true-up payment to Forest under the collaboration agreement, in each case, in respect of a particular quarterly period.

### Our indebtedness could adversely affect our financial condition or restrict our future operations.

As of March 31, 2013, we had total indebtedness of approximately \$175.0 million. We chose to issue debt securities based on the additional strategic optionality that this creates for us, and the limited restrictions that these debt securities place on our ability to run our business compared to other potential available financing transactions. However, our indebtedness could have important consequences, including:

• limiting our ability to obtain additional financing to fund future working capital, capital expenditures, acquisitions or other general corporate requirements;

• requiring a substantial portion of our cash flow to be dedicated to debt service payments instead of other purposes, thereby reducing the amount of cash flow available for working capital, capital expenditures, corporate transactions and other general corporate purposes;

- increasing our vulnerability to adverse changes in general economic, industry and competitive conditions;
- limiting our flexibility in planning for and reacting to changes in the industry in which we compete;

• placing us at a disadvantage compared to other, less leveraged competitors or competitors with comparable debt at more favorable interest rates; and

increasing our cost of borrowing.

Although we are not as restricted under these debt securities as we might have been under a more traditional secured credit facility provided by a bank, the indenture governing our debt securities contains a number of restrictive covenants that impose restrictions on us and may limit our ability to engage in certain acts, including restrictions on our ability to:

• amend our collaboration agreement with Forest in a way that would have a material adverse effect on the noteholders rights, or terminate the collaboration agreement with respect to the U.S.;

- transfer our rights to commercialize the product under our collaboration agreement with Forest; and
- incur certain liens.

Upon a breach of the covenants under our indenture, the noteholders could elect to declare all amounts outstanding under the outstanding debt securities to be immediately due and payable. If we are unable to repay those amounts, the noteholders could proceed against the collateral granted to them to secure the debt securities. If the noteholders under the indenture accelerate the repayment of the debt securities, we cannot be certain that we will have sufficient assets to repay them.

If we breach our covenants under our indenture and seek a waiver, we may not be able to obtain a waiver from the required noteholders. If this occurs we would be in default under our indenture, the noteholders could exercise their rights, as described above, and we could be forced into bankruptcy or liquidation.

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