

IRONWOOD PHARMACEUTICALS INC  
Form 424B4  
February 04, 2010

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Filed Pursuant to Rule 424(b)(4)  
Registration Statement No. 333-163275

## PROSPECTUS

# 16,666,667 Shares

### CLASS A COMMON STOCK

This is the initial public offering of Class A common stock by Ironwood Pharmaceuticals, Inc. We are offering 16,666,667 shares of Class A common stock. The initial public offering price is \$11.25 per share.

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Currently, no public market exists for our Class A common stock. Our Class A common stock has been approved for listing on The NASDAQ Global Market under the symbol "IRWD."

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Following this offering, we will have two classes of authorized common stock, Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting. In certain circumstances pertaining to change in control matters, holders of our Class A common stock are entitled to one vote per share and holders of our Class B common stock are entitled to ten votes per share.

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*Investing in our Class A common stock involves risks. See "Risk Factors" beginning on page 8.*

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*Price \$11.25 Per Share*

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|             | Price to<br>Public | Underwriting<br>Discounts and<br>Commissions <sup>(1)</sup> | Proceeds to<br>Us,<br>Before Expenses |
|-------------|--------------------|---|---------------------------------------|
| Per Share   | \$11.25            | \$0.7875  | \$10.4625                             |
| <hr/> Total | \$187,500,004      | \$10,500,000  | \$177,000,004                         |

(1) The underwriters will receive an underwriting discount and commission of 3.4525% on the sale of 6,577,440 shares of our Class A common stock to certain of our existing stockholders and certain specified affiliated entities.

We have granted the underwriters an option for a period of 30 days to purchase up to 2,500,000 additional shares of Class A common stock on the same terms and conditions set forth above.

**Neither the Securities and Exchange Commission nor any state securities commission nor any other regulatory body has approved or disapproved of these securities or passed on the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.**

The underwriters expect to deliver the shares of Class A common stock to purchasers on or about February 8, 2010.

**J.P.Morgan**

**Morgan Stanley**  
BofA Merrill Lynch

**Credit Suisse**

**Wedbush PacGrow Life Sciences**

*February 2, 2010*

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**You should rely only on the information contained in this prospectus. We have not, and the underwriters have not, authorized anyone to provide you with additional information or information different from that contained in this prospectus. We are not, and the underwriters are not, making an offer to sell these securities in any jurisdiction where an offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate as of the date on the front cover of this prospectus only, regardless of the time of delivery of this prospectus or of any sale of our Class A common stock. Our business, prospects, financial condition and results of operations may have changed since that date.**

Until March 1, 2010, all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

The Ironwood logo is a trademark of Ironwood Pharmaceuticals, Inc. All other trademarks and service marks appearing in this prospectus are the property of their respective holders. All rights reserved.

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**PROSPECTUS SUMMARY**

*This summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our Class A common stock. You should read this entire prospectus carefully, especially the risks of investing in our Class A common stock discussed under "Risk Factors" beginning on page 8 and the consolidated financial statements and notes to those consolidated financial statements, before making an investment decision.*

**Overview**

We are an entrepreneurial pharmaceutical company that discovers, develops and intends to commercialize innovative medicines targeting important therapeutic needs. Our goal is to build the next great pharmaceutical company, an outstanding business that will thrive and endure well beyond our lifetimes and generate substantial returns for our shareholders. Our experienced team of researchers is focused on a portfolio of internally discovered drug candidates that includes one Phase 3 drug candidate (linaclotide), one Phase 1 pain drug candidate, and multiple preclinical programs.

We believe that linaclotide could present patients and healthcare practitioners with a unique therapy for a major medical need not yet met by existing therapies. Linaclotide is a first-in-class compound currently in confirmatory Phase 3 clinical trials evaluating its safety and efficacy for the treatment of patients with irritable bowel syndrome with constipation (IBS-C) or chronic constipation (CC). IBS-C and CC are gastrointestinal disorders that affect millions of sufferers worldwide, according to our estimates. Linaclotide recently achieved favorable efficacy and safety results in two Phase 3 CC trials, meeting all 32 primary and secondary endpoints, including the improvement of abdominal symptoms such as bloating and discomfort as well as constipation symptoms, across both doses evaluated in these independent trials involving 1,287 subjects. We expect to have data from our Phase 3 IBS-C trials in the second half of 2010. If those trials are successful, we intend to file a New Drug Application with the U.S. Food and Drug Administration, or the FDA, in the first half of 2011, seeking approval to market linaclotide to IBS-C and CC patients age 18 and older in the U.S. If the FDA approves linaclotide for those indications, we may seek to expand linaclotide's market opportunity by exploring its utility in other gastrointestinal indications and in the pediatric population.

Linaclotide was designed by Ironwood scientists to target the defining attributes of IBS-C: abdominal pain, discomfort, bloating and constipation. Linaclotide acts locally in the gut with no detectable systemic exposure in humans at therapeutic doses. In the six Phase 2 and Phase 3 clinical trials we have completed to date in over 2,000 IBS-C and CC patients, linaclotide has demonstrated rapid and sustained improvement of the multiple symptoms of IBS-C and CC, with favorable tolerability and convenient once-daily oral dosing.

In a Phase 2b study in patients with IBS-C, linaclotide rapidly reduced abdominal pain, abdominal discomfort and bloating, and improved constipation symptoms, throughout the 12-week treatment period of the trial, with improvements noted for all symptoms assessed within the first week of initiation of therapy. In particular, abdominal pain was reduced 37% to 47%, and pain reduction was observed within the first week following initiation of therapy and was sustained throughout the treatment period, even among patients with severe or very severe abdominal pain.

In a Phase 2b study in patients with CC, linaclotide rapidly reduced abdominal discomfort and bloating, and improved constipation symptoms, throughout the 4-week treatment periods of the trials.

In five of the six Phase 2 and Phase 3 trials, diarrhea was the most common adverse event (seen in 5% to 20% of subjects) and the most common cause for discontinuation (1% to 7% of the patients discontinued participation in the trials). Diarrhea has generally been mild to moderate.

We have pursued a partnering strategy for commercializing linaclotide that has enabled us to retain significant control over linaclotide's development and commercialization, share the costs with high-quality

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collaborators whose capabilities complement ours, and, should linaclotide meet our sales expectations, retain approximately half of linaclotide's future long-term value in the major pharmaceutical markets. In September 2007, we entered into a partnership with Forest Laboratories, Inc., or Forest, to co-develop and co-market linaclotide in the U.S. In April 2009, we entered into a license agreement with Almirall, S.A., or Almirall, to develop and commercialize linaclotide in Europe for the treatment of IBS-C and other gastrointestinal conditions. In November 2009, we entered into a license agreement with Astellas Pharma Inc., or Astellas, to develop and commercialize linaclotide for the treatment of IBS-C and other gastrointestinal conditions in several Asian countries. To date, licensing fees, milestone payments, related equity investments and development costs received from our linaclotide partners total greater than \$250 million. We have retained all rights to linaclotide outside of the territories discussed above.

In addition to five years of exclusivity under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, that would be granted if the FDA approves linaclotide, linaclotide is covered by a U.S. composition of matter patent that expires in 2025, subject to possible patent term extension. Linaclotide is also covered by a European Union composition of matter patent that expires in 2024, subject to possible patent term extension. A patent application is pending in Japan, and if issued, would expire in 2024.

If linaclotide continues to advance to regulatory submission in the U.S., the European Union and Asia, we expect to receive an additional \$190 million in pre-commercial payments from our partners. We believe that these milestone payments, together with our existing cash and the anticipated proceeds of this offering, should enable us to launch and commercialize linaclotide in the U.S. with our partner Forest and to fund our currently contemplated research and development efforts for at least the next five years, based on our current business plan.

**Our Strategy**

Our goal is to build the next great pharmaceutical company by discovering, developing and commercializing innovative and differentiated medicines that target important unmet needs. Key elements of our strategy include:

attract and incentivize a team with a singular passion for creating and commercializing medicines that can make a significant difference in patients' lives;

successfully commercialize linaclotide in collaboration with Forest in the U.S.;

support our international partners to commercialize linaclotide outside of the U.S.;

if approved for IBS-C and CC, develop linaclotide for the treatment of other gastrointestinal disorders and for the pediatric population;

invest in our pipeline of novel product candidates and evaluate candidates outside of the company for in-licensing or acquisition opportunities;

participate in a meaningful way in the economics of the drugs that we bring to the market; and

execute our strategy with our shareholders' long-term interests in mind by seeking to maximize long-term per share cash flows.

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**Risks Affecting Us**

Our ability to implement our business strategy is subject to numerous risks and uncertainties. As an early stage pharmaceutical company, we face many risks inherent in our business and our industry generally. We currently have no commercial products and we have not received regulatory approval for, nor have we generated commercial revenue from, any of our product candidates. The regulatory approval process is expensive, time-consuming and uncertain, and our product candidates may not be approved for sale by regulatory authorities. We are largely dependent on the success of our lead product candidate, linaclotide, which may never be successfully commercialized. Even if linaclotide receives regulatory approval, it may still face future development and regulatory difficulties and may never achieve profitability. Our other product candidates are at an early stage of development and are unproven. If we do not successfully commercialize our product candidates, we will be unable to achieve our business objectives. Our patents may not adequately protect our present and future candidates or prevent third parties from competing against us. We have a limited operating history and have incurred substantial losses since inception. We incurred a net loss attributable to Ironwood Pharmaceuticals, Inc. of approximately \$47.3 million for the nine months ended September 30, 2009 and had an accumulated deficit of approximately \$290.6 million as of September 30, 2009. We anticipate that we will continue to incur additional losses for the foreseeable future. You should carefully consider all of the information set forth in this prospectus and, in particular, the information under the heading "Risk Factors," prior to making an investment in our Class A common stock.

**Corporate Information**

We were incorporated in Delaware in 1998. Prior to April 7, 2008, we were named Microbia, Inc., which is now the name of our majority-owned subsidiary (formerly Microbia Precision Engineering, Inc.). Our address is 320 Bent Street, Cambridge, Massachusetts 02141. Our telephone number is 617-621-7722. Our website address is [www.ironwoodpharma.com](http://www.ironwoodpharma.com). Information contained in, and that can be accessed through, our website is not incorporated into and does not form a part of this prospectus.

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**THE OFFERING**

|  |  |
|--|--|
| Class A common stock we are offering               | 16,666,667 shares  |
| Over-allotment option                              | 2,500,000 shares   |
| Common stock to be outstanding after this offering |  |
| Class A common stock                               | 16,666,667 shares  |
| Class B common stock                               | 78,246,222 shares  |
| Total common stock                                 | 94,912,889 shares  |
| Voting rights                                      | <p>Until at least December 31, 2018, each share of Class A common stock and each share of Class B common stock has one vote per share, except on the following matters (in which each share of Class A common stock has one vote per share and each share of Class B common stock has ten votes per share):</p> <ul style="list-style-type: none"> <li>    adoption of a merger or consolidation agreement involving Ironwood;</li> <li>    a sale of all or substantially all of Ironwood's assets;</li> <li>    a dissolution or liquidation of Ironwood; or</li> <li>    every matter, if and when any individual, entity or "group" (as such term is used in Regulation 13D of the Securities Exchange Act of 1934, as amended, or the Exchange Act) has, or has publicly disclosed (through a press release or a filing with the Securities and Exchange Commission, or the SEC) an intent to have, beneficial ownership of 30% or more of the number of outstanding shares of Class A common stock and Class B common stock, combined. See "Description of Capital Stock" for a description of the material terms of our Class A common stock and our Class B common stock.</li> </ul> |
| Use of proceeds after expenses                     | <p>We estimate that the net proceeds from this offering will be approximately \$175.0 million, or approximately \$203.1 million if the underwriters exercise their over-allotment option in full. We expect to use the net proceeds from this offering to fund the development and commercialization of linaclotide, to fund research and development of other products and for other general corporate purposes. See "Use of Proceeds."</p>   |
| Risk factors                                       | <p>You should read the "Risk Factors" section of this prospectus beginning on page 8 for a discussion of factors to consider carefully before deciding whether to purchase shares of our Class A common stock.</p>   |
| Directed share program                             | <p>The underwriters will receive an underwriting discount and commission of 3.4525% on the sale of 6,577,440 shares to certain of our existing stockholders and certain specified affiliated entities. See "Underwriting."</p>   |
| NASDAQ Global Market symbol                        | IRWD   |

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The number of shares of our common stock to be outstanding after this offering is based on 78,246,222 shares of Class B common stock outstanding as of December 31, 2009, after giving effect to the conversion of 69,904,843 shares of convertible preferred stock outstanding as of December 31, 2009 into 70,391,620 shares of our Class B common stock at the completion of this offering.

The number of shares of our common stock outstanding immediately after this offering excludes:

13,691,579 shares of Class B common stock issuable upon the exercise of options outstanding as of December 31, 2009, with exercise prices ranging from \$0.10 to \$7.36 per share and a weighted average exercise price of \$2.45 per share; and

2,255,516 additional shares of Class B common stock reserved for future grants under our 2002 Stock Incentive Plan and 2005 Stock Incentive Plan as of December 31, 2009.

Unless otherwise indicated, all information in this prospectus:

gives effect to the automatic conversion of all outstanding shares of our convertible preferred stock into shares of our Class B common stock upon the completion of this offering;

gives effect to our eleventh amended and restated certificate of incorporation that we will file with Delaware immediately prior to the closing of this offering;

assumes no conversion of our Class B common stock into our Class A common stock prior to the completion of this offering; and

assumes no exercise by the underwriters of their option to purchase up to 2,500,000 shares of our Class A common stock in this offering to cover over-allotments.



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The following tables present a summary of our historical consolidated financial information and pro forma net loss per common share. You should read the following summary financial data in conjunction with "Selected Consolidated Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes, all included elsewhere in this prospectus.

|   | December 31,                                    |             |             | Nine Months Ended<br>September 30, |             |
|---|---|-------------|-------------|------------------------------------|-------------|
|   | 2006  | 2007        | 2008        | 2008                               | 2009        |
|   | (unaudited)                                     |             |             |                                    |             |
|   | (in thousands, except share and per share data) |             |             |                                    |             |
| <b>Consolidated Statement of Operations Data:</b>   |   |             |             |                                    |             |
| <b>Revenue:</b>   |   |             |             |                                    |             |
| Collaborative arrangements  | \$  | \$ 4,608    | \$ 18,383   | \$ 13,933                          | \$ 25,917   |
| Services  | 3,140   | 5,856       | 3,833       | 3,309                              | 1,581       |
| <b>Total revenue</b>  | 3,140   | 10,464      | 22,216      | 17,242                             | 27,498      |
| <b>Operating expenses:</b>  |   |             |             |                                    |             |
| Research and development  | 35,543  | 57,246      | 59,809      | 43,309                             | 58,824      |
| General and administrative  | 7,192   | 10,833      | 18,328      | 13,054                             | 17,309      |
| <b>Total operating expenses</b>   | 42,735  | 68,079      | 78,137      | 56,363                             | 76,133      |
| <b>Loss from operations</b>   | (39,595)  | (57,615)    | (55,921)    | (39,121)                           | (48,635)    |
| <b>Other income (expense):</b>  |   |             |             |                                    |             |
| Interest expense  | (217)   | (263)       | (334)       | (253)                              | (370)       |
| Interest and investment income  | 2,533   | 4,118       | 2,124       | 1,901                              | 214         |
| Remeasurement of forward purchase contracts   |   | 600         | (900)       | (5,900)                            | (100)       |
| <b>Other income (expense), net</b>  | 2,316   | 4,455       | 890         | (4,252)                            | (256)       |
| <b>Loss before income tax benefit</b>   | (37,279)  | (53,160)    | (55,031)    | (43,373)                           | (48,891)    |
| Income tax benefit  |   |             |             |                                    | (153)       |
| Net loss  | (37,279)  | (53,160)    | (55,031)    | (43,373)                           | (48,738)    |
| Net loss attributable to noncontrolling interest  | 99  | 408         | 1,157       | 726                                | 1,483       |
| <b>Net loss attributable to Ironwood Pharmaceuticals, Inc.</b>  | \$ (37,180)                                     | \$ (52,752) | \$ (53,874) | \$ (42,647)                        | \$ (47,255) |
| <b>Net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted</b>  | \$ (5.79)                                       | \$ (7.91)   | \$ (7.82)   | \$ (6.22)                          | \$ (6.70)   |
| <b>Weighted average number of common shares used in net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted</b> | 6,417,499                                       | 6,666,601   | 6,889,817   | 6,859,285                          | 7,054,291   |

|  |           |           |
|--|-----------|-----------|
| <b>Pro forma net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted (unaudited)<sup>(1)</sup></b> | \$ (0.72) | \$ (0.62) |
|--|-----------|-----------|

|   |            |            |
|---|------------|------------|
| <b>Pro forma weighted average number of common shares used in net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted (unaudited)<sup>(1)</sup></b> | 74,495,452 | 75,574,117 |
|---|------------|------------|

(1)

Pro forma basic and diluted net loss per share have been calculated assuming: (a) the automatic conversion of all outstanding shares of convertible preferred stock as of December 31, 2008 into 67,605,635 shares of our Class B common stock and as of September 30, 2009 into 69,709,801 shares of our Class B common stock upon the closing

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of this offering; (b) the issuance of 681,819 shares of our convertible preferred stock sold at a price of \$22.00 per share for cash proceeds of \$15.0 million, which were received on November 13, 2009, including a \$0.7 million gain on the final remeasurement of the forward purchase contract at the time of settlement, and the conversion of such shares into 681,819 shares of our Class B common stock upon the closing of this offering and (c) compensation expense of approximately \$56,000 and \$107,000 related to 30,000 and 45,000 time-accelerated stock options at December 31, 2008 and September 30, 2009, respectively, that will fully vest upon the closing of this offering. Pro forma basic and diluted net loss per share does not give effect to the sale of 16,666,667 shares of Class A common stock that we are offering pursuant to this prospectus.

|  | As of September 30, 2009<br>(unaudited) |                          |   |
|--|---|--------------------------|---|
|  | Actual                                  | Pro Forma <sup>(a)</sup> | Pro Forma as<br>Adjusted <sup>(b)</sup> |
|  | (in thousands)                          |                          |   |
| <b>Consolidated Balance Sheet Data:</b>                  |   |                          |   |
| Cash, cash equivalents and available-for-sale securities | \$ 98,928                               | \$ 113,928               | \$ 288,928                              |
| Working capital (excluding deferred revenue)             | 99,412                                  | 108,612                  | 283,612                                 |
| Total assets   | 149,647                                 | 158,847                  | 333,847                                 |
| Deferred revenue, including current portion              | 104,487                                 | 104,487                  | 104,487                                 |
| Long-term debt, including current portion                | 3,406                                   | 3,406                    | 3,406                                   |
| Capital lease obligations, including current portion     | 220                                     | 220                      | 220                                     |
| Total liabilities  | 135,640                                 | 135,640                  | 135,640                                 |
| Convertible preferred stock                              | 289,849                                 |                          |   |
| Noncontrolling interest                                  | 3,856                                   | 3,856                    | 3,856                                   |
| Total stockholders' equity (deficit)                     | (275,842)                               | 23,207                   | 198,207                                 |

- (a) The pro forma consolidated balance sheet data gives effect to: (i) the automatic conversion of all outstanding shares of our convertible preferred stock into 69,709,801 shares of our Class B common stock upon the closing of this offering; (ii) the issuance of 681,819 shares of our convertible preferred stock sold at a price of \$22.00 per share for cash proceeds of \$15.0 million, which were received on November 13, 2009, including a \$0.7 million gain on the final remeasurement of the forward purchase contract at the time of settlement, and the conversion of such shares into 681,819 shares of our Class B common stock upon the closing of this offering and (iii) compensation expense of approximately \$107,000 related to 45,000 time-accelerated stock options at September 30, 2009 that will fully vest upon the closing of this offering.
- (b) The pro forma as adjusted consolidated balance sheet data also gives effect to the sale of 16,666,667 shares of our Class A common stock in this offering at the initial public offering price of \$11.25 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

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**RISK FACTORS**

Investing in our Class A common stock involves a high degree of risk. You should carefully consider the following risk factors, as well as the other information in this prospectus, before deciding to invest in our Class A common stock. The occurrence of any of the following risks could harm our business, financial condition, results of operations or prospects. In that case, the trading price of our Class A common stock could decline, and you may lose all or part of your investment.

**Risks Related to Our Business and Industry**

*We are largely dependent on the success of linaclotide, which may never receive regulatory approval or be successfully commercialized.*

We currently have one product candidate, linaclotide, in Phase 3 clinical development. Our other drug candidates are in earlier stages of development. Our business depends entirely on the successful development and commercialization of our product candidates. We currently generate no revenue from sales, and we may never be able to develop marketable drugs. The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of pharmaceutical products is subject to extensive regulation by the FDA and foreign regulatory authorities, and regulations differ from jurisdiction to jurisdiction. We are not permitted to market any of our product candidates in the U.S. until we receive approval of a new drug application, or an NDA, from the FDA, or in any foreign jurisdictions until we receive the requisite approvals from such jurisdictions. We have neither submitted an NDA nor received marketing approval for linaclotide in any jurisdiction. Obtaining approval of an NDA is a lengthy, expensive and uncertain process. The FDA also has substantial discretion in the drug approval process, including the ability to delay, limit or deny approval of a product candidate for many reasons. For example:

the FDA may not deem linaclotide or another product candidate safe and effective;

the FDA may not find the data from preclinical studies and clinical trials sufficient to support approval;

the FDA may not approve of manufacturing processes and facilities; or

the FDA may change its approval policies or adopt new regulations.

Linaclotide is a first-in-class compound that is currently in Phase 3 clinical development for the treatment of irritable bowel syndrome with constipation, or IBS-C, and chronic constipation, or CC, and will require the successful completion of at least two Phase 3 clinical trials for each indication before submission of an NDA to the FDA for potential approval in such indication. In November 2009, we announced that we achieved favorable results in our CC trials. Even though linaclotide met the endpoints of the CC trial, it may not be approved for the CC indication or for any other indication for which we are seeking approval from the FDA. The FDA may disagree with our trial design or our interpretation of data from clinical trials, or may change the requirements for approval even after it has reviewed and commented on the design for our clinical trials. The FDA might also approve linaclotide for fewer or more limited indications than we request, or may grant approval contingent on the performance of costly post-approval clinical trials. In addition, the FDA may not approve the labeling claims that we believe are necessary or desirable for the successful commercialization of linaclotide. Any failure to obtain regulatory approval of linaclotide would significantly limit our ability to generate revenues, and any failure to obtain such approval for all of the indications and labeling claims we deem desirable could reduce our potential revenue.

*Our clinical trials may fail to demonstrate acceptable levels of safety and efficacy of linaclotide, which could prevent or significantly delay regulatory approval.*

Our product candidates are prone to the risks of failure inherent in drug development most pharmaceutical product candidates fail. Before obtaining regulatory approvals for the commercial sale of

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linaclotide or any other product candidate for a specific indication, we must demonstrate with substantial evidence gathered in well-controlled clinical trials and to the satisfaction of the FDA, with respect to approval in the U.S., and to the satisfaction of similar regulatory authorities in other jurisdictions, with respect to approval in those jurisdictions, that the product candidate is safe and effective for use for the target indication.

The results from the preclinical and clinical trials that we have completed for linaclotide may not be replicated in future trials, or we may be unable to demonstrate sufficient safety and efficacy to obtain the requisite regulatory approvals for linaclotide. A number of companies in the biotechnology and pharmaceutical industries have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. If linaclotide is not shown to be safe and effective, our clinical development programs could be delayed or terminated. Our failure to adequately demonstrate the efficacy and safety of linaclotide or any other product candidates that we may develop, in-license or acquire would prevent receipt of regulatory approval and, ultimately, the commercialization of that product candidate.

***The positive top-line results from our two Phase 3 clinical trials assessing the safety and efficacy of linaclotide in patients with CC may not be indicative of our two Phase 3 clinical trials assessing the safety and efficacy of linaclotide in patients with IBS-C.***

In November 2009, we announced that the primary endpoint was achieved in each of our two Phase 3 clinical trials assessing the safety and efficacy of linaclotide in patients with CC. Additional data from each of these Phase 3 clinical trials may become available and may have a bearing on the safety and efficacy of linaclotide. In addition, the primary efficacy endpoint in each of these two clinical trials is only one of the three primary efficacy endpoints in each of our two Phase 3 clinical trials assessing the safety and efficacy of linaclotide in patients with IBS-C. Positive results in the CC trial or from earlier clinical trials are not necessarily indicative of future success in the IBS-C trials, even with respect to similar endpoints. Therefore, unless we meet all three primary efficacy endpoints in our two IBS-C clinical trials, we may be unable to demonstrate sufficient safety and efficacy of linaclotide in patients with IBS-C. Finally, our partners Almirall and Astellas intend to seek approval from regulatory authorities in each of their respective territories solely for the IBS-C indication. Accordingly, if we are unable to establish safety and efficacy of linaclotide in our U.S. IBS-C trials, our partners may be unable to utilize our data in the U.S. in their regulatory filings, and may be hindered from obtaining approval for linaclotide in their respective territories.

***Linaclotide may cause undesirable side effects or have other properties that could delay or prevent its regulatory approval or limit its commercial potential.***

Undesirable side effects caused by linaclotide could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in the denial of regulatory approval by the FDA or other regulatory authorities and potential products liability claims. We are currently completing our evaluation of the data from our CC studies and conducting two Phase 3 IBS-C trials as well as a long-term safety study in patients dosed with linaclotide over a 78-week period. Serious adverse events deemed to be caused by linaclotide could have a material adverse effect upon the linaclotide program and our business as a whole. The most common adverse event to date in the clinical studies evaluating the safety and efficacy of linaclotide has been diarrhea. For the most part, the diarrhea has been considered mild or moderate by the patients, but in a small percentage of patients, it has been severe enough for patients to discontinue participation in a study. There have been no serious adverse events in patients treated with linaclotide that were deemed by a study investigator to be definitively related or probably related to linaclotide treatment. There have been serious adverse events in patients treated with linaclotide that were deemed by a study investigator to be possibly related to linaclotide treatment, involving single cases of aplastic anemia, atrial fibrillation, bronchitis, cholecystectomy, gastroenteritis, vertigo, and ileus. These serious adverse events may or may not have been related to linaclotide and our understanding of the relationship between

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linaclotide and these events may change as we gather more information. Finally, there have been no deaths in our trials that were considered to be related to linaclotide treatment.

If linaclotide receives marketing approval, and we or others later identify undesirable side effects caused by the product, a number of potentially significant negative consequences could result, including:

regulatory authorities may withdraw approvals of linaclotide;

regulatory authorities may require additional warnings on the label;

we may be required to create a medication guide outlining the risks of such side effects for distribution to patients;

we could be sued and held liable for harm caused to patients; and

our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of linaclotide and could substantially increase commercialization costs.

***Delays in the completion of clinical testing 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

signing-up 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; and

lack of adequate funding to continue the clinical trial.

Additionally, changes in regulatory requirements and guidance may occur, and we may need to amend clinical trial protocols to reflect these changes. Amendments may require us to resubmit our clinical trial

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protocols to institutional review boards for reexamination, which may impact the costs, timing or successful completion of a clinical trial. If we experience delays in completion of, or if we terminate any of our clinical trials, the commercial prospects for our product candidates 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 of our product candidates.

***Because we work with Forest Laboratories, Inc. to develop, promote and manufacture linaclotide in North America, we are dependent upon a third party in our efforts to obtain regulatory approval for, and to commercialize, linaclotide within our expected timeframes.***

We co-develop and plan to co-promote linaclotide in the U.S. with Forest Laboratories, Inc., or Forest. Forest plays a significant role in the conduct of the clinical trials for linaclotide and the subsequent collection and analysis of data. In addition, Forest is responsible for completing the manufacturing process of linaclotide upon production of the active pharmaceutical ingredient, or API, which consists of finishing and packaging linaclotide into capsules. Employees of Forest are not our employees, and we have limited ability to control the amount or timing of resources that they devote to linaclotide. If Forest fails to devote sufficient time and resources to linaclotide, or if its performance is substandard, it will delay the potential approval of our regulatory applications as well as the commercialization and manufacturing of linaclotide. A material breach by Forest of our collaboration agreement could also delay regulatory approval and commercialization of linaclotide. In addition, the execution of clinical trials, and the subsequent compilation and analysis of the data produced, requires coordination among various parties. These functions may not be carried out effectively and efficiently if these parties fail to communicate and coordinate with one another. Moreover, although we have non-compete restrictions in place with Forest, Forest may have relationships with other commercial entities, some of which may compete with us. If Forest assists our competitors, it could harm our competitive position.

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

If approved and commercialized, linaclotide will compete with one existing prescription therapy for the treatment of IBS-C and CC, Amitiza. In addition, over the counter products are also used to treat certain symptoms of IBS-C and CC. 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 clinical benefits in our clinical trials. 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 certain companies are developing other products which could compete with linaclotide should they be approved by the FDA. Currently, there is only one compound in late stage development, and it is being developed by Theravance, Inc. This compound has completed Phase 2 trials for CC. To our knowledge, other potential competitors are in earlier stages of development. If our potential competitors are successful in completing drug development for their drug candidates and obtain approval from the FDA, they could limit the demand for linaclotide.

Many 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.



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***We have limited sales and marketing experience and resources, and we may not be able to effectively market and sell linaclotide.***

With linaclotide, we are developing a product candidate for large markets traditionally served by general practitioners and internists, as well as gastrointestinal specialists. Traditional pharmaceutical companies employ groups of sales representatives to call on these large generalist physician populations. In order to adequately address these physician groups, we must optimize our co-development and co-promotion relationship in the U.S., Canada and Mexico with Forest, our license and commercialization relationship in Europe with Almirall, and our license and commercialization relationship in certain Asian countries with Astellas. Likewise, we must either establish sales and marketing collaborations or co-promotion arrangements or expend significant resources to develop our own sales and marketing presence outside of North America, Europe, and those Asian countries. We currently possess limited resources and may not be successful in establishing additional collaborations or co-promotion arrangements on acceptable terms, if at all. We also face competition in our search for collaborators, co-promoters and sales force personnel. By entering into strategic collaborations or similar arrangements, we rely on third parties for financial resources and for development, commercialization, sales and marketing and regulatory expertise. Our collaborators may fail to develop or effectively commercialize linaclotide because they cannot obtain the necessary regulatory approvals, lack adequate financial or other resources or decide to focus on other initiatives.

***Even if linaclotide receives regulatory approval, it may still face future development and regulatory difficulties.***

Even if U.S. regulatory approval is obtained, the FDA may still impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly post-approval studies. Linaclotide and our other product candidates would also be subject to ongoing FDA requirements governing the labeling, packaging, storage, advertising, promotion, recordkeeping and submission of safety and other post-market information. In addition, 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 current good manufacturing practices, or 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 the facility where the product is manufactured, a regulatory agency may impose restrictions on that product or the manufacturer, including requiring withdrawal of the product from the market or suspension of manufacturing. If we, our product candidates or the manufacturing facilities for our product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

issue warning letters or untitled letters;

impose civil or criminal penalties;

suspend regulatory approval;

suspend any ongoing clinical trials;

refuse to approve pending applications or supplements to applications filed 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 if linaclotide receives regulatory approval in the U.S., we or our collaborators may never receive approval to commercialize linaclotide outside of the U.S.***

In May 2009, we entered into an out-license agreement with Almirall for European rights to develop and commercialize linaclotide. In November 2009, we entered into an out-license agreement with Astellas for rights to develop and commercialize linaclotide in certain Asian countries. In the future, we may seek



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to commercialize linaclotide in foreign countries outside of Europe and those Asian countries with other parties or by ourselves. In order to market any products outside of the U.S., we must establish and 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. The time required to obtain approval in other jurisdictions might differ from that required to obtain FDA approval. The regulatory approval process in other jurisdictions may include all of the risks detailed above regarding FDA approval in the U.S. as well as other risks. 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. Failure to obtain regulatory approvals in other jurisdictions or any delay or setback in obtaining such approvals could have the same adverse effects detailed above regarding FDA approval in the U.S. As described above, such effects include the risks that linaclotide may not be approved for all indications requested, which could limit the uses of our linaclotide and have an adverse effect on its commercial potential or require costly post-marketing studies.

***If the manufacturers upon whom we rely fail to produce linaclotide in the volumes that we require on a timely basis, or fail to comply with stringent regulations applicable to pharmaceutical drug manufacturers, we may face delays in the development and commercialization of our product candidates.***

We do not currently possess internal manufacturing capacity. We currently utilize the services of contract manufacturers to manufacture our clinical supplies. With respect to the manufacturing of linaclotide, we are currently pursuing long-term commercial supply agreements with multiple manufacturers. These manufacturers will be responsible for the linaclotide API. These third party manufacturers acquire the raw materials for the API from a limited number of sources. Any curtailment in the availability of these raw materials could result in production or other delays with consequent adverse effects on us. In addition, because regulatory authorities must generally approve raw material sources for pharmaceutical products, changes in raw material suppliers may result in production delays or higher raw material costs.

We may be required to agree to minimum volume requirements, exclusivity arrangements or other restrictions with the contract manufacturers. We may not be able to enter into long-term agreements on commercially reasonable terms, or at all. If we change or add manufacturers, the FDA and comparable foreign regulators must approve these manufacturers' facilities and processes prior to use, which would require new testing and compliance inspections, and the new manufacturers would have to be educated in or independently develop the processes necessary for the production of our product candidates. Peptide manufacturing is a highly specialized manufacturing business. While we believe we will have long term arrangements with a sufficient number of API manufacturers, if we lose a manufacturer, it would take us a substantial amount of time to identify and develop a relationship with an alternative manufacturer.

Upon production of our API, each of our collaboration partners, Forest, Almirall and Astellas, is responsible for completing the manufacturing process of linaclotide which consists of finishing and packaging linaclotide into capsules, and we will be dependent upon those parties' success in producing drug product for commercial sale. No party has experience producing the API or finished drug product for linaclotide at commercial scale, and such efforts may fail. Traditionally, peptide manufacturing is costly, time consuming, resulting in low yields and poor stability. We cannot give any assurances that we will not encounter these issues when scaling up manufacturing for linaclotide.

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 production, particularly in scaling up production. These problems include difficulties with production costs and yields, quality control, including stability of the product and quality assurance testing, shortages of qualified personnel, as well as compliance with federal, state and foreign regulations. We are currently evaluating the stability of different batch sizes of

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linaclotide at various points in time. If we are unable to demonstrate stability in accordance with commercial requirements, or if our manufacturers were to encounter difficulties or otherwise fail to comply with their obligations to us, our ability to obtain FDA approval and market linaclotide would be jeopardized. In addition, any delay or interruption in the supply of clinical trial supplies could delay the completion of our clinical trials, increase the costs associated with conducting our clinical trials and, depending upon the period of delay, require us to commence new trials at significant additional expense or to terminate a trial.

Each of the linaclotide manufacturers would need to comply with GMP requirements enforced by the FDA through its facilities inspection program. These requirements include, among other things, quality control, quality assurance and the maintenance of records and documentation. Manufacturers of linaclotide may be unable to comply with these GMP requirements and with other FDA and foreign regulatory requirements. We have little control over our manufacturers' or collaboration partners' compliance with these regulations and standards. A failure to comply with these requirements may result in fines and civil penalties, suspension of production, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval. If the safety of linaclotide is compromised due to a manufacturers' or collaboration partners' failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize linaclotide, and we may be held liable for any injuries sustained as a result. Any of these factors could cause a delay of clinical trials, regulatory submissions, approvals or commercialization of linaclotide or our other product candidates, entail higher costs or result in our being unable to effectively commercialize linaclotide or our other product candidates. Furthermore, if our manufacturers or collaboration partners fail to deliver the required commercial quantities on a timely basis and at commercially reasonable prices, we may be unable to meet demand for any approved products and would lose potential revenues.

***Guidelines and recommendations published by various organizations can reduce the use of our products.***

Government agencies promulgate regulations and guidelines directly applicable to us and to our products. In addition, professional societies, practice management groups, private health and science foundations and organizations involved in various diseases from time to time may also publish guidelines or recommendations to the health care and patient communities. Recommendations of government agencies or these other groups or organizations may relate to such matters as usage, dosage, route of administration and use of concomitant therapies. Recommendations or guidelines suggesting the reduced use of our products or the use of competitive or alternative products that are followed by patients and health care providers could result in decreased use of our products.

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

Our ability to commercialize linaclotide successfully will depend in part on the coverage and reimbursement levels set by governmental authorities, private health insurers and other third-party payors. As a threshold for coverage and reimbursement, third-party payors generally require that drug products have been approved for marketing by the FDA. Third-party payors also 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 linaclotide or we may be required to sell linaclotide at a discount.

We expect that private insurers will consider the efficacy, cost effectiveness and safety of linaclotide in determining whether to approve reimbursement for linaclotide 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 linaclotide 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 payors limit the indications for which linaclotide will be reimbursed to a smaller set than we believe it is effective in treating.

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In some foreign countries, particularly Canada and the countries of Europe, the pricing of prescription pharmaceuticals is subject to strict 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. 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.

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

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

The use of our product candidates in clinical trials and the sale of any products for which we obtain marketing approval expose us to the risk of product liability claims. If we cannot 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 any approved product;
- impairment of our business reputation;
- withdrawal of clinical trial participants;
- initiation of investigations by regulators;
- costs of related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- loss of revenues; and
- the inability to commercialize our product candidates.

We have obtained product liability insurance coverage for our clinical trials. Our insurance coverage is limited to \$5 million per occurrence, and \$10 million in the aggregate, and covers bodily injury and property damage arising from our clinical trials, subject to industry-standard terms, conditions and exclusions. Our insurance coverage may not be sufficient to reimburse us for any expenses or losses we may suffer. 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. If and when we obtain marketing approval for any of our product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain this product liability insurance on commercially reasonable terms. On occasion, large judgments have been awarded in class action lawsuits based on drugs that had unanticipated side effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

*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 develop and market additional products and product candidates. We are pursuing various therapeutic opportunities through our pipeline. We may spend several

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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. 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:

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.

***Healthcare reform measures could hinder or prevent our product candidates' commercial success.***

The U.S. government and other governments have shown significant interest in pursuing healthcare reform. Any government-adopted reform measures could adversely impact the pricing of healthcare products and services in the U.S. or internationally and the amount of reimbursement available from governmental agencies or other third party payors. The continuing efforts of the U.S. and foreign governments, insurance companies, managed care organizations and other payors of health care services to contain or reduce health care costs may adversely affect our ability to set prices for our products which we believe are fair, and our ability to generate revenues and achieve and maintain profitability.

New laws, regulations and judicial decisions, or new interpretations of existing laws, regulations and decisions, that relate to healthcare availability, methods of delivery or payment for products and services, or sales, marketing or pricing, may limit our potential revenue, and we may need to revise our research and



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development programs. The pricing and reimbursement environment may change in the future and become more challenging due to several reasons, including policies advanced by the current executive administration in the U.S., new healthcare legislation or fiscal challenges faced by government health administration authorities. Specifically, in both the U.S. and some foreign jurisdictions, there have been a number of legislative and regulatory proposals to change the health care system in ways that could affect our ability to sell our products profitably. In the U.S., changes in federal health care policy are being considered by Congress this year. Some of these proposed reforms could result in reduced reimbursement rates for linaclotide and our other potential products, which would adversely affect our business strategy, operations and financial results.

In addition, the Medicare Prescription Drug Improvement and Modernization Act of 2003 reforms the way Medicare will cover and reimburse for pharmaceutical products. This legislation could decrease the coverage and price that we may receive for our products. Other third-party payors are increasingly challenging the prices charged for medical products and services. It will be time consuming and expensive for us to go through the process of seeking reimbursement from Medicare and private payors. Our products may not be considered cost-effective, and coverage and reimbursement may not be available or sufficient to allow us to sell our products on a profitable basis. Further federal and state proposals and health care reforms are likely which could limit the prices that can be charged for the product candidates that we develop and may further limit our commercial opportunity. Our results of operations could be materially adversely affected by the proposed healthcare reforms, by the Medicare prescription drug coverage legislation, by the possible effect of such current or future legislation on amounts that private insurers will pay and by other health care reforms that may be enacted or adopted in the future.

In September 2007, the Food and Drug Administration Amendments Act of 2007 was enacted, giving 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. The FDA's exercise of this authority could result in delays or increased costs during product development, clinical trials and regulatory review, increased costs to assure compliance with post-approval regulatory requirements, and potential restrictions on the sale and/or distribution of approved products.

***If our strategic alliances are unsuccessful, our operating results will be negatively impacted.***

Our three primary strategic alliances are with Forest, Almirall and Astellas. The success of these arrangements is largely dependent on the resources, efforts and skills of these partners. Disputes and difficulties in such relationships are common, often due to conflicting priorities or conflicts of interest. Merger and acquisition activity may exacerbate these conflicts. The benefits of these alliances are reduced or eliminated when strategic partners:

terminate the agreements covering the strategic alliance;

fail to devote financial or other resources to the alliances and thereby hinder or delay development, manufacturing or commercialization activities; or

fail to maintain the financial resources necessary to continue financing their portion of the development, manufacturing or commercialization costs, or become insolvent or declare bankruptcy.

***We will need to increase the size of our organization, and we may experience difficulties in managing growth.***

We will need to expand our managerial, operational, financial and other resources in order to manage our operations and clinical trials, continue our development activities and commercialize our product

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candidates. Our personnel, systems and facilities currently in place may not be adequate to support this future growth. Our need to effectively execute our growth strategy requires that we:

manage our clinical trials effectively, including our Phase 3 clinical trials for linaclotide;

manage our internal development efforts effectively while complying with our contractual obligations to licensors, licensees, contractors, collaborators and other third parties;

improve our operational, financial and management controls, reporting systems and procedures; and

attract and motivate sufficient numbers of talented employees.

***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 and clinical personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses, particularly in the greater-Boston area. Our industry has experienced a high rate of turnover of management personnel in recent years. If we are not able to attract and motivate necessary personnel to accomplish our business objectives, we may experience constraints that will significantly impede the achievement of our objectives.

We are highly dependent on the 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 of Research and Development and our Chief Scientific Officer; Michael J. Higgins, our Senior Vice President, Chief Operating Officer and Chief Financial Officer; and Thomas McCourt, our Senior Vice President, Marketing and Sales and Chief Commercial Officer. Although no member of our management team has informed us to date that he or she intends to resign or retire, 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 and clinical strategies. 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 of products that may compete with ours.

***We will need to obtain FDA approval of any proposed product names, and any failure or delay associated with such approval may adversely impact our business.***

Any name we intend to use for our product candidates will require approval from the FDA regardless of whether we have secured a formal trademark registration from the U.S. Patent and Trademark Office. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. The FDA may also object to a product name if it believes the name inappropriately implies medical claims. If the FDA objects to any of our proposed product names, we may be required to adopt an alternative name for our product candidates. If we adopt an alternative name, we would lose the benefit of our existing trademark applications for such product candidate, such as linaclotide, and may be required to expend significant additional resources in an effort to identify a suitable product name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. We may be unable to build a successful brand identity for a new trademark in a timely manner or at all, which would limit our ability to commercialize our product candidates.

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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 payors, 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 could 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:

the federal healthcare program anti-kickback law, which prohibits, 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 payors 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; and

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 payor, 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 compliance efforts.

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 may 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. 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 and fraud laws may prove costly.

***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

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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.

***Our business and operations would suffer in the event of system failures.***

Despite the implementation of security measures, our internal computer systems and those of our contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Such an event could cause interruption of our operations. For example, the loss of clinical trial data from completed or ongoing clinical trials for linaclotide could result in delays in our regulatory approval efforts and significantly increase our costs. To the extent that any disruption or security breach were to result in a loss of or damage to our data, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the development of our product candidates could be delayed.

***If the proprietary strain-development platform of our biomanufacturing segment does not succeed, we may lose our investment in Microbia, Inc.***

Our biomanufacturing segment consists of our majority ownership interest in Microbia, Inc. (formerly known as Microbia Precision Engineering), or Microbia. Microbia focuses on building a specialty biochemicals business based on a proprietary strain-development platform. The success of this segment is dependent on Microbia successfully developing, scaling up manufacturing and establishing commercial partnerships for biochemicals produced using its industrial biotechnology platform. If Microbia is not successful in developing products from its strain-development platform or partnering its platform, we may lose some or all of the value of our equity investment in Microbia.

**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.

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.

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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 that litigation would have a material adverse effect on our business.***

Our commercial success depends upon our ability and the ability of our collaborators to develop, manufacture, market and sell our product candidates 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 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 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 our product candidates may infringe.

We may be exposed to, or threatened with, future litigation by third parties alleging that our product candidates infringe their intellectual property rights. If 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 patent. A license may not be available to us on acceptable terms, if at all. In addition, during litigation, the patent holder 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. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming. In addition, in an infringement proceeding, a court 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 application at risk of not issuing.

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Interference proceedings brought by the U.S. Patent and Trademark Office 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. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our Class A common stock.

***Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.***

The U.S. Patent and Trademark Office and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process. There are situations in which noncompliance can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case.

***We have not yet registered trademarks for linaclotide in our potential markets, and failure to secure those registrations could adversely affect our business.***

We have not yet registered trademarks for linaclotide in any jurisdiction. Although we have filed trademark applications for linaclotide in the U.S., our trademark applications in the U.S. and any other jurisdictions where we may file may not be allowed for registration, and our registered trademarks may not be maintained or enforced. During trademark registration proceedings, we may receive rejections. Although we are given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the U.S. Patent and Trademark Office and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings.

***We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.***

We employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors, and as such, we may be subject to claims that these employees, or we, have used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

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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.*

We have a limited operating history. In recent years, we have focused primarily on developing linaclotide, with the goal of supporting regulatory approval for this product candidate. We have financed our operations primarily through private placements of preferred stock and our collaboration and license arrangements, and we have incurred losses in each year since our inception in 1998. We incurred net losses attributable to Ironwood Pharmaceuticals, Inc. of approximately \$37.2 million, \$52.8 million and \$53.9 million in the years ended December 31, 2006, 2007 and 2008, respectively, and approximately \$47.3 million in the nine months ended September 30, 2009. As of September 30, 2009, we had an accumulated deficit of approximately \$290.6 million. Our prior losses, combined with 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 increasing 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 have not generated any product revenue from our product candidates and may never be profitable.*

Our ability to become profitable depends upon our ability to generate revenue from sales. To date, we have not generated any product revenue, and we do not know when, or if, we will generate any such revenue. Our ability to generate product revenue depends on a number of factors, including, but not limited to, our ability to:

successfully complete our ongoing and planned clinical trials for linaclotide;

obtain regulatory approvals for linaclotide;

if regulatory approvals are received, manufacture commercial quantities of linaclotide at acceptable cost levels;

optimize our relationship to co-develop and co-promote linaclotide in the U.S. with Forest, to commercialize linaclotide in Europe with Almirall and to commercialize linaclotide in certain Asian countries with Astellas; and

identify and enter into one or more strategic collaborations to market and sell linaclotide outside of North America, Europe and those Asian countries.

Even if linaclotide is approved for commercial sale, we anticipate incurring significant costs associated with commercialization. We may not achieve profitability after generating product sales. If we are unable to generate product revenues, we will not become profitable.

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

Developing product candidates, conducting clinical trials, establishing manufacturing relationships and marketing drugs are expensive and uncertain. We believe that our cash on hand as of the date of this prospectus, additional cash milestone payments we may receive from our collaborators, and the proceeds of this offering, will enable us to launch and commercialize linaclotide in the U.S. with our partner, Forest, and to fund our currently contemplated research and development efforts for at least the next five years based on our existing business plan. However, unforeseen circumstances may arise, or our strategic

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imperatives could change, requiring us 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 rate of progress and cost of our clinical trials and other product development programs for linaclotide and our other product candidates;

the costs and timing of in-licensing additional product candidates or acquiring other complementary companies;

the timing of any regulatory approvals of our product candidates;

the costs of establishing sales, marketing and distribution capabilities; and

the status, terms and timing of any collaborative, licensing, co-promotion or other arrangements.

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 or eliminate one or more of our development programs or our commercialization efforts.

***Our quarterly operating results may fluctuate significantly.***

We expect our operating results to be subject to quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

variations in the level of expenses related to our development programs;

addition or termination of clinical trials;

any intellectual property infringement lawsuit in which we may become involved;

regulatory developments affecting our product candidates;

our execution of any collaborative, licensing or similar arrangements, and the timing of payments we may make or receive under these arrangements;

the achievement and timing of milestone payments under our existing collaboration and license agreements; and

if linaclotide receives regulatory approval, the level of underlying demand for that product and wholesalers' buying patterns.

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our Class A common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially.



*Raising additional funds by issuing securities may cause dilution to existing stockholders and raising funds through borrowing or licensing arrangements may restrict our operations or require us to relinquish proprietary rights.*

If we need to raise additional funds by issuing equity securities as a result of unforeseen circumstances or new strategic imperatives, our existing stockholders' ownership will be diluted. If we seek to raise capital through debt financing, such transactions typically require covenants that restrict operating activities. Any borrowings under debt financing will need to be repaid, which creates additional financial risk, particularly if our business or prevailing financial market conditions are not conducive to paying-off or refinancing our outstanding debt obligations at maturity.

If we raise additional funds through collaboration, licensing or other similar arrangements, it may be necessary to relinquish potentially valuable rights to our product candidates or technologies, or to grant licenses on terms that are not favorable to us. If adequate funds are not available when and if needed, our

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ability to achieve profitability or to respond to competitive pressures would be significantly limited, and we may be required to delay, significantly curtail or eliminate one or more of our programs.

***We have operated as a private company and have no experience attempting to comply with public company obligations. Attempting to comply with these requirements will increase our costs and require additional management resources, and we still may fail to comply.***

We will face increased legal, accounting, administrative and other costs and expenses as a public company. Compliance with the Sarbanes-Oxley Act of 2002, as well as other rules of the SEC, for example, will result in significant initial cost to us as well as ongoing increases in our legal, audit and financial compliance costs. As a public company, we will become subject to Section 404 of the Sarbanes-Oxley Act relating to internal controls over financial reporting. Although we have not identified any material weaknesses in our internal controls over financial reporting to date, we cannot assure that our internal controls over financial reporting will prove to be effective.

***If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our Class A common stock.***

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, including at our subsidiary, Microbia, could cause us to fail to meet our reporting obligations. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our Class A common stock.

***Our ability to use net operating loss and tax credit carryforwards and certain built-in losses to reduce future tax payments is limited by provisions of the Internal Revenue Code, and may be subject to further limitation as a result of the transactions contemplated by this offering.***

Section 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, contain rules that limit the ability of a company that undergoes an ownership change, which is generally any change in ownership of more than 50% of its stock over a three-year period, to utilize its net operating loss and tax credit carryforwards and certain built-in losses recognized in years after the ownership change. These rules generally operate by focusing on ownership changes involving stockholders owning directly or indirectly 5% or more of the stock of a company and any change in ownership arising from a new issuance of stock by the company. Generally, if an ownership change occurs, the yearly taxable income limitation on the use of net operating loss and tax credit carryforwards and certain built-in losses is equal to the product of the applicable long term tax exempt rate and the value of the company's stock immediately before the ownership change. We may be unable to offset our taxable income with losses, or our tax liability with credits, before such losses and credits expire and therefore would incur larger federal income tax liability.

In addition, it is possible that the transactions described in this offering, either on a standalone basis or when combined with future transactions (including issuances of new shares of our Class A common stock or Class B common stock and sales of shares of our Class A common stock), will cause us to undergo one or more additional ownership changes. In that event, we generally would not be able to use our pre-change loss or credit carryovers or certain built-in losses prior to such ownership change to offset future taxable income in excess of the annual limitations imposed by Sections 382 and 383 and those attributes already subject to limitations (as a result of our prior ownership changes) may be subject to more stringent limitations. As of December 31, 2008, we had an immaterial amount of net operating loss carryforwards and tax credit carryforwards at risk of loss due to a prior ownership change, as well as approximately \$78.2 million of net operating loss carryforwards and approximately \$10.1 million of tax credit carryforwards at risk of limitation in the event of a future ownership change.

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**Risks Relating to Securities Markets and Investment in Our Stock**

*The concentration of our capital stock ownership with our founders, directors, executives, employees and current holders of our preferred stock (and their affiliates) will limit your ability to influence certain corporate matters.*

Each share of Class A common stock and each share of Class B common stock has one vote per share on all matters except certain ones pertaining to change in control matters. After our offering, our Class B common stock will have ten votes per share and our Class A common stock, which is the stock we are selling in this offering, will have one vote per share in the following matters:

adoption of a merger or consolidation agreement involving Ironwood;

a sale of all or substantially all of Ironwood's assets;

a dissolution or liquidation of Ironwood; and,

every matter, if and when any individual, entity or "group" (as such term is used in Regulation 13D of the Exchange Act) has, or has publicly disclosed (through a press release or a filing with the SEC) an intent to have, beneficial ownership of 30% or more of the number of outstanding shares of Class A common stock and Class B common stock, combined.

Because of our dual class common stock structure, the holders of our Class B common stock, who consist of our founders, directors, executives, employees and current holders of our preferred stock (and their affiliates), will continue to be able to control the corporate matters listed above if any such matter is submitted to our stockholders for approval even if they come to own less than 50% of the outstanding shares of our common stock. Immediately after this offering, the holders of our Class A common stock will own 17.6% and the holders of our Class B common stock will own 82.4% of the outstanding shares of Class A common stock and Class B common stock, combined. However, because of our dual class common stock structure these holders of our Class A common stock will have 2.1% and holders of our Class B common stock will have 97.9% of the total votes immediately after this offering in each of the matters identified in the list above. This concentrated control with our Class B common stock holders will limit your ability to influence those corporate matters and, as a result, we may take actions that our stockholders do not view as beneficial. The market price of our Class A common stock could be adversely affected by the structure. The underwriters have reserved 6,577,440 of the shares of our Class A common stock to be issued in this offering for sale to certain of our existing stockholders and certain specified affiliated entities. Participation in this offering by existing holders of our convertible preferred stock will further concentrate voting rights and may negatively impact liquidity for shares of our Class A common stock.

*Anti-takeover provisions under our charter documents and Delaware law could delay or prevent a change of control which could negatively impact the market price of our Class A common stock.*

Provisions in our certificate of incorporation and bylaws, as amended and restated upon the completion of this offering, may have the effect of delaying or preventing a change of control. These provisions include the following:

Our certificate of incorporation provides for a dual class common stock structure. As a result of this structure, our founders, directors, executives, employees and current holders of our preferred stock (and each of their affiliates), each of whom will hold shares of our Class B common stock following this offering, will have significant influence over certain matters requiring stockholder approval, including significant corporate transactions, such as a merger. This concentrated control could discourage others from initiating a change of control transaction that other stockholders may view as beneficial.

Our board of directors is divided into three classes serving staggered three-year terms, such that not all members of the board will be elected at one time. This staggered board structure prevents stockholders from replacing the entire board at a single stockholders' meeting.



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Our board of directors has the right to elect directors to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors.

Our board of directors may issue, without stockholder approval, shares of preferred stock. The ability to authorize preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us.

Stockholders must provide advance notice to nominate individuals for election to the board of directors or to propose matters that can be acted upon at a stockholders' meeting. Furthermore, stockholders may only remove a member of our board of directors for cause. These provisions may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect such acquiror's own slate of directors or otherwise attempting to obtain control of our company.

Our stockholders may not act by written consent. As a result, a holder, or holders, controlling a majority of our capital stock would not be able to take certain actions outside of a stockholders' meeting.

Special meetings of stockholders may be called only by the chairman of our board of directors, our chief executive officer, our president or a majority of our board of directors. As a result, a holder, or holders, controlling a majority of our capital stock would not be able to call a special meeting.

A majority of the outstanding shares of Class B common stock are required to amend our certificate of incorporation and a super-majority (80%) of the outstanding shares of Class B common stock are required to amend our by-laws, which make it more difficult to change the provisions described above.

In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These and other provisions in our certificate of incorporation and our bylaws and in the Delaware General Corporation Law could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors.

***If holders of shares of our Class B common stock convert their shares of Class B common stock into shares of Class A common stock and exercise their registration rights, a significant number of shares of our Class A common stock could be sold into the market, which could reduce the trading price of our Class A common stock and impede our ability to raise future capital.***

After this offering, holders of approximately 70,170,477 shares of Class B common stock (after giving effect to the conversion of 69,683,700 shares of convertible preferred stock outstanding as of December 31, 2009 into shares of our Class B common stock) will have rights under our eighth amended and restated investors' rights agreement, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. These rights will continue following this offering and will terminate five years following the completion of this offering, or for any particular holder with registration rights who at such time holds less than 1% of our outstanding Class B common stock, at such time following this offering when all securities held by that stockholder subject to registration rights may be sold pursuant to Rule 144 under the Securities Act of 1933, as amended, or the Securities Act, within a single 90 day period. We also intend to register all shares of Class B common stock that we have issued and all shares of Class A common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to the lock-up agreements described in the "Underwriting" section of this prospectus.

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***There may not be a viable public market for our Class A common stock.***

Prior to this offering, there has been no public market for our Class A common stock, and a regular trading market may not develop and continue after this offering. Furthermore, the market price of our Class A common stock may decline below the initial public offering price. The initial public offering price has been determined through negotiations between us and the representatives of the underwriters and may not be indicative of the market price of our Class A common stock following this offering. Among the factors considered in such negotiations were prevailing market conditions, certain of our financial information, market valuations of other companies that we and the representatives of the underwriters believed were comparable to us, estimates of our business potential and the present state of our business. See "Underwriting" for additional information.

***As a new investor, you will experience immediate and substantial dilution in the net tangible book value of your shares.***

The initial public offering price of our Class A common stock in this offering is considerably more than the net tangible book value per share of our Class A common stock. Investors purchasing shares of Class A common stock in this offering will pay a price that substantially exceeds the value of our tangible assets after subtracting liabilities. As a result, investors will, as of September 30, 2009:

incur immediate dilution of \$9.16 per share of Class A common stock, based on the initial public offering price of \$11.25 per share of Class A common stock; and

contribute 35.7% of the total amount invested to date to fund our company based on the initial offering price of \$11.25 per share of Class A common stock, but will own only 17.6% of the outstanding shares of Class A common stock and Class B common stock, combined, after the offering.

***To the extent outstanding stock options are exercised, there will be further dilution to new investors.***

As of December 31, 2009, we had options to purchase 13,691,579 shares of Class B common stock outstanding, with exercise prices ranging from \$0.10 to \$7.36 per share and a weighted average exercise price of \$2.45 per share. Upon the vesting of each of these options, the holder may exercise his or her options, which would result in further dilution to investors.

***We expect that the price of our Class A common stock will fluctuate substantially.***

The market price of our Class A common stock may be highly volatile due to many factors, including:

the results from our clinical trials, including our current and planned Phase 3 clinical trials for linaclotide;

FDA or international regulatory actions, including actions on regulatory applications for any of our product candidates;

the commercial performance of any of our product candidates that receive marketing approval;

announcements of the introduction of new products by us or our competitors;

market conditions in the pharmaceutical and biotechnology sectors;

announcements concerning product development results or intellectual property rights of others;

litigation or public concern about the safety of our potential products;

actual and anticipated fluctuations in our quarterly operating results;

deviations in our operating results from the estimates of securities analysts;

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additions or departures of key personnel;

any third-party coverage and reimbursement policies for linaclotide;

developments concerning current or future strategic collaborations; and

discussion of us or our stock price in the financial or scientific press or in online investor communities.

The realization of any of the risks described in these "Risk Factors" could have a dramatic and material adverse impact on the market price of our Class A common stock. In addition, class action litigation has often been instituted against companies whose securities have experienced periods of volatility. Any such litigation brought against us could result in substantial costs and a diversion of management attention, which could hurt our business, operating results and financial condition.

***Our management team may invest or spend the proceeds of this offering in ways with which you may not agree or in ways which may not yield a significant return, if any.***

Our management will have broad discretion over the use of proceeds from this offering. The net proceeds from this offering will be used to fund the continued development and commercialization of linaclotide, the research and development of our other product candidates and other general corporate purposes. Our management will have considerable discretion in the application of the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. The net proceeds may be used for corporate purposes that do not increase our operating results or market value. Until the net proceeds are used, they may be placed in investments that do not produce significant income or investments that lose value.

***Future sales of our Class A common stock may depress our stock price.***

While we do not currently anticipate making additional offers of Class A common stock, such sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our Class A common stock. Immediately after this offering, we will have outstanding 16,666,667 shares of Class A common stock and 78,246,222 shares of Class B common stock, based on the number of outstanding shares of Class A common stock and Class B common stock as of December 31, 2009 and after giving effect to the conversion of 69,904,843 shares of convertible preferred stock outstanding as of December 31, 2009 into 70,391,620 shares of our Class B common stock at the completion of this offering. The shares of Class A common stock that we are selling in connection with this offering may be resold in the public market immediately.

***We have never paid dividends on our capital stock, and because we do not anticipate paying any cash dividends in the foreseeable future, capital appreciation, if any, of our common stock will be your sole source of gain on an investment in our Class A common stock.***

We have paid no cash dividends on any of our classes of capital stock to date, and we currently intend to retain our future earnings, if any, to fund the development and growth of our business. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.



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**SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This prospectus, including the sections titled "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," contains forward-looking statements. Forward-looking statements convey our current expectations or forecasts of future events. All statements contained in this prospectus 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 statements, but the absence of these words does not necessarily mean that a statement is not forward-looking. These forward-looking statements include, among other things, statements about:

our expectations related to the use of proceeds from this offering;

the progress of, timing of and amount of expenses associated with our research, development and commercialization activities;

the timing, conduct and success of our clinical studies for our product candidates;

our ability to obtain U.S. and foreign regulatory approval for our product candidates and the ability of our product candidates to meet existing or future regulatory standards;

our expectations regarding federal, state and foreign regulatory requirements;

the therapeutic benefits and effectiveness of our product candidates;

the accuracy of our estimates of the size and characteristics of the markets that may be addressed by our product candidates;

our ability to manufacture sufficient amounts of our product candidates for clinical studies and products for commercialization activities;

our plans with respect to collaborations and licenses related to the development, manufacture or sale of our product candidates;

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

the timing of commercializing our product candidates;

our plan to develop a high-quality commercial organization;

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

anticipated trends and challenges in our potential markets;

our ability to attract and motivate key personnel; and

other factors discussed elsewhere in this prospectus.

Any or all of our forward-looking statements in this prospectus may turn out to be inaccurate. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. They may be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties, including the risks, uncertainties and assumptions described in "Risk Factors." In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur as contemplated, and actual results could differ materially from those anticipated or implied by the forward-looking statements.

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

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**USE OF PROCEEDS**

We estimate that the net proceeds of the sale of the Class A common stock that we are offering will be approximately \$175.0 million, or \$203.1 million if the underwriters exercise their over-allotment option in full, at the initial public offering price of \$11.25 per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to obtain additional working capital to fund anticipated operating expenses, establish a public market for our Class A common stock and facilitate future access to the public markets.

We estimate that we will use the proceeds of this offering, in combination with existing cash resources of approximately \$123.1 million as of December 31, 2009, as follows:

approximately \$225.0 million to fund the development and commercialization of linaclotide;

approximately \$39.0 million to fund the research and development of IW-6118, an inhibitor of Fatty Acid Amide Hydrolase, or FAAH, being evaluated for the treatment of pain and inflammation, in Phase 1 and Phase 2 studies, and to continue discovery and preclinical research of early-stage compounds in gastrointestinal pain, inflammation and cardiovascular indications during the twelve month period following the date of this offering; and

the remainder for general corporate purposes, such as general and administrative expenses, capital expenditures, working capital, prosecution and maintenance of our intellectual property, the potential investment in technologies or products that complement our business, and further investments in our pipeline.

Although we currently anticipate that we will use the net proceeds of this offering as described above, there may be circumstances where a reallocation of funds may be necessary. The amounts and timing of our actual expenditures will depend upon numerous factors, including the progress of our development and commercialization efforts of linaclotide, the progress of our clinical studies, our existing and future strategic collaborations and partnerships and our operating costs and expenditures. Accordingly, our management will have significant flexibility in the expenditure of the net proceeds of this offering.

The costs and timing of drug development and commercialization and of regulatory approval, particularly conducting clinical studies, are highly uncertain, are subject to substantial risks and can often change. Accordingly, we may change the allocation of use of these proceeds as a result of contingencies such as the progress and results of our clinical studies and other development activities, the continuation of our existing collaborations and the establishment of new arrangements, our manufacturing requirements and regulatory or competitive developments.

Pending use of the proceeds from this offering as described above or otherwise, we intend to invest the net proceeds in short-term interest-bearing, investment-grade securities.

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**DIVIDEND POLICY**

Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of Class A common stock and Class B common stock will be entitled to share equally in any dividends that our board of directors may determine to issue from time to time. In the event a dividend is paid in the form of shares of common stock or rights to acquire shares of common stock, the holders of Class A common stock will receive Class A common stock, or rights to acquire Class A common stock, as the case may be, and the holders of Class B common stock will receive Class B common stock, or rights to acquire Class B common stock, as the case may be.

We have never declared or paid any cash dividends on our capital stock and we do not currently anticipate declaring or paying cash dividends on our capital stock in the foreseeable future. We currently intend to retain all of our future earnings, if any, to finance operations. Any future determination relating to our dividend policy will be made at the discretion of our board of directors and will depend on a number of factors, including future earnings, capital requirements, financial conditions, future prospects, contractual restrictions and covenants and other factors that our board of directors may deem relevant.

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The following table sets forth our capitalization as of September 30, 2009:

on an actual basis;

on a pro forma basis after giving effect to: (a) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 69,709,801 shares of our Class B common stock, which will occur upon the completion of this offering; (b) the issuance of 681,819 shares of our convertible preferred stock sold at a price of \$22.00 per share for cash proceeds of \$15.0 million, which were received on November 13, 2009, including a \$0.7 million gain on the final remeasurement of the forward purchase contract at the time of settlement, and the conversion of such shares into 681,819 shares of our Class B common stock, which will occur upon the closing of this offering and (c) compensation expense of approximately \$107,000 related to 45,000 time-accelerated stock options at September 30, 2009 that will fully vest upon the closing of this offering; and

on a pro forma as adjusted basis to give effect to the receipt by us of net proceeds of \$175.0 million from the sale of shares of our Class A common stock that we are offering at the initial public offering price of \$11.25 per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

You should read the following table in conjunction with our financial statements and related notes, "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus.

|   | <b>As of September 30, 2009</b>                        |                                  |                                  |
|---|--|----------------------------------|----------------------------------|
|   | <b>Actual</b>  | <b>Pro Forma<br/>(unaudited)</b> | <b>Pro Forma<br/>As Adjusted</b> |
|   | <b>(in thousands, except share and per share data)</b> |                                  |                                  |
| Cash, cash equivalents and available-for-sale securities  | \$ 98,928  | \$ 113,928                       | \$ 288,928                       |
| Long-term debt, including current portion   | 3,406  | 3,406                            | 3,406                            |
| Class A common stock, \$0.001 par value: 98,530,700 shares authorized, no shares issued and outstanding, actual and pro forma; 500,000,000 shares authorized, 16,666,667 shares issued and outstanding, pro forma as adjusted   |  |                                  | 17                               |
| Class B common stock, \$0.001 par value: 98,530,700 shares authorized, 7,713,407 shares issued and outstanding, actual; 98,530,700 shares authorized, 78,105,027 shares issued and outstanding, pro forma; 100,000,000 shares authorized, 78,105,027 shares issued and outstanding, pro forma as adjusted | 8  | 78                               | 78                               |
| Convertible preferred stock, \$0.001 par value: 74,942,226 shares authorized, 69,223,024 shares issued and outstanding, actual; 74,942,226 shares authorized, no shares issued or outstanding, pro forma; no shares authorized, issued or outstanding, pro forma as adjusted                              | 289,849  |                                  |                                  |
| Preferred stock, \$0.001 par value: no shares authorized, no shares issued or outstanding, actual and pro forma; 75,000,000 shares authorized, no shares issued and outstanding, pro forma as adjusted  |  |                                  |                                  |
| Additional paid-in capital  | 10,921   | 309,307                          | 484,290                          |
| Accumulated deficit   | (290,629)  | (290,036)                        | (290,036)                        |
| Accumulated other comprehensive income  | 2  | 2                                | 2                                |
| Total Ironwood Pharmaceuticals, Inc. stockholders' equity (deficit)   | (279,698)  | 19,351                           | 194,351                          |
| Noncontrolling interest   | 3,856  | 3,856                            | 3,856                            |
| Total stockholders' equity (deficit)  | \$ (275,842)   | \$ 23,207                        | \$ 198,207                       |

|                      |    |        |    |        |    |         |
|----------------------|----|--------|----|--------|----|---------|
| Total capitalization | \$ | 17,413 | \$ | 26,613 | \$ | 201,613 |
|----------------------|----|--------|----|--------|----|---------|

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The table above does not include:

14,094,470 shares of Class B common stock issuable upon the exercise of options outstanding as of September 30, 2009, with exercise prices ranging from \$0.10 to \$5.48 per share and a weighted average exercise price of \$2.45 per share; and

1,293,820 additional shares of Class B common stock reserved for future grants under our 2002 Stock Incentive Plan and 2005 Stock Incentive Plan as of September 30, 2009.

Table of Contents**DILUTION**

The historical net tangible book value of our common stock as of September 30, 2009 was approximately \$(275.8) million, or \$(35.76) per share, based on no shares of Class A common stock and 7,713,407 shares of Class B common stock outstanding as of such date. Historical net tangible book value per share represents the amount of our total tangible assets less total liabilities and convertible preferred stock, divided by the number of shares of common stock issued and outstanding.

Our pro forma net tangible book value as of September 30, 2009 was approximately \$23.2 million, or \$0.30 per share, based on the aggregate of Class A and Class B common stock. Pro forma net tangible book value per share represents the amount of our total tangible assets, less our total liabilities, divided by the pro forma number of shares of Class A and Class B common stock outstanding as of September 30, 2009, after giving effect to (a) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 69,709,801 shares of our Class B common stock, which will occur upon the completion of this offering, and the recognition of compensation expense of approximately \$107,000 related to 45,000 time-accelerated stock options outstanding at September 30, 2009 that will fully vest upon the completion of this offering, and (b) the issuance of 681,819 shares of our convertible preferred stock sold at a price of \$22.00 per share for cash proceeds of \$15.0 million, which were received on November 13, 2009, including a \$0.7 million gain on the final remeasurement of the forward purchase contract at the time of settlement, and the conversion of such shares into 681,819 shares of our Class B common stock, which will occur upon the completion of this offering.

After giving effect to the sale of 16,666,667 shares of Class A common stock that we are offering at the initial public offering price of \$11.25 per share and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2009 would have been approximately \$198.2 million, or approximately \$2.09 per share based on the aggregate of Class A and Class B common stock. This amount represents an immediate increase in pro forma net tangible book value of \$1.79 per share to our existing stockholders and an immediate dilution in pro forma net tangible book value of approximately \$9.16 per share to new investors purchasing shares of Class A common stock in this offering at the initial public offering price of \$11.25 per share. We determine dilution by subtracting the pro forma as adjusted net tangible book value per share from the amount of cash that a new investor paid for a share of Class A common stock. The following table illustrates this dilution:

|   |            |
|---|------------|
| Initial offering price per share of Class A common stock  | \$ 11.25   |
| Historical net tangible book value per share as of September 30, 2009   | \$ (35.76) |
| Increase attributable to the conversion of the outstanding shares of convertible preferred stock as of September 30, 2009 and the recognition of compensation expense | \$ 35.94   |
| Increase attributable to the issuance and conversion of 681,819 shares of convertible preferred stock   | \$ 0.12    |
| Pro forma net tangible book value per share as of September 30, 2009  | \$ 0.30    |
| Increase in pro forma net tangible book value attributable to this offering   | \$ 1.79    |
| Pro forma as adjusted net tangible book value per share after this offering   | \$ 2.09    |
| Dilution per share to new investors   | \$ 9.16    |

If the underwriters exercise their over-allotment option in full in this offering, the pro forma as adjusted net tangible book value would be \$2.33 per share, the increase in pro forma net tangible book value per share to existing stockholders would be \$2.03 and the dilution per share to new investors would be \$8.92 in each case at the initial public offering price of \$11.25 per share.



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The following table summarizes, as of September 30, 2009, the differences between the number of shares of Class A common stock purchased from us, the total consideration paid to us in cash and the average price per share that existing stockholders and new investors paid. The calculation below is based on the initial public offering price of \$11.25 per share after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

|                       | Shares Purchased  |               | Total Consideration   |               | Average Price  |
|-----------------------|-------------------|---------------|-----------------------|---------------|----------------|
|                       | Number            | Percent       | Amount                | Percent       | per Share      |
| Existing Stockholders | 78,105,027        | 82.4%         | \$ 315,030,404        | 64.3%         | \$ 4.03        |
| New Investors         | 16,666,667        | 17.6%         | \$ 175,000,004        | 35.7%         | \$ 10.50       |
| <b>Total</b>          | <b>94,771,694</b> | <b>100.0%</b> | <b>\$ 490,030,408</b> | <b>100.0%</b> | <b>\$ 5.17</b> |

The foregoing tables and calculations are based on the number of shares of our common stock outstanding as of September 30, 2009, after giving effect to: (a) the automatic conversion of all outstanding shares of our convertible preferred stock into our Class B common stock, which will occur upon the completion of this offering, (b) the issuance of 681,819 shares of our convertible preferred stock sold at a price of \$22.00 per share for cash proceeds of \$15.0 million, which were received on November 13, 2009, including a \$0.7 million gain on the final remeasurement of the forward purchase contract at the time of settlement, and the conversion of such shares into 681,819 shares of our Class B common stock, which will occur upon the closing of this offering and (c) compensation expense of approximately \$107,000 related to 45,000 time-accelerated stock options at September 30, 2009 that will fully vest upon the closing of this offering, and excludes:

14,094,470 shares of Class B common stock issuable upon the exercise of options outstanding as of September 30, 2009, with exercise prices ranging from \$0.10 to \$5.48 per share and a weighted average exercise price of \$2.45 per share; and

1,293,820 additional shares of Class B common stock reserved for future grants under our 2002 Stock Incentive Plan and 2005 Stock Incentive Plan as of September 30, 2009.

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**SELECTED CONSOLIDATED FINANCIAL DATA**

You should read the following selected financial data together with our consolidated financial statements and the related notes appearing at the end of this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus. We have derived the consolidated statements of operations data for the years ended December 31, 2006, 2007 and 2008 and the consolidated balance sheet data as of December 31, 2007 and 2008 from our audited financial statements included elsewhere in this prospectus. We have derived the consolidated statement of operations data for the years ended December 31, 2004 and 2005 and consolidated balance sheet data as of December 31, 2004, 2005 and 2006 from our audited financial statements not included in this prospectus. We have derived the consolidated statements of operations data for the nine months ended September 30, 2008 and 2009 and the consolidated balance sheet data as of September 30, 2009 from our unaudited consolidated financial statements included elsewhere in this prospectus. Our unaudited consolidated financial statements for the nine months ended September 30, 2008 and 2009 have been prepared on the same basis as the annual consolidated financial statements and include all adjustments, which include only normal recurring adjustments, necessary for fair presentation of this data in all material respects. Pro forma financial information reflects: (a) the automatic conversion of all outstanding shares of our convertible preferred stock into shares of our Class B common stock upon the completion of this offering, (b) the issuance of 681,819 shares of our convertible preferred stock sold at a price of \$22.00 per share for cash proceeds of \$15.0 million, which were received on November 13, 2009, including a \$0.7 million gain on the final remeasurement of the forward purchase contract at the time of settlement, and the conversion of such shares into 681,819 shares of our Class B common stock upon the closing of this offering and (c) compensation expense of approximately \$56,000 and \$107,000 related to 30,000 and 45,000 time-accelerated stock options at December 31, 2008 and September 30, 2009, respectively, that will fully vest upon the closing of this offering. Our historical results for any prior period are not necessarily indicative of results to be expected in any future period, and our results for any interim period are not necessarily indicative of results for a full fiscal year.

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|  | December 31, |                 |                 |                 |                 | Nine months ended<br>September 30, |                 |
|--|--------------|-----------------|-----------------|-----------------|-----------------|------------------------------------|-----------------|
|  | 2004         | 2005            | 2006            | 2007            | 2008            | 2008                               | 2009            |
|  | (unaudited)  |                 |                 |                 |                 |                                    |                 |
| (In thousands, except share and per share data)  |              |                 |                 |                 |                 |                                    |                 |
| <b>Consolidated Statement of Operations Data:</b>  |              |                 |                 |                 |                 |                                    |                 |
| <b>Revenue:</b>  |              |                 |                 |                 |                 |                                    |                 |
| Collaborative arrangements   | \$           | \$              | \$              | \$ 4,608        | \$ 18,383       | \$ 13,933                          | \$ 25,917       |
| Services   |              | 3,569           | 1,574           | 3,140           | 5,856           | 3,833                              | 3,309           |
| <b>Total revenue</b>   |              | <b>3,569</b>    | <b>1,574</b>    | <b>3,140</b>    | <b>10,464</b>   | <b>22,216</b>                      | <b>17,242</b>   |
| <b>Operating expenses:</b>   |              |                 |                 |                 |                 |                                    |                 |
| Research and development(1)  |              | 18,600          | 23,011          | 35,543          | 57,246          | 59,809                             | 43,309          |
| General and administrative(1)  |              | 3,693           | 4,627           | 7,192           | 10,833          | 18,328                             | 13,054          |
| <b>Total operating expenses</b>  |              | <b>22,293</b>   | <b>27,638</b>   | <b>42,735</b>   | <b>68,079</b>   | <b>78,137</b>                      | <b>56,363</b>   |
| <b>Loss from operations</b>  |              | <b>(18,724)</b> | <b>(26,064)</b> | <b>(39,595)</b> | <b>(57,615)</b> | <b>(55,921)</b>                    | <b>(39,121)</b> |
| <b>Other income (expense):</b>   |              |                 |                 |                 |                 |                                    |                 |
| Interest expense   |              | (375)           | (207)           | (217)           | (263)           | (334)                              | (253)           |
| Interest and investment income   |              | 320             | 353             | 2,533           | 4,118           | 2,124                              | 1,901           |
| Remeasurement of forward purchase contracts  |              |                 |                 | 600             | (900)           | (5,900)                            | (100)           |
| <b>Other income (expense), net</b>   |              | <b>(55)</b>     | <b>146</b>      | <b>2,316</b>    | <b>4,455</b>    | <b>890</b>                         | <b>(4,252)</b>  |
| <b>Loss before income tax benefit</b>  |              | <b>(18,779)</b> | <b>(25,918)</b> | <b>(37,279)</b> | <b>(53,160)</b> | <b>(55,031)</b>                    | <b>(43,373)</b> |
| Income tax benefit   |              |                 |                 |                 |                 |                                    | (153)           |
| <b>Net loss</b>  |              | <b>(18,779)</b> | <b>(25,918)</b> | <b>(37,279)</b> | <b>(53,160)</b> | <b>(55,031)</b>                    | <b>(43,373)</b> |
| <b>Net loss attributable to noncontrolling interest</b>  |              |                 |                 | 99              | 408             | 1,157                              | 726             |
| <b>Net loss attributable to Ironwood Pharmaceuticals, Inc.</b>   | \$           | (18,779)        | \$ (25,918)     | \$ (37,180)     | \$ (52,752)     | \$ (53,874)                        | \$ (42,647)     |
| <b>Net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted</b>   | \$           | (3.48)          | \$ (4.35)       | \$ (5.79)       | \$ (7.91)       | \$ (7.82)                          | \$ (6.22)       |
| <b>Weighted average number of common shares used in net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted</b>                          |              | 5,389,863       | 5,963,326       | 6,417,499       | 6,666,601       | 6,889,817                          | 6,859,285       |
| <b>Pro forma net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted (unaudited)(2)</b>  |              |                 |                 |                 |                 | \$ (0.72)                          | \$ (0.62)       |
| <b>Pro forma weighted average number of common shares used in net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted (unaudited)(2)</b> |              |                 |                 |                 |                 | 74,495,452                         | 75,574,117      |

(1) Includes share-based compensation expense as indicated in the following table:

|                            |        |        |        |        |          |          |          |
|----------------------------|--------|--------|--------|--------|----------|----------|----------|
| Research and development   | \$ 208 | \$ 253 | \$ 316 | \$ 795 | \$ 1,708 | \$ 1,203 | \$ 1,332 |
| General and administrative | 56     | 64     | 633    | 359    | 1,086    | 640      | 1,919    |

(2)

Pro forma basic and diluted net loss per share have been calculated assuming: (a) the automatic conversion of all outstanding shares of convertible preferred stock as of December 31, 2008 into 67,605,635 shares of our Class B common stock and as of September 30, 2009 into 69,709,801 shares of our Class B common stock upon the closing of this offering, (b) the issuance of 681,819 shares of our convertible preferred stock sold at a price of \$22.00 per share for cash proceeds of \$15.0 million, which were received on November 13, 2009, including a \$0.7 million gain on the final remeasurement of the forward purchase contract at the time of settlement, and the conversion of such shares into 681,819 shares of our Class B common stock upon the closing of this offering and (c) compensation expense of approximately \$56,000 and \$107,000 related to 30,000 and 45,000 time-accelerated stock options at December 31, 2008 and September 30, 2009, respectively, that will fully vest upon the closing of this offering. Pro forma basic and diluted net loss per share does not give effect to the sale of 16,666,667 shares of Class A common stock that we are offering pursuant to this prospectus.

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|  | 2004           | 2005     | As of<br>December 31,<br>2006      2007<br>(unaudited) |           | 2008      | As of<br>September 30,<br>2009 |
|--|----------------|----------|--|-----------|-----------|--------------------------------|
|  | (In thousands) |          |  |           |           |                                |
| <b>Consolidated Balance Sheet Data:</b>                  |                |          |  |           |           |                                |
| Cash, cash equivalents and available-for-sale securities | \$ 26,459      | \$ 5,134 | \$ 49,501  | \$ 91,936 | \$ 89,767 | \$ 98,928                      |
| Working capital (deficit) (excluding deferred revenue)   | 22,985         | (1,635)  | 43,793   | 105,043   | 86,780    | 99,412                         |
| Total assets   | 32,079         | 10,490   | 57,520   | 135,908   | 140,723   | 149,647                        |
| Deferred revenue, including current portion              | 123            | 543      | 930  | 74,392    | 66,054    | 104,487                        |
| Long-term debt, including current portion                | 1,847          | 4,182    | 2,243  | 2,963     | 1,815     | 3,406                          |
| Capital lease obligations, including current portion     |                |          |  |           | 306       | 220                            |
| Total liabilities  | 4,859          | 8,570    | 9,900  | 90,480    | 97,734    | 135,640                        |
| Convertible preferred stock                              | 98,924         | 98,924   | 173,851  | 223,802   | 273,400   | 289,849                        |
| Noncontrolling interest                                  |                |          | 6,903  | 6,495     | 5,339     | 3,856                          |
| Total stockholders' deficit                              | (71,704)       | (97,004) | (126,231)  | (178,374) | (230,411) | (275,842)                      |

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**MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION  
AND RESULTS OF OPERATIONS**

The following discussion of our financial condition and results of operations should be read in conjunction with our financial statements and the notes to those financial statements appearing elsewhere in this prospectus. 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" and elsewhere in this prospectus, our actual results may differ materially from those anticipated in these forward-looking statements.

**Overview**

We are an entrepreneurial pharmaceutical company that discovers, develops and intends to commercialize innovative medicines targeting important therapeutic needs. To achieve this, we are building a sustainable culture centered on creating and marketing important new drugs. Our experienced team of researchers is focused on a portfolio of internally discovered drug candidates that includes one Phase 3 drug candidate (linaclotide), one Phase 1 pain drug candidate, and multiple preclinical programs. We have pursued a partnering strategy for the commercialization of linaclotide that has enabled us to retain significant control over linaclotide's development and commercialization, share the costs of drug development and commercialization with collaborators whose capabilities complement ours, and retain approximately half of the future long-term value of linaclotide in the major pharmaceutical markets, should linaclotide meet our sales expectations.

We were incorporated in Delaware as Microbia, Inc. (which is now the name of our majority-owned subsidiary) on January 5, 1998. On April 7, 2008, we changed our name to Ironwood Pharmaceuticals, Inc.

We operate in two reportable business segments human therapeutics and biomanufacturing. Our human therapeutics segment comprises the vast majority of our business, and it consists of the development and commercialization of our product candidates, including linaclotide. Our biomanufacturing segment, which comprises a much smaller part of our business, consists of our majority ownership interest in Microbia, which focuses on building a specialty biochemicals business based on a proprietary strain-development platform. Our human therapeutics segment represented 96%, 97% and 97% and our biomanufacturing segment represented 4%, 3% and 3% of our total assets at December 31, 2007 and 2008 and September 30, 2009, respectively. Our human therapeutics segment represented 87%, 95%, 86%, 88% and 81% and our biomanufacturing segment represented 13%, 5%, 14%, 12% and 19% of our loss from operations for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2008 and 2009, respectively. In November 2009, Microbia amended its existing facility lease to include an early termination option and subsequently implemented a strategic restructuring plan that includes an immediate reduction of Microbia's workforce (see Note 21 to our consolidated financial statements). We expect that after the restructuring actions are completed, Microbia's operating expenses will decrease and as a result, its percentage of our consolidated loss from operations will decrease.

To date we have dedicated substantially all of our activities to the research and development of our product candidates. We have not generated any revenue to date from product sales and have incurred significant operating losses since our inception in 1998. We incurred net losses attributable to Ironwood Pharmaceuticals, Inc. of approximately \$37.2 million, \$52.8 million and \$53.9 million in the years ended December 31, 2006, 2007 and 2008, respectively, and approximately \$47.3 million in the nine months ended September 30, 2009. As of September 30, 2009, we had an accumulated deficit of approximately \$290.6 million, and we expect to incur losses for the foreseeable future.

Table of Contents**Financial Overview**

**Revenue.** Revenue to date from our human therapeutics segment is generated primarily through collaborative research, development and/or commercialization agreements. The terms of these agreements typically include payment to us of one or more of the following: nonrefundable, up-front license fees; milestone payments; and royalties on product sales. Revenue from our human therapeutics segment is shown in our consolidated statements of operations as collaborative arrangements revenue. Revenue from our biomanufacturing segment is generated by our subsidiary, Microbia, which has entered into research and development service agreements with various third parties. These agreements generally provide for fees for research and development services rendered, and may include additional payments at the conclusion of the research period upon achieving specified events. These service agreements also contemplate royalty payments to us on future sales of Microbia's customers' products. Revenue from our biomanufacturing segment is shown as services revenue. We expect our revenue to fluctuate for the foreseeable future as our collaborative arrangements revenue is principally based on the achievement of clinical and commercial milestones. Additionally, we expect our services revenue to decline as existing Microbia customer contracts are completed and no new services contracts are anticipated.

**Research and development expense.** Research and development expense consists of expenses incurred in connection with the discovery and development of our product candidates. These expenses consist primarily of compensation, benefits and other employee related expenses, facility costs and third-party contract costs relating to research, formulation, manufacturing, preclinical study and clinical trial activities. Also included in research and development expenses are the costs of revenue related to the Microbia services contracts. We charge all research and development expenses to operations as incurred. Under our Forest collaboration agreement we are reimbursed for certain research and development expenses and we net these reimbursements against our research and development expenses as incurred.

Our lead product candidate is linaclotide and it represents the largest portion of our research and development expense for our product candidates. Linaclotide is a first-in-class compound currently in confirmatory Phase 3 trials evaluating its safety and efficacy for the treatment of patients with IBS-C or CC. Our other clinical stage program is IW-6118, an inhibitor of FAAH being evaluated for the treatment of pain and inflammation. IW-6118 is a novel small molecule inhibitor of FAAH, that decreased inflammation and pain and elevated fatty acid amides in preclinical models. We have an active investigational new drug application, or IND, for IW-6118 and are currently investigating the safety, tolerability, and pharmacokinetic properties of this molecule in Phase 1 studies.

The following table sets forth our research and development expenses related to linaclotide and IW-6118 for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2008 and 2009. We began tracking program expenses for linaclotide in 2004, and program expenses from inception to September 30, 2009 were approximately \$81.5 million. We began tracking program expenses for IW-6118 in 2008, and program expenses from inception to September 30, 2009 were approximately \$6.9 million. These expenses relate primarily to external costs associated with manufacturing, preclinical studies and clinical trial costs. The expenses for linaclotide include both reimbursements to us by Forest as well as our portion of costs incurred by Forest for linaclotide and invoiced to us under the cost-sharing provisions of our collaboration agreement. Costs related to facilities, depreciation, share-based compensation and research and development support services are not directly charged to programs.

|             | December 31,   |           |           | Nine Months Ended<br>September 30, |           |
|-------------|----------------|-----------|-----------|------------------------------------|-----------|
|             | 2006           | 2007      | 2008      | 2008                               | 2009      |
|             | (unaudited)    |           |           |                                    |           |
|             | (in thousands) |           |           |                                    |           |
| Linaclotide | \$ 10,974      | \$ 23,450 | \$ 13,588 | \$ 9,473                           | \$ 25,850 |
| IW-6118     |                |           | 2,577     | 1,312                              | 4,328     |
|             |                |           |           | 41                                 |           |

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The lengthy process of securing FDA 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. Accordingly, 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 or IW-6118 prior to their regulatory approval, if such approval is ever granted. 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, IW-6118 or any of our other product candidates will generate revenues and cash flows.

We have multiple product candidates in earlier stages of development, and are pursuing various therapeutic opportunities. 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, positive data. In addition, we are actively engaged in identifying externally-discovered drug candidates at various stages of clinical development and accessing them through in-licensing or acquisition. In evaluating potential assets, we apply the same criteria as those used for investments in internally-discovered assets. To date, we have not in-licensed any drug candidates, but we do expect to do so from time to time.

The majority of our external costs are spent on linaclotide, as costs associated with later stage clinical trials are, in most cases, more significant than those incurred in earlier stages of our pipeline. We expect external costs related to the linaclotide program to begin decreasing if its current Phase 3 clinical trials yield positive data and no other clinical trials are necessary to obtain regulatory approval in the U.S. If IW-6118 is successful in early stage clinical trials, we would expect the program's external costs to increase as it progresses through later stage clinical trials. The remainder of our research and development expense is not tracked by project as it consists primarily of our internal costs, and it benefits multiple projects that are in earlier stages of development and which typically share resources.

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.

The costs, timing and outcome of regulatory review of a product candidate.

The emergence of competing technologies and products and other adverse market developments.

As a result of the uncertainties discussed above, we are unable to determine the duration and costs to complete current or future clinical stages of our product candidates or when, or to what extent, we will generate revenues from the commercialization and sale of any 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 scientific and clinical data of each product candidate, as well as ongoing assessments of such product candidate's commercial potential.



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We expect our research and development costs to continue to be substantial for the foreseeable future and to increase with respect to our product candidates other than linaclotide as we advance those product candidates through preclinical studies and clinical trials.

*General and administrative expense.* 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 and human resource functions. Other costs include the legal costs of pursuing patent protection of our intellectual property, facility costs and professional fees for accounting and legal services. After this offering, we anticipate increases in general and administrative expense relating to operating as a public company. These increases will likely include legal fees, accounting fees and directors' and officers' insurance premiums, as well as fees for investor relations services. We also anticipate substantial expenses related to developing the organization necessary to commercialize linaclotide.

**Critical Accounting Policies and Estimates**

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of these financial statements requires us to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and the reported amounts of revenues and expenses during the reported periods. These items are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates could occur in the future. These critical estimates and assumptions are based on our historical experience, our observance of trends in the industry, and various other factors that are believed to be reasonable under the circumstances and form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Changes in estimates are reflected in reported results for the period in which they become known. Actual results may differ from our estimates.

We believe that our application of the following accounting policies, each of which require significant judgments and estimates on the part of management, are the most critical to aid in fully understanding and evaluating our reported financial results. Our significant accounting policies are more fully described in Note 2, "Summary of Significant Accounting Policies," to our consolidated financial statements appearing elsewhere in this prospectus.

***Revenue Recognition***

Our revenue is generated primarily through collaborative research and development and license agreements. The terms of these agreements typically include payment to us of one or more of the following: nonrefundable, up-front license fees; milestone payments; and royalties on product sales. In addition, we generate services revenue through agreements that generally provide for fees for research and development services rendered, and may include additional payments at the conclusion of the research period upon achieving specified events. These service agreements also contemplate royalty payments to us on future sales of our customers' product.

We recognize revenue when there is persuasive evidence that an arrangement exists, services have been rendered or delivery has occurred, the price is fixed or determinable, and collection is reasonably assured. We evaluate revenue from agreements that have multiple elements and account for those components as separate elements when the following criteria are met:

the delivered items have value to the customer on a stand-alone basis;

there is objective and reliable evidence of fair value of the undelivered items; and

if there is a general right of return relative to the delivered items, delivery or performance of the undelivered items is considered probable and within our control.

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The determination that multiple elements in an arrangement meet the criteria for separate units of accounting requires us to exercise our judgment.

The determination of whether we should recognize revenue on a gross or net basis involves judgment based on the relevant facts and circumstances, which relate primarily to whether we act as a principal or agent in the process of generating revenues from our collaboration and licensing arrangements.

For certain of our arrangements, particularly our license agreement with Almirall, it is required that taxes be withheld on payments to us. We have adopted a policy to recognize revenue net of these tax withholdings.

*Up-Front License Fees*

We recognize revenues from nonrefundable, up-front license fees related to collaboration and license agreements, including the \$70.0 million up-front license fee under the Forest collaboration agreement entered into in September 2007 and the \$40.0 million up-front license fee, of which \$38.0 million was received net of foreign withholding taxes, under the Almirall license agreement entered into in April 2009, on a straight-line basis over the contracted or estimated period of performance due to our continued involvement in research and development. The period of performance over which the revenues are recognized is typically the period over which the research and/or development is expected to occur. As a result, we often are required to make estimates regarding drug development and commercialization timelines for compounds being developed pursuant to a collaboration or license agreement. Because the drug development process is lengthy and our collaboration and license agreements typically cover activities over several years, this approach has resulted in the deferral of significant amounts of revenue into future periods. In addition, because of the many risks and uncertainties associated with the development of drug candidates, our estimates regarding the period of performance may change in the future. Any change in our estimates could result in substantial changes to the period over which the revenues from an up-front license fee are recognized. To date, we have had no material changes to our estimated periods of continuing involvement under existing collaboration and license agreements.

*Milestones*

At the inception of each agreement that includes contingent milestone payments, we evaluate whether the contingencies underlying each milestone are substantive and at risk to both parties, specifically reviewing factors such as the scientific and other risks that must be overcome to achieve the milestone, as well as the level of effort and investment required. If we do not consider a milestone to be substantive and at risk to both parties, the revenues from the related milestone payment cannot be recognized when the milestone is achieved, but must be recognized on a straight-line basis over the remaining performance period. All of the milestones that have been achieved under our Forest collaboration agreement to date have been considered substantive. As of September 30, 2009, we had not achieved any milestones under our Almirall license agreement.

In those circumstances where a substantive milestone is achieved, collection of the related receivable is reasonably assured and we have remaining obligations to perform under the collaboration arrangement, we recognize as revenue on the date the milestone is achieved an amount equal to the applicable percentage of the performance period that has elapsed as of the date the milestone is achieved, with the balance being deferred and recognized over the remaining period of performance.

Payments received or reasonably assured after performance obligations are fully met are recognized as earned. Because the recognition of a substantive milestone under a collaboration agreement typically requires the completion of a number of activities conducted over a significant period of time, the expenses related to achieving the milestone often are incurred prior to the period in which the milestone payment is recognized. When we do achieve milestones that we consider substantive under any of our collaborations,

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we may experience significant fluctuations in our collaborative revenues from quarter to quarter and year to year depending on the timing of achieving such substantive milestones.

*Services Revenue*

Services revenue is recognized when there is persuasive evidence that an arrangement exists, services have been rendered or delivery has occurred, the price is fixed or determinable, and collection is reasonably assured. Revenue from research and development services rendered is recognized as services are performed. These arrangements may include additional payments upon achieving specified events. We recognize these additional payments as revenue when achieved and the payments are due and collectible. Royalty revenue related to research and development services is recognized in the period the sales occur.

*Research and Development Expense*

All research and development expenses are expensed as incurred. Research and development expenses comprise costs incurred in performing research and development activities, including compensation, benefits and other employee costs; share-based compensation expense; laboratory supplies and other direct expenses; facilities expenses; overhead expenses; contractual services, including clinical trial and related clinical manufacturing expenses; and other external expenses. In addition, research and development expense includes reimbursements from Forest for services performed pursuant to our collaboration agreement. Clinical trial expenses include expenses associated with contract research organizations, or CROs. The invoicing from CROs for services rendered can lag several months. We accrue the cost of services rendered in connection with CRO activities based on our estimate of site management, monitoring costs, project management costs, and investigator fees. We maintain regular communication with our CRO vendors to gauge the reasonableness of our estimates. Differences between actual clinical trial expenses and estimated clinical trial expenses recorded have not been material and are adjusted for in the period in which they become known. Under our Forest collaboration agreement we are reimbursed for certain research and development expenses and we net these reimbursements against our research and development expenses as incurred. Nonrefundable advance payments for research and development activities are capitalized and expensed over the related service period or as goods are received.

*Share-based Compensation Expense*

Prior to January 1, 2006, we accounted for employee share-based awards, including stock options, to employees using the intrinsic value method. Under the intrinsic value method, compensation expense was measured on the date of award as the difference, if any, between the deemed fair value of our common stock and the option exercise price, multiplied by the number of options granted. The option exercise prices and fair value of our common stock are determined by our management and board of directors based on a review of various objective and subjective factors. No compensation expense was recorded for stock options issued to employees prior to January 1, 2006 for awards with fixed amounts and with fixed exercise prices at least equal to the fair value of our common stock at the date of grant.

Effective January 1, 2006, we recognize compensation expense for all share-based awards granted, modified, repurchased or cancelled on or after January 1, 2006, based on the grant date fair value. These costs are recognized on a straight-line basis over the requisite service period for all time-based vested awards. We continue to account for share-based awards granted prior to January 1, 2006 under the intrinsic value method.

We record the expense of services rendered by non-employees based on the estimated fair value of the stock option using the Black-Scholes option-pricing model as of the respective vesting date. Further, we expense the fair value of non-employee stock options over the vesting term of the underlying stock options.

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For employee share-based awards subsequent to January 1, 2006, we estimate the fair value of the share-based awards, including stock options, using the Black-Scholes option-pricing model. Determining the fair value of share-based awards requires the use of highly subjective assumptions, including the expected term of the award and expected stock price volatility. The assumptions used in calculating the fair value of share-based awards granted in 2006, 2007, 2008 and the nine months ended September 30, 2009 are set forth below:

|                                     | Years Ended December 31, |       |       | Nine Months Ended<br>September 30, 2009 |
|-------------------------------------|--------------------------|-------|-------|---|
|                                     | 2006                     | 2007  | 2008  |   |
| Volatility                          | 69.0%                    | 65.0% | 64.0% | 62.4%                                   |
| Dividend yield                      | %                        | %     | %     | %                                       |
| Expected life of options (in years) | 7.0                      | 7.0   | 6.5   | 6.5                                     |
| Risk-free interest rate             | 4.8%                     | 4.6%  | 3.1%  | 2.7%                                    |

The assumptions used in determining the fair value of share-based awards represent management's best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change, and we use different assumptions, our share-based compensation could be materially different in the future. The risk-free interest rate used for each grant is based on a zero-coupon U.S. Treasury instrument with a remaining term similar to the expected term of the share-based award. Because we do not have a sufficient history to estimate the expected term, we use the simplified method for estimating the expected term. The simplified method is based on the average of the vesting tranches and the contractual life of each grant. Because there was no public market for our common stock prior to this offering, we lacked company-specific historical and implied volatility information. Therefore, we estimate our expected stock volatility based on that of publicly-traded peer companies, and we expect to continue to use this methodology until such time as we have adequate historical data regarding the volatility of our publicly-traded stock price. For purposes of identifying publicly-traded peer companies, we selected publicly-traded companies that are in the biopharmaceutical industry, have products or product candidates in similar therapeutic areas (gastrointestinal dysfunction and pain management) and stages of preclinical and clinical development as us, have sufficient trading history to derive a historic volatility rate and have similar vesting terms as our granted options. We have not paid and do not anticipate paying cash dividends on our shares of common stock; therefore, the expected dividend yield is assumed to be zero. We also recognize compensation expense for only the portion of options that are expected to vest. Accordingly, we have estimated expected forfeitures of stock options based on our historical forfeiture rate, adjusted for known trends, and used these rates in developing a future forfeiture rate. Our forfeiture rates were 5.0%, 5.0% and 4.4% as of December 31, 2006, 2007 and 2008, respectively, and 4.4% and 4.0% as of September 30, 2008 and 2009, respectively. If our actual forfeiture rate varies from our historical rates and estimates, additional adjustments to compensation expense may be required in future periods.

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The following table presents the grant dates and related exercise prices of stock options granted and other stock awards granted from January 1, 2007 to February 1, 2010:

| Date of Issuance   | Nature of Issuance     | Number of Shares       | Exercise or Purchase Price per Share | Per Share Estimated Fair Value of Common Stock <sup>(1)</sup> | Per Share Weighted Average Estimated Fair Value of Options <sup>(2)</sup> |
|--------------------|------------------------|------------------------|--------------------------------------|---|---|
| January 23, 2007   | Option grant           | 1,206,000              | \$ 2.94                              | \$ 2.94   | \$ 2.06   |
| April 24, 2007     | Option grant           | 177,250                | \$ 3.05                              | \$ 3.05   | \$ 2.06   |
| July 11, 2007      | Option grant           | 96,500                 | \$ 3.05                              | \$ 3.05   | \$ 2.08   |
| October 23, 2007   | Option grant           | 67,500                 | \$ 3.62                              | \$ 3.62   | \$ 2.36   |
| February 1, 2008   | Option grant           | 1,633,500              | \$ 3.76                              | \$ 3.76   | \$ 2.35   |
| April 30, 2008     | Option grant           | 114,300                | \$ 4.33                              | \$ 4.33   | \$ 2.53   |
| July 29, 2008      | Option grant           | 139,000                | \$ 4.67                              | \$ 4.67   | \$ 2.84   |
| November 25, 2008  | Option grant           | 149,300                | \$ 4.98                              | \$ 4.98   | \$ 3.03   |
| November 25, 2008  | Stock award            | 5,000                  | \$ 0.00                              | \$ 4.98   | \$ 0.00   |
| February 12, 2009  | Option grant           | 1,485,000              | \$ 4.89                              | \$ 4.89   | \$ 2.95   |
| May 5, 2009        | Option grant           | 35,000                 | \$ 5.00                              | \$ 5.00   | \$ 3.06   |
| July 22, 2009      | Option grant           | 69,000                 | \$ 5.48                              | \$ 5.48   | \$ 3.51   |
| July 29, 2009      | Option grant           | 900,000 <sup>(3)</sup> | \$ 5.48                              | \$ 5.48   | \$ 3.38   |
| August 4, 2009     | Option grant           | 29,000                 | \$ 5.48                              | \$ 5.48   | \$ 3.38   |
| September 8, 2009  | Option grant           | 360,000 <sup>(4)</sup> | \$ 5.48                              | \$ 5.48   | \$ 3.38   |
| September 18, 2009 | Restricted stock award | 470,686 <sup>(5)</sup> | \$ 0.00                              | \$ 5.48   | \$ 0.00   |
| October 20, 2009   | Option grant           | 18,000                 | \$ 7.36                              | \$ 7.36   | \$ 4.35   |
| October 22, 2009   | Restricted stock award | 44,863 <sup>(5)</sup>  | \$ 0.00                              | \$ 7.36   | \$ 0.00   |
| October 26, 2009   | Option grant           | 15,000                 | \$ 7.36                              | \$ 7.36   | \$ 4.35   |

- (1) The per share estimated fair value of common stock represents the determination by our board of directors of the fair value of our common stock as of the date of grant, taking into account various objective and subjective factors and including the results, if applicable, of valuations of our common stock as discussed in the pages that follow.
- (2) Our estimate of the per share weighted average fair value for stock option grants was computed based upon the Black-Scholes option-pricing model with the assumptions through September 30, 2009 as disclosed in our consolidated financial statements.
- (3) Comprises stock options subject to performance-based milestone vesting. The vesting of these performance-based milestone stock options will occur upon the achievement of certain performance-based milestones, such as the filing of a second NDA with the FDA, the first commercial sale of our product, or achieving a specified sales target. Management has concluded that the performance-based milestones are not probable of achievement, as such, no compensation expense has been recorded related to these options.
- (4) Comprises stock options granted to an executive officer hired September 8, 2009.
- (5) Comprises shares of common stock sold to independent members of the board of directors under restricted stock agreements in accordance with the terms of our 2005 Stock Incentive Plan and consistent with our current director compensation program (see "Director Compensation" section). A total of 115,549 shares of restricted common stock will vest on December 31, 2009 and the remainder vest ratably over four years beginning in January 2010. In the event that a member of the board of directors ceases to serve on our board prior to December 31, 2013, the member will forfeit all unvested shares in accordance with the terms of the restricted stock agreement.

We have historically granted stock options at exercise prices not less than the fair value of our common stock as determined by our board of directors, with input from management. Our board of

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directors has historically determined, with input from management, the estimated fair value of our common stock on the date of grant based on a number of objective and subjective factors, including:

the prices at which we sold shares of convertible preferred stock;

the superior rights and preferences of securities senior to our common stock at the time of each grant;

the likelihood of achieving a liquidity event such as an initial public offering or sale of our company;

our historical operating and financial performance and the status of our research and product development efforts;

achievement of enterprise milestones, including our entering into collaboration and license agreements; and

external market conditions affecting the biotechnology industry sector.

Beginning in March 2006, our board of directors also considered valuations provided by management in determining the fair value of our common stock. Such valuations were prepared as of March 1, June 1, October 31 and December 31, 2006, April 24, June 30, September 30 and December 31, 2007, March 31, June 30, October 28 and December 31, 2008, and March 31, June 30 and September 30, 2009, and valued our common stock at \$1.56, \$1.56, \$1.61, \$2.94, \$3.05, \$3.05, \$3.62, \$3.76, \$4.33, \$4.67, \$4.98, \$4.89, \$5.00, \$5.48 and \$7.36 per share, respectively. The valuations, as described in detail below for each option grant date beginning January 2007, have been used to estimate the fair value of our common stock as of each option grant date listed and in calculating share-based compensation expense. Our board of directors has consistently used the most recent quarterly valuation provided by management for determining the fair value of our common stock unless a specific event occurs that necessitates an interim valuation.

The valuations were prepared consistent with the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held Company Equity Securities Issued as Compensation*, or the Practice Aid. We used the guideline company method and the similar transaction method of the market approach, which compare our company to similar publicly-traded companies or transactions, and an income approach, which looks at projected future cash flows, to value our company from among the alternatives discussed in the Practice Aid. In addition, as we have several series of convertible preferred stock outstanding, it was also necessary to allocate our company's value to the various classes of stock, including stock options. As provided in the Practice Aid, there are several approaches for allocating enterprise value of a privately-held company among the securities held in a complex capital structure. The possible methodologies include the probability-weighted expected return method, the option-pricing method and the current value method.

We used the probability-weighted expected return method described in the Practice Aid to allocate the enterprise values to the common stock. Under this method, the value of our common stock is estimated based upon an analysis of future values for our company assuming various future outcomes, the timing of which is based on the plans of our board of directors and management. Under this approach, share value is based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the rights of each share class. We estimated the fair value of our common stock using a probability-weighted analysis of the present value of the returns afforded to our stockholders under each of four possible future scenarios. Three of the scenarios assumed a shareholder exit, either through an initial public offering, or IPO, or a sale of our company. The fourth scenario assumed a sale of our company at a value that is less than the cumulative amounts invested by our preferred stockholders.

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In March 2006, when we began utilizing the Practice Aid to allocate enterprise values to the various possible outcomes, we assumed two separate IPO scenarios based on our company's profile at the time. In 2006, we were advancing the linaclotide program in human clinical trials as well as a second early stage clinical product candidate. Given the relative risk of these two programs, one IPO scenario included both programs advancing in the clinic at the time of an IPO. Based on the relative risks of both programs and the significant effect on the potential value of a liquidity event if one program failed, a second IPO scenario was added, which included only linaclotide advancing in the clinic at the time of an IPO. This second scenario was included to better reflect the potential outcomes for our company. Beginning with the March 31, 2008 valuation, due to the suspension in March 2008 of the second product candidate program, we eliminated the two product IPO scenario and we utilized a one product IPO scenario reflecting only linaclotide advancing in the clinic at the time of an IPO. Beginning with the October 28, 2008 valuation, we again included two separate IPO scenarios to better reflect our company's risk profile at that time. The linaclotide program was by then advancing in two indications, CC and IBS-C. We believe that the IBS-C indication has a significantly higher market value and higher clinical risk for Ironwood. To better reflect the potential liquidity outcomes for linaclotide, the first IPO scenario included an assumption of successful Phase 3 clinical trials for both the CC and IBS-C indications at the time of an IPO, and the second IPO scenario reflected successful Phase 3 clinical trials in only the CC indication at the time of the IPO. For both IPO scenarios and the sale scenario, the estimated future values of our common stock were calculated using assumptions including: the expected pre-money or sale valuations based on the market approach, and beginning in September 2007, the income approach using the discounted cash flow method, and the expected dates of the future expected IPO or sale. For the sale at an assumed price less than the liquidation preference scenario, the estimated future and present values of our common stock were calculated using assumptions including the estimated aggregate enterprise value that could be attained through such a sale and the estimated expected date of the future sale. The present values of our common stock under each scenario were then calculated using a risk-adjusted discount rate. Finally, the calculated present values for our common stock were probability-weighted based on our estimate of the relative occurrence of each scenario to derive the concluded value of our common stock.

*Stock Option Grants on January 23, 2007*

Our board of directors granted stock options on January 23, 2007, with each having an exercise price of \$2.94 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of December 31, 2006 provided by management.

As of December 31, 2006, linaclotide had completed Phase 2a clinical trials and the second product candidate had completed Phase 1 clinical trials and was expected to proceed further in clinical trials in early 2007. Additionally, Microbia had recently entered into a five-year product development agreement with a customer.

In the December 31, 2006 valuation, we used the market approach to estimate the aggregate future enterprise value of our company under the two separate IPO scenarios, as described above, one in which both product candidates successfully completed Phase 2 clinical trials, and one where only linaclotide successfully completed Phase 2 clinical trials. In both IPO scenarios, we assumed the liquidity event would occur in February 2008. In applying the market approach to the IPO scenarios, we used the Guideline Public Company Method as described in the Practice Aid. Under this method, we analyzed market data on pre-money IPO valuations for approximately 50 biotechnology companies that went public in the period 2003 to 2006. From this set of data we selected a sub-set of companies that had either one or two drugs in Phase 2 clinical trials. We used the median and high end of the range, \$200.0 million to \$350.0 million in the one-product IPO scenario and \$150.0 million to \$700.0 million in the two-product IPO scenario, to estimate the enterprise values of our company under the two IPO scenarios. We used \$250.0 million for the one-product scenario and \$600.0 million for the two-product IPO scenario. We used these values as the



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estimated enterprise values in the respective IPO scenarios of the probability-weighted expected return method.

In applying the market approach in the sale scenario, we analyzed sale transactions of similar biotechnology companies. The value used was supported by published transaction values of companies with product candidates in various stages of drug development ranging from discovery stage to Phase 3 clinical trials. In the sale scenario, we estimated our company's enterprise value using transactions for companies that were in a comparable stage of development as we anticipated we would be as of February 2008, which was the estimated date a sale or merger would be consummated.

In the sale at an assumed price less than the liquidation preference scenario, we assumed a sale in February 2008 of our company's existing research and intellectual property at a value that would not allow our preferred stockholders to realize their liquidation preference at December 31, 2006.

Under the IPO scenarios, the fair value of our common stock was calculated using the expected aggregate enterprise valuations and a risk-adjusted discount rate of 16% based on the estimated timing of a potential IPO with no lack of marketability discount. The risk-adjusted discount rate was based on the inherent risk of a hypothetical investment in our common stock. An appropriate rate of return required by a hypothetical investor was determined based on our cost of capital. Our calculated cost of capital was developed based upon a quantitative and qualitative analysis of factors that would impact the discount rate.

The fair value of our common stock under the sale at an assumed price less than the liquidation preference scenario was determined by reducing the total estimated enterprise value by the liquidation preferences of our convertible preferred shares, all of which would receive more value based on their liquidation preferences, as opposed to converting to common stock.

In our December 31, 2006 valuation, we used a probability weight of 35% for the two-product IPO scenario and a probability weight of 15% for the one-product IPO scenario. The greater probability of an IPO in a two-product scenario versus a one-product scenario was the basis for the higher two-product probability weight. The sale scenario had a probability weight of 45% and the sale at an assumed price less than the liquidation preference scenario had a probability weight of 5%. The probability weights assigned to the respective scenarios were primarily based on the industry average of the clinical success rates given the stage of development of our product candidates as of the valuation date as well as our assessment of the current financing and biotechnology industry environments at the time of the valuation. The resulting value, which represented the estimated fair value of our common stock at December 31, 2006, was \$2.94 per share. No events or other circumstances occurred between December 31, 2006 and January 23, 2007 such that there was a change in the common stock fair value during that period.

*Stock Option Grants on April 24, 2007*

Our board of directors granted stock options on April 24, 2007, with each having an exercise price of \$3.05 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of April 24, 2007 provided by management.

As of April 24, 2007, we had sold 8.0 million shares of our Series F convertible preferred stock at a per share price of \$6.25 from which we received approximately \$50.0 million of net proceeds. With the exception of the sale of the Series F convertible preferred stock, there had not been any material changes in our business or operating results since the December 31, 2006 valuation. We used the same valuation methodologies as were used in the December 31, 2006 valuation. The increase in the estimated fair value of our common stock to \$3.05 per share in the April 24, 2007 valuation as compared to the December 31, 2006 valuation was primarily related to the decrease in the time to the expected liquidity event as the sale of the Series F convertible preferred stock was already taken into consideration in the December 31, 2006 valuation.

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*Stock Option Grants on July 11, 2007*

Our board of directors granted stock options on July 11, 2007, with each having an exercise price of \$3.05 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of June 30, 2007 provided by management.

As of June 30, 2007, linaclotide had advanced into Phase 2b clinical trials while the second product candidate had not advanced as quickly as our previous projections. We used the same valuation methodologies as were used in the April 24, 2007 valuation, updated for the advancement of linaclotide to Phase 2b clinical trials and the delay in the second product candidate. The probability weight assigned to the two-product IPO scenario was reduced to 25% and the probability weight assigned to the one-product IPO scenario was increased to 50% compared to 15% in the April 24, 2007 valuation. The probability weight assigned to the sale scenario was reduced to 20% and the probability weight assigned to the sale at an assumed price less than the liquidation preference scenario remained the same compared to the April 24, 2007 valuation. The changes in the respective probability weights reflect linaclotide's further progress in the clinic and the delay in the second product candidate's development. Based on later clinical timelines and a reduced need for funding because of our Series F convertible preferred stock financing, the June 30, 2007 valuation reflected a revised liquidity event date of September 30, 2008 for the two IPO scenarios and the sale scenario. The resulting estimated fair value of our common stock of \$3.05 per share at June 30, 2007 was the same as at April 24, 2007 because of the combined effect of the change in the probability weights assigned the two IPO scenarios and the sale scenario and the approximately seven month delay in the date of a liquidity event.

*Stock Option Grants on October 23, 2007*

Our board of directors granted stock options on October 23, 2007, with each having an exercise price of \$3.62 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of September 30, 2007 provided by management.

As of September 30, 2007, we suspended the clinical trials and related development activity associated with our second product candidate. After further evaluating the clinical results and market opportunity for our second product candidate, we decided not to pursue further development activities for it. However, we did assume that an earlier stage third product candidate based on an existing back-up compound could be in Phase 2 clinical trials at the time of an IPO. Additionally, in September 2007, we entered into the Forest collaboration agreement for linaclotide whereby we anticipated receiving a \$70.0 million up-front license fee as well as various clinical milestone payments and a commercial milestone payment for the achievement of a certain sales level. The Forest collaboration agreement included a clinical milestone, which would trigger an equity investment in our company by Forest. Also, under the Forest collaboration agreement, all development and commercialization costs, as well as all profits and losses related to linaclotide, were to be shared equally by the parties.

We used the same valuation methodologies as were used in the June 30, 2007 valuation, updated for two material changes in our business. The first change was the suspension of all development activity associated with our second product candidate and its replacement with an earlier stage product candidate utilizing a backup compound. The second change was the execution of the Forest collaboration agreement which, among other benefits, made additional financial resources available to us in the form of milestone payments in addition to the up-front licensing fee of \$70.0 million and cost sharing. At the time of this valuation, the two-product IPO scenario was updated to project linaclotide in Phase 3 clinical trials and a new third product candidate in Phase 2 clinical trials at the time of a liquidity event. The one-product IPO scenario was also updated to reflect only linaclotide in Phase 3 clinical trials at the time of a liquidity event. The sale scenario was updated to reflect linaclotide success in only one indication and under the assumption that a sale of Ironwood would be executed only in the absence of available equity financing. The probability weight assigned to the two-product IPO scenario was reduced to 15% and the probability

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weight assigned to the one-product IPO scenario was increased to 65% compared to the June 30, 2007 valuation based on our assessment that the CC indication posed lower clinical risk than IBS-C due to the different endpoints being tested and thus CC was more likely to be successful at the time of a liquidity event than the combination of both CC and IBS-C. The sale scenario's probability weight was reduced to 15% and the probability weight assigned to the sale at an assumed price less than the liquidation preference scenario remained the same compared to the June 30, 2007 valuation. The changes in the respective probability weights reflect the changes in the business described above. Additionally, the September 30, 2007 valuation reflected a delayed liquidity event date of June 30, 2009 for all the scenarios based on a decreased need for capital due to the additional funding provided to us by the Forest collaboration. The risk-adjusted discount rate for all scenarios was revised to 20% to reflect the overall increase in business risk associated with our increased reliance on linaclotide due to the setbacks and delays in our second product candidate program. The higher estimated enterprise value now associated with the one-product IPO scenario and its greater probability weight, driven by decreased clinical risk in CC and additional payments for the CC indication from the Forest collaboration, were the primary reasons for the increase in the estimated fair value of our common stock to \$3.62 per share as compared to \$3.05 per share in the June 30, 2007 valuation.

*Stock Option Grants on February 1, 2008*

Our board of directors granted stock options on February 1, 2008, with each having an exercise price of \$3.76 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of December 31, 2007 provided by management.

As of December 31, 2007, there had not been any material changes in our business or operating results since the September 30, 2007 valuation. We used the same valuation methodologies as were used in the September 30, 2007 valuation, updated to reflect the shorter time to the liquidity event date of June 30, 2009 for all the scenarios. As a result, the estimated fair value of our common stock increased to \$3.76 per share in the December 31, 2007 valuation as compared to \$3.62 in the September 30, 2007 valuation.

*Stock Option Grants on April 30, 2008*

Our board of directors granted stock options on April 30, 2008, with each having an exercise price of \$4.33 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of March 31, 2008 provided by management.

As of March 31, 2008, there were two material changes in our business. On March 4, 2008, we announced favorable Phase 2b results for linaclotide. We also terminated all efforts in our early stage clinical product candidate as well as the related backup compound based on the current marketing and regulatory environment for similar drugs. As a result of these changes, we eliminated the two-product IPO scenario. The focus of our clinical development was now solely on linaclotide, which became the primary value driver in our analysis. Additionally, the methodology for estimating the enterprise value for the remaining one-product IPO scenario was changed from the market approach to the income approach using the discounted cash flow method. This change in method incorporated the agreed upon deal terms with Forest, including all expected milestone payments and future profit sharing, which we assessed to be a better reflection of our enterprise value. Under the discounted cash flow method, our equity value is equal to the projected future free cash flows and expected terminal value of Ironwood, adjusted for cash, net of debt, and the probability of linaclotide completing successful Phase 3 clinical trials. The present value of our projected free cash flow is determined by discounting our projected future cash flows back to the valuation date. The discount rate used in the analysis was 16%. In determining the appropriate discount rate, we determined our weighted average cost of capital based on comparable biotechnology companies. We then adjusted this weighted average cost of capital for company specific risk based on the reduced risk profile of our company at the time of an IPO. Also, we increased the discount rate used to discount the per share values from the event date to the valuation date for all the scenarios to 22% from 20%. One primary

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reason for the increase in the discount rate was the change in the set of comparable companies primarily due to the elimination of the second product candidate. The change to the set of comparable companies along with updates in the market data increased the cost of equity for the scenarios.

Because we no longer considered a two-product IPO scenario viable at this time, the probability weight assigned to the one-product IPO scenario was increased to 70%. The probability weight assigned to the sale scenario was increased to 25% based on the concentration of company risk, the availability of equity financing, and increased merger and sale activity in the biotechnology industry at that time. The sale at an assumed price less than the liquidation preference scenario remained at 5%. The impact of the changes in risk-adjusted discount rates and probability weights resulted in an estimated fair value of our common stock of \$4.33 per share as of March 31, 2008.

*Stock Option Grants on July 29, 2008*

Our board of directors granted stock options on July 29, 2008, with each having an exercise price of \$4.67 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of June 30, 2008 provided by management.

As of June 30, 2008, there had not been any material changes in our business or operating results since the March 31, 2008 valuation. We used the same valuation methodologies as were used in the March 31, 2008 valuation; however, we refined our comparable biotechnology companies to reflect anticipated progress of linaclotide into Phase 3 clinical trials by adding other companies with significant potential Phase 3 programs. The revised publicly traded comparable biotechnology companies were (1) focused on the development of gastrointestinal drugs, (2) had drug candidates in Phase 2 or Phase 3 clinical trials or a combination of both, or (3) had comparable market opportunities for their drug candidates. As a result of the change in comparable biotechnology companies, the risk-adjusted discount rate decreased to 19%. The expected liquidity event date remained June 30, 2009. These changes resulted in an increase in the estimated fair value of our common stock to \$4.67 per share as of June 30, 2008.

*Stock Option Grants and Stock Award on November 25, 2008*

Our board of directors granted stock options and a stock award on November 25, 2008, with each stock option having an exercise price of \$4.98 per share and the stock award having a fair value of \$4.98 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of October 28, 2008 provided by management.

As of October 28, 2008, we had sold 4.1 million shares of our Series H convertible preferred stock at a per share price of \$12.00 from which we received approximately \$49.6 million of net proceeds. This financing also included a change in our capital structure to reflect a limited dual class common stock structure whereby any shares then owned or owned prior to a public offering have a super-majority vote in certain circumstances. Also, shortly after the close of our Series H convertible preferred stock financing, the general financial market conditions substantially deteriorated as a result of the global credit and liquidity crisis, which led to a significant increase in the cost of capital. This credit crisis substantially lowered our expectations for additional financing for the foreseeable future which had the effect of lowering our valuation primarily as a result of a delay in our assessed timeline to a liquidity event.

We used the same valuation methodologies as were used in the June 30, 2008 valuation; however, we updated them to reflect an adjustment to the IPO scenario based on the deterioration in the financial markets. The IPO scenario was also split into two linaclotide scenarios: (1) a two-indication IPO whereby both the IBS-C and CC indications achieved favorable Phase 3 clinical trials at the time of a liquidity event, and (2) a one-indication IPO whereby only the CC indication had favorable Phase 3 clinical trials at the time of a liquidity event. This split in IPO scenarios was made to reflect the difference in clinical risk associated with successful Phase 3 data in the CC indication, which relied primarily on clinical endpoints that we assessed were easier to achieve than the endpoints required in our IBS-C clinical trials. We also

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determined there was higher commercial value associated with the IBS-C market in relation to the CC market based on assessments of the size of each opportunity. The discount rate used in both IPO scenarios to discount the cash flows was 19%. The funding received in the Series H convertible preferred financing round, combined with aggressive cash management, was deemed sufficient to fund linaclotide through Phase 3 clinical trials, which, along with the current financial crisis, resulted in the moving of the expected IPO date to June 30, 2010 from June 30, 2009. Since we estimated that the IPO would occur after some Phase 3 clinical trial results for linaclotide were known, a higher probability of success was applied to the future estimated cash flows. These changes in assumptions resulted in larger estimated enterprise values in all IPO and sale scenarios. The combination of the aforementioned events and the deterioration in the condition of the financial markets balanced out the impact on the discount rate used to discount the per share values from the event date to the valuation date and left it unchanged at 19%.

We assigned a probability weight of 45% to the two-indication IPO scenario and 30% to the one-indication IPO scenario. The total probability weight of 75% assigned to an IPO liquidity event was an increase from 70% in the June 30, 2008 valuation. The increase in the total IPO probability weight reflected the greater likelihood that linaclotide would succeed in clinical trials for at least one, if not both, of the indications. The probability weight assigned to the sale scenario was reduced to 20% compared to the June 30, 2008 valuation based on the implementation of a limited dual class common stock structure and the potential of a super-majority blocking vote by any existing stockholders in certain circumstances. The probability weight assigned to the sale at an assumed price less than the liquidation preference scenario remained the same compared to the June 30, 2008 valuation. The higher estimated enterprise values now associated with the two IPO scenarios and the sale scenario combined with the greater total probability weight assigned to the IPO scenarios were the primary reasons for the increase in the estimated fair value of our common stock to \$4.98 per share as compared to \$4.67 per share in the June 30, 2008 valuation.

*Stock Option Grants on February 12, 2009*

Our board of directors granted stock options on February 12, 2009, with each having an exercise price of \$4.89 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of December 31, 2008 provided by management.

As of December 31, 2008, there had not been any material changes in our business or operating results since the October 28, 2008 valuation. We used the same valuation methodologies as were used in the October 28, 2008 valuation, except a later liquidity event date of September 30, 2010 was used for all the scenarios as compared to June 30, 2010 in the October 28, 2008 valuation. This liquidity date change resulted from the continued deterioration in the condition of the financial markets, which was assumed to have a sustained limiting effect on the IPO market for the foreseeable future. As a result, the estimated fair value of our common stock decreased to \$4.89 per share in the December 31, 2008 valuation as compared to \$4.98 in the October 28, 2008 valuation.

*Stock Option Grants on May 5, 2009*

The compensation and HR committee of our board of directors, or the compensation committee, granted stock options on May 5, 2009, with each having an exercise price of \$5.00 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of March 31, 2009 provided by management.

As of March 31, 2009, there had not been any material changes in our business or operating results since the December 31, 2008 valuation. We used the same valuation methodologies as were used in the December 31, 2008 valuation, updated to reflect an increase in the risk-adjusted discount rate from 19% to 20% for all the scenarios based on changes in market data, reflecting the additional return investors would expect from an equity investment made during the turbulent economic conditions existing at this time. Despite this increased cost of capital, no liquidity dates were changed and we were three months closer to our assumed liquidity events and as a result, the estimated fair value of our common stock increased to \$5.00 per share in the March 31, 2009 valuation as compared to \$4.89 in the December 31, 2008 valuation.

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*Stock Option Grants on July 22, July 29, August 4 and September 8, 2009 and Restricted Stock Awards on September 18, 2009*

Our board of directors or the compensation committee granted stock options on July 22 and 29, August 4 and September 8, 2009 and restricted stock awards on September 18, 2009, with each having an exercise price of \$5.48 per share. In addition to considering the objective and subjective factors listed above, the board of directors considered the valuation as of June 30, 2009 provided by management.

As of June 30, 2009, linaclotide had entered Phase 3 clinical trials for CC and had not yet entered Phase 3 clinical trials for IBS-C. In April 2009, we completed the Almirall license agreement for the development and distribution of linaclotide for the European market. Under the Almirall license agreement, we anticipated receiving a net \$38.0 million up-front license fee, a clinical milestone, a commercial milestone payment and royalties based on Almirall's annual sales in the licensed territory. Additionally, the Almirall license agreement includes a clinical milestone, which would trigger an equity investment in our company by Almirall.

We used the same valuation methodologies as were used in the March 31, 2009 valuation; however, we updated the discounted cash flow analyses to reflect the additional value we anticipated receiving from the completed Almirall license agreement. As a result of the revisions, the estimated enterprise value of Ironwood in both the two-indication IPO scenario and the one-indication IPO scenario increased. The estimated enterprise values under the sale scenario and sale at an assumed price less than the liquidation preference scenario remained the same as in the March 31, 2009 valuation. The probability weights assigned to each scenario, the expected liquidity event date, and the risk-adjusted discount rate all remained the same as in the March 31, 2009 valuation. As a result, the estimated fair value of our common stock increased to \$5.48 per share in the June 30, 2009 valuation as compared to \$5.00 per share in the March 31, 2009 valuation.

*Stock Option Grants on October 20 and October 26, 2009 and Restricted Stock Award on October 22, 2009*

The compensation committee granted stock options on October 20 and October 26, 2009 and a restricted stock award on October 22, 2009, with each having an exercise price of \$7.36 per share. In addition to considering the objective and subjective factors listed above, our board of directors considered the valuation as of September 30, 2009 provided by management.

As of September 30, 2009, linaclotide had entered Phase 3 clinical trials for IBS-C as well as progressing in its Phase 3 clinical trials for CC. In July 2009, we achieved a clinical milestone included in the Forest collaboration agreement and as a result received a \$20.0 million milestone payment from Forest and sold 2.1 million shares of our Series G convertible preferred stock to Forest at a contractually-agreed per share price of \$12.00 from which we received approximately \$25.0 million of net proceeds.

We used the same valuation methodologies as were used in the June 30, 2009 valuation, however, we updated them to reflect an earlier liquidity event date of March 31, 2010 for the one-indication IPO scenario based on our belief that if we received successful data from our Phase 3 clinical trials for CC, they could potentially support a public offering. In addition, the market for IPOs had become more active, thereby increasing the likelihood of an IPO based on successful Phase 3 CC data. As a result, we increased the probability weight of the one-indication IPO scenario to 45% and decreased the probability weight of the two-indication IPO scenario to 30%. The increase in the probability weight of the one-indication IPO scenario reflected the greater likelihood that linaclotide would succeed in Phase 3 clinical trials for CC at the time of an IPO. The total probability weight of 75% assigned to the combination of the one-indication and two-indication IPO scenarios remained the same as the June 30, 2009 valuation. The estimated enterprise values in both the one-indication and two-indication IPO scenarios were also updated to reflect the feedback we received from investment advisors as to the value of our potential IPO in both the one-indication and two-indication IPO scenarios. The risk-adjusted discount rate was adjusted from 20%

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to 19% for all the scenarios to reflect the initiation of the IBS-C trials and the modest improvement in the economic environment. The higher estimated enterprise values now associated with the two IPO scenarios and the sale scenario combined with the increase in probability weight and shorter timeline assigned to the one-indication IPO scenario were the primary reasons for the increase in the estimated fair value of our common stock to \$7.36 per share in the September 30, 2009 valuation as compared to \$5.48 in the June 30, 2009 valuation.

On November 2, 2009, we became aware of and announced favorable efficacy and safety results in two Phase 3 CC trials, meeting all 32 primary and secondary endpoints across both doses evaluated in these independent trials involving 1,287 subjects. Due to the materiality of this result for Ironwood and a favorable outcome above our expectations, management prepared a common stock valuation to reflect a significant change in value although no additional stock option grants were made or contemplated.

We used the same valuation methodologies as were used in the September 30, 2009 valuation, however, we updated them to reflect the significant change to our business that resulted from the favorable clinical trial results in CC. First, we determined that it was highly likely that we would be able to complete a successful public offering on the strength of our CC clinical trial data, and as a result we increased the probability weight of our one-indication IPO scenario to 65%. We also moved the liquidity event date to February 28, 2010 from March 31, 2010 based on higher confidence that we could complete a public offering earlier. The probability weight of the two-indication IPO remained at 30% to continue to reflect the possibility that the IBS-C trial could enroll more quickly and could persuade us to wait for IBS-C Phase 3 results before completing a public offering. The total combined probability weight of 95% assigned to the one-indication and two-indication IPO scenarios increased from 75% in the previous valuation based on our determination of a higher likelihood of completing an IPO sometime in 2010. The risk-adjusted discount rate was also lowered from 19% to 15% for all the scenarios to reflect a decrease in company risk as a result of a higher likelihood of obtaining financing required to fund Ironwood further into the future. The sale scenario was decreased to 5% to reflect the lower likelihood in light of our CC trial results. The sale at an assumed price less than the liquidation preference scenario previously assigned a 5% likelihood was decreased to zero. As a result of these changes, the estimated fair value of our common stock increased to \$11.75 per share in the November 2, 2009 valuation as compared to \$7.36 per share in the September 30, 2009 valuation.

On January 15, 2010, we and the underwriters determined a preliminary range for the initial public offering price, the midpoint of which, at such time, was \$15.00 as compared to \$11.75, management's determination of the estimated fair value of our common stock on November 2, 2009, the date we became aware of and announced favorable efficacy and safety results in two Phase 3 CC trials for linaclotide. This estimated fair value represents a discount of 22% from the midpoint of the range and an increase of 28% from the estimated fair value of our common stock on November 2, 2009. We note that, as is typical in initial public offerings, the preliminary range was not derived using a formal determination of fair value, but was determined based upon discussions between us and the underwriters. Among the factors considered in setting this range were prevailing market conditions and estimates of our business potential. In addition to this difference in purpose and methodology, we believe that the difference in value reflected between the midpoint of the range and management's determination of the estimated fair value of our common stock on November 2, 2009 is primarily the result of the following factors:

The stock price of our publicly-traded peer companies increased, on average, approximately 17% during the period from November 2, 2009 to January 13, 2010. The NASDAQ biotechnology index increased approximately 15%, and the NASDAQ composite index increased approximately 13% during the same period.

During the period from November 2, 2009 to January 13, 2010, four biopharmaceutical companies filed registration statements for initial public offerings in the U.S. as compared to just four biopharmaceutical companies that priced their initial public offerings in the 12 months preceding

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November 2, 2009, demonstrating a significant improvement in the market for initial public offerings in the U.S. in the biopharmaceutical industry.

Our January of 2010 discussions with the underwriters took into account our and the underwriters' perceptions of significantly increased optimism regarding the market for initial public offerings, as well as our and our underwriters' increased expectations that we would complete our initial public offering in the first quarter of 2010.

We performed a preliminary valuation to estimate the fair value of our common stock immediately before the anticipated effective date of the offering of February 2, 2010, in which we held all assumptions, with the exception of the liquidity date for a one-indication IPO scenario, consistent with our November 2, 2009 valuation. The liquidity date for the one-indication IPO scenario was accelerated from February 28, 2010 to February 2, 2010. As a result of both the accelerated liquidity date for the one-indication IPO scenario and the passage of time from the November 2, 2009 valuation to the February 2, 2010 anticipated effective date, management's estimated fair value of our common stock at February 2, 2010 would be \$12.18, a 19% discount from the midpoint of the preliminary range.

History has shown that it is reasonable to expect that the completion of an initial public offering will increase the value of stock as a result of the significant increase in the liquidity and ability to trade/sell such securities. However, it is not possible to measure such increase in value with precision or certainty.

Based on the \$15.00 midpoint of the preliminary range, the intrinsic value of the options outstanding at October 26, 2009 was \$176.3 million, of which \$95.1 million related to vested options and \$81.2 million related to unvested options.

There are significant judgments and estimates inherent in the determination of these valuations. These judgments and estimates include assumptions regarding our future performance, the time to completing an IPO or other liquidity event, and the timing of and probability of launching our product candidate as well as determinations of the appropriate valuation methods. If we had made different assumptions, our share-based compensation expense, net loss and net loss per share could have been significantly different.

We have also granted performance-based stock options with terms that allow the recipients to vest in a specific number of shares based upon the achievement of performance-based goals as specified in the grants. Share-based compensation expense associated with these performance-based stock options is recognized if the performance condition is considered probable of achievement using management's best estimates of the time to vesting for the achievement of the performance milestones. If the actual achievement of the performance milestones varies from our estimates, share-based compensation expense could be materially different than what is recorded in the period. The cumulative effect on current and prior periods of a change in the estimated time to vesting for performance-based stock options will be recognized as compensation cost in the period of the revision, and recorded as a change in estimate.

We have also granted time-accelerated stock options with terms that allow the acceleration in vesting of the stock options upon the achievement of performance-based milestones specified in the grants. Share-based compensation expense associated with these time-accelerated stock options is recognized over the requisite service period of the awards or the implied service period, if shorter.

While the assumptions used to calculate and account for share-based compensation awards represents management's best estimates, these estimates involve inherent uncertainties and the application of management's judgment. As a result, if revisions are made to our underlying assumptions and estimates, our share-based compensation expense could vary significantly from period to period.



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The total estimated compensation cost related to non-vested stock options and stock awards not yet recognized was approximately \$2.2 million, \$3.9 million, \$6.4 million and \$11.2 million as of December 31, 2006, 2007 and 2008 and September 30, 2009, respectively. The weighted-average period over which this expense is expected to be recognized is approximately 3.96 years. See Notes 2 and 15 to our consolidated financial statements located in this prospectus for further discussion of share-based compensation.

***Fair Value of Financial Instruments***

In September 2007, we entered into a collaboration agreement with Forest, which included a contingent equity investment in the form of a forward purchase contract, which required Forest to purchase 2,083,333 shares of our Series G convertible preferred stock at a price of \$12.00 per share if we achieved a specific clinical milestone. This preferred stock, which was issued to Forest in September 2009, has rights and conditions substantially identical to our outstanding preferred stock prior to the issuance.

In April 2009, we entered into a license agreement with Almirall, which also included a contingent equity investment in the form of a forward purchase contract, which required Almirall to purchase 681,819 shares of our Series I convertible preferred stock, if a specific clinical milestone is met, at a price of \$22.00 per share. The milestone in this agreement is a different milestone from the one contained in the Forest collaboration agreement. This preferred stock, which was issued to Almirall and for which we received \$15.0 million of cash proceeds on November 13, 2009, has rights and conditions substantially identical to our outstanding preferred stock.

We evaluated both of these financial instruments and determined that because we may be required to settle these instruments by transferring assets to Forest and Almirall due to "deemed liquidation" provisions of the preferred stock, these instruments should be considered assets or liabilities. Each contingent equity investment was assessed at fair market value at its inception. A significant input in the valuation of the forward purchase contracts is the fair value of our convertible preferred shares which are estimated using the probability-weighted expected return method. Under the probability-weighted expected return method, the value of our convertible preferred shares is calculated based on an analysis of potential future values of our company assuming various future liquidity events, the timing and amount of which are based on estimates from our company's management. The resulting preferred share value was based on the probability-weighted present value of the expected future returns, considering each of the possible outcomes as well as the rights of each preferred share class. At each measurement date, assumptions used in the probability-weighted expected return model, including future values, liquidity dates and scenario weightings, were consistent with the assumptions used in our common stock valuations at such time, as described above. The calculated discount or premium from the pre-determined price paid by Forest and Almirall for their shares in excess of the estimated fair value of our convertible preferred stock at the expected time of meeting the respective milestone was then discounted using a company risk-adjusted rate consistent with the common stock valuations being performed at the time to arrive at the present value of the respective forward purchase contract.

At the inception of the Forest collaboration agreement, the fair value of our convertible preferred stock to be issued upon the achievement of the milestone was equal to the sum of the probability-weighted present values for the four identified possible exit scenarios initial public offering (either one-product IPO or two-product IPO or later a one-indication IPO and two-indication IPO), sale and sale at an assumed price below the liquidation preference, all with June 30, 2009 as the expected milestone achievement date. The probability weight assigned to the two-product IPO scenario was 20% and the probability weight assigned to the one-product IPO scenario was 70%. The probability weight assigned to the sale scenario was 5% and the probability weight assigned to the sale at an assumed price less than the liquidation preference scenario was 5%. The resulting enterprise values for each scenario were discounted to an estimated investment date of October 31, 2008, using a risk-adjusted discount rate of 20%. Based on this calculation, the fair value of the convertible preferred stock to be issued upon achievement of the Forest milestone was valued at \$5.32 per share. The resulting difference of \$6.68 per share between the fair

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value of \$5.32 and the purchase price of \$12.00 per share represented the estimated premium Forest would pay above the fair value of the convertible preferred stock. This per share premium was then adjusted by the probability of achieving the milestone, which was estimated at 80%, based on clinical risk, resulting in a probability adjusted premium of \$5.34 per share. The resulting total premium was then discounted as of September 12, 2007 using a company risk-adjusted discount rate of 20%. As a result, the Forest contingent equity investment was valued at the inception of the agreement to be \$9.0 million, which represents the fair value of the premium that Forest would pay for shares of our stock should the milestone be achieved.

The fair value of our convertible preferred stock to be issued upon the achievement of the Almirall milestone at the inception of the license agreement in April 2009 was equal to the sum of the probability-weighted present values for the four identified possible exit scenarios: one-indication IPO, two-indication IPO, sale and sale at an assumed price less than the liquidation preference, all with September 30, 2010 as the expected event date. The resulting enterprise values for each scenario were discounted as of the investment date which was estimated to be October 15, 2009. Based on this calculation, the fair value of the convertible preferred stock to be issued upon achievement of the Almirall milestone was estimated at \$9.23 per share. The resulting difference of \$12.77 per share between the estimated fair value of \$9.23 and the purchase price of \$22.00 per share is the estimated premium Almirall will pay above the fair value of the convertible preferred stock. This per share premium was then adjusted by the probability of achieving the milestone, which was estimated at 75%, resulting in a probability adjusted premium of \$9.58 per share. The resulting total premium was then discounted as of April 30, 2009 at 20%. As a result, the Almirall contingent equity investment was valued at the inception of the agreement to be \$6.0 million, which represents the fair value of the premium that Almirall would pay for shares of our stock should the milestone be achieved.

In addition to valuing these instruments at their inception, we are also required to remeasure the fair value of our contingent equity investments at each reporting period, using current assumptions, with changes in value recorded as other income or expense. At December 31, 2007, we remeasured the fair value of the Forest contingent equity investment using valuation methodologies consistent with those used at inception, updated for current assumptions. Based on these calculations, the fair value of the convertible preferred stock to be issued upon achievement of the milestone was valued at \$5.28 per share. The resulting difference of \$6.72 per share was then adjusted by the probability of achieving the milestone, which was again estimated as 80%, resulting in a probability adjusted premium of \$5.38 per share. The resulting total premium was then discounted as of December 31, 2007 using an appropriate risk-adjusted discount rate of 21%. As a result, the Forest contingent equity investment was valued at December 31, 2007 to be \$9.6 million.

At September 30, 2008, we remeasured the fair value of the Forest contingent equity investment using valuation methodologies consistent with those used at December 31, 2007, updated for current assumptions. Based on these calculations, the fair value of the convertible preferred stock to be issued upon achievement of the Forest milestone was valued at \$9.63 per share. The resulting difference of \$2.37 per share was then adjusted by the probability of achieving the milestone, which was again estimated as 80%, resulting in a probability adjusted premium of \$1.90 per share. The resulting total premium was then discounted as of September 30, 2008 using a risk-adjusted discount rate of 14%. As a result of these assumptions, the contingent equity investment was valued at September 30, 2008 to be \$3.7 million. At December 31, 2008, we remeasured the fair value of the Forest contingent equity investment using valuation methodologies consistent with those used at September 30, 2008, updated for current assumptions. Based on these calculations, the fair value of the convertible preferred stock to be issued upon achievement of the Forest milestone was estimated at \$7.16 per share. The resulting difference of \$4.84 per share was then adjusted by an updated probability of achieving the milestone, which was now estimated at 90%, resulting in a probability adjusted premium of \$4.35 per share. The resulting total premium was then discounted as of December 31, 2008 using a risk-adjusted discount rate of 19%. As a result, the Forest contingent equity investment was valued at December 31, 2008 to be \$8.7 million.

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On July 22, 2009, we achieved the Forest milestone, thus triggering the Forest equity investment. As a result, we remeasured the fair value of the equity investment as of July 22, 2009 using valuation methodologies consistent with those used at December 31, 2008, updated for current assumptions including a change to the investment date to July 22, 2009. Based on these calculations, the fair value of the convertible preferred stock to be issued upon achievement of the Forest milestone was calculated at \$7.76 per share. The resulting difference of \$4.24 per share was not adjusted by a probability discount as the milestone was achieved. The resulting total premium was then discounted as of July 22, 2009 using a risk-adjusted discount rate of 20%. As a result, the Forest contingent equity investment was valued at July 22, 2009 to be \$8.8 million and at that time we reclassified the forward purchase contract as a reduction to convertible preferred stock. On September 1, 2009, we received from Forest \$25.0 million for the 2,083,333 shares of Series G convertible preferred stock.

At September 30, 2009, we remeasured the fair value of the Almirall contingent equity investment using valuation methodologies consistent with those used at December 31, 2008, updated for current assumptions. Based on these calculations, the fair value of the convertible preferred stock to be issued upon achievement of the Almirall milestone increased to \$10.51 per share. This per share premium was then adjusted by the probability of achieving the milestone, which remained at 75%, resulting in a probability adjusted premium of \$8.62 per share. The resulting total premium was then discounted as of September 30, 2009 using a risk-adjusted discount rate of 19%. As a result, the Almirall contingent equity investment was valued at September 30, 2009 to be \$5.8 million.

On November 2, 2009, we achieved the Almirall milestone, thus triggering the Almirall equity investment. As a result, we remeasured the fair value of the equity investment as of November 2, 2009 using valuation methodologies consistent with those used at September 30, 2009, updated for current assumptions including a change to the investment date to November 2, 2009. Based on these calculations, the fair value of the convertible preferred stock to be issued upon achievement of the Almirall milestone was estimated at \$12.41 per share. The resulting difference of \$9.59 per share was not adjusted by a probability discount as the milestone was achieved. The resulting total premium was then discounted as of November 2, 2009 using a risk-adjusted discount rate of 15%. As a result, the Almirall contingent equity investment was valued at November 2, 2009 to be \$6.5 million and at that time we reclassified the forward purchase contract as a reduction to convertible preferred stock and recognized in other income a \$0.7 million gain on remeasurement. On November 13, 2009, we received from Almirall \$15.0 million for the 681,819 shares of Series I convertible preferred stock.

Table of Contents**Results of Operations**

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

|   | December 31,   |             |             | Nine Months Ended<br>September 30, |             |
|---|----------------|-------------|-------------|------------------------------------|-------------|
|   | 2006           | 2007        | 2008        | 2008                               | 2009        |
|   | (in thousands) |             |             |                                    |             |
| <b>Revenue:</b>   |                |             |             |                                    |             |
| Collaborative arrangements                              | \$             | \$          | \$          | \$                                 | \$          |
| Services  | 3,140          | 5,856       | 3,833       | 3,309                              | 1,581       |
| Total revenue   | 3,140          | 10,464      | 22,216      | 17,242                             | 27,498      |
| <b>Operating expenses:</b>                              |                |             |             |                                    |             |
| Research and development                                | 35,543         | 57,246      | 59,809      | 43,309                             | 58,824      |
| General and administrative                              | 7,192          | 10,833      | 18,328      | 13,054                             | 17,309      |
| Total operating expenses                                | 42,735         | 68,079      | 78,137      | 56,363                             | 76,133      |
| Loss from operations                                    | (39,595)       | (57,615)    | (55,921)    | (39,121)                           | (48,635)    |
| <b>Other income (expense):</b>                          |                |             |             |                                    |             |
| Interest expense  | (217)          | (263)       | (334)       | (253)                              | (370)       |
| Interest and investment income                          | 2,533          | 4,118       | 2,124       | 1,901                              | 214         |
| Remeasurement of forward purchase contracts             |                | 600         | (900)       | (5,900)                            | (100)       |
| Other income (expense), net                             | 2,316          | 4,455       | 890         | (4,252)                            | (256)       |
| Loss before income tax benefit                          | (37,279)       | (53,160)    | (55,031)    | (43,373)                           | (48,891)    |
| Income tax benefit                                      |                |             |             |                                    | (153)       |
| Net loss  | (37,279)       | (53,160)    | (55,031)    | (43,373)                           | (48,738)    |
| Net loss attributable to noncontrolling interest        | 99             | 408         | 1,157       | 726                                | 1,483       |
| Net loss attributable to Ironwood Pharmaceuticals, Inc. | \$ (37,180)    | \$ (52,752) | \$ (53,874) | \$ (42,647)                        | \$ (47,255) |

***Nine Months Ended September 30, 2009 Compared to Nine Months Ended September 30, 2008****Revenue*

|                            | Nine Months Ended<br>September 30, |           | Change    |         |
|----------------------------|------------------------------------|-----------|-----------|---------|
|                            | 2008                               | 2009      | \$        | %       |
|                            | (unaudited)                        |           |           |         |
|                            | (dollars in thousands)             |           |           |         |
| <b>Revenue:</b>            |                                    |           |           |         |
| Collaborative arrangements | \$ 13,933                          | \$ 25,917 | \$ 11,984 | 86.0%   |
| Services                   | 3,309                              | 1,581     | (1,728)   | (52.2)% |
| Total revenue              | \$ 17,242                          | \$ 27,498 | \$ 10,256 | 59.5%   |

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*Collaborative Arrangements.* The increase in revenue from collaborative arrangements for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008 was primarily due to increases in revenue from the Forest collaboration and the Almirall license agreement. During the nine month period ended September 30, 2009, we recognized approximately \$8.2 million in deferred revenue related to a \$20.0 million Forest milestone payment we received in July 2009, and a total of approximately \$4.4 million in deferred revenue related to the \$38.0 million up-front license payment received from Almirall in May 2009 and the amortization of the deferred revenue resulting from recording the initial \$6.0 million valuation of the Almirall forward purchase contract. In both the nine months ended September 30, 2008 and 2009, we recognized a total of approximately \$11.9 million in deferred revenue related to the amortization of the up-front license payment from Forest and the initial \$9.0 million valuation of the Forest forward purchase contract. In the nine months ended September 30, 2008, we recognized approximately \$2.1 million in deferred revenue related to a clinical milestone achieved in September 2008 for which we received a \$10.0 million payment and, in the nine months ended September 30, 2009, we recognized approximately \$1.5 million of deferred revenue related to the same milestone.

*Services.* Services revenue decreased primarily due to the receipt of a one-time \$1.2 million payment in March 2008 as settlement of a contract dispute and the winding down of service contracts amounting to \$0.4 million.

*Operating Expenses*

|                            | Nine Months Ended<br>September 30, |           | Change    |       |
|----------------------------|------------------------------------|-----------|-----------|-------|
|                            | 2008                               | 2009      | \$        | %     |
|                            | (unaudited)                        |           |           |       |
|                            | (dollars in thousands)             |           |           |       |
| Operating expenses:        |                                    |           |           |       |
| Research and development   | \$ 43,309                          | \$ 58,824 | \$ 15,515 | 35.8% |
| General and administrative | 13,054                             | 17,309    | 4,255     | 32.6% |
| Total operating expenses   | \$ 56,363                          | \$ 76,133 | \$ 19,770 | 35.1% |

*Research and Development Expense.* The increase in research and development expense for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008 was primarily due to an increase of \$11.1 million in expenses associated with the initial Phase 3 clinical trials for linaclotide, an increase of \$3.5 million in spending for compensation, benefits and other employee related expenses resulting from an increase in headcount to support our linaclotide program, and increased facilities and depreciation costs of \$1.2 million associated with new research and development space.

*General and Administrative Expense.* The increase in general and administrative expense for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008 was primarily due to increased compensation, benefits and other employee related expenses of \$3.3 million related to an increase in headcount to support our overall growth, increased facilities' costs of \$0.9 million associated with new office space and increased legal costs of \$0.7 million associated with intellectual property and other corporate legal matters, partially offset by a \$0.4 million decrease in professional fees associated with marketing related activities.

Table of Contents*Other Income (Expense), Net*

|   | Nine Months Ended      |          | Change   |         |
|---|------------------------|----------|----------|---------|
|   | September 30,          |          | \$       | %       |
|   | 2008                   | 2009     |          |         |
|   | (unaudited)            |          |          |         |
|   | (dollars in thousands) |          |          |         |
| Other income (expense):                     |                        |          |          |         |
| Interest expense                            | \$ (253)               | \$ (370) | \$ (117) | (46.2)% |
| Interest and investment income              | 1,901                  | 214      | (1,687)  | (88.7)% |
| Remeasurement of forward purchase contracts | (5,900)                | (100)    | 5,800    | 98.3%   |
| Total other income (expense), net           | \$ (4,252)             | \$ (256) | \$ 3,996 | 94.0%   |

*Interest Expense.* The increase in interest expense for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008 was a result of additional borrowings in 2009 under our debt facility as well as two new capital leases that we entered into in 2008.

*Interest and Investment Income.* The decrease in interest and investment income for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008 was due to lower prevailing interest rates during the period combined with lower average cash and investment balances.

*Remeasurement of Forward Purchase Contracts.* The smaller decline in the fair value of the forward purchase contracts for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008 resulted from changes in the fair value of the Forest and Almirall forward purchase contracts at the time of remeasurement. The valuation of the Forest forward purchase contract for the nine months ended September 30, 2009 increased \$0.1 million as compared to a decrease of \$5.9 million for the nine months ended September 30, 2008. The large decrease in the valuation of the Forest forward purchase contract was primarily a result of an increase in the fair value of our convertible preferred stock at the time of remeasurement. This increase was driven by higher estimated enterprise values and a lower risk-adjusted interest rate assumption used in our valuation. These changes in the underlying valuation assumptions reflected the close of our Series H convertible preferred stock financing which occurred prior to the sustained deterioration of the financial markets. As a result, at September 30, 2008, the valuation of the Forest forward purchase contract decreased. The Almirall forward purchase contract valuation decreased \$0.2 million in the nine months ended September 30, 2009 without a corresponding change in the nine months ended September 30, 2008 as we entered into the license agreement with Almirall in April 2009.

*Income Tax Benefit.* The \$0.2 million increase in income tax benefit for the nine months ended September 30, 2009 was related to a refundable research and development tax credit which we received in October 2009.

*Net Loss Attributable to Noncontrolling Interest.* The \$0.8 million increase in net loss attributable to noncontrolling interest was due to the larger net loss for Microbia as a result of lower revenue and increased expenses during the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008.

Table of Contents**Year Ended December 31, 2008 Compared to Year Ended December 31, 2007***Revenue*

|                            | Years Ended<br>December 31, |               | Change        |            |
|----------------------------|-----------------------------|---------------|---------------|------------|
|                            | 2007                        | 2008          | \$            | %          |
| (dollars in thousands)     |                             |               |               |            |
| <b>Revenue:</b>            |                             |               |               |            |
| Collaborative arrangements | \$ 4,608                    | \$ 18,383     | \$ 13,775     | 298.9%     |
| Services                   | 5,856                       | 3,833         | (2,023)       | (34.6)%    |
| <br>Total revenue          | <br>\$ 10,464               | <br>\$ 22,216 | <br>\$ 11,752 | <br>112.3% |

*Collaborative Arrangements.* The increase in revenue from collaborative arrangements for the year ended December 31, 2008 compared to the year ended December 31, 2007 was due to the amortization of \$11.2 million of deferred revenue from the Forest up-front license payment and the amortization of the deferred revenue related to the initial \$9.0 million valuation of the Forest forward purchase contract over the estimated development period. In the year ended December 31, 2007 we recognized a total of approximately \$4.6 million of deferred revenue related to the Forest up-front license payment and the amortization of the initial valuation of the Forest forward purchase contract as compared to a total of approximately \$15.8 million in the year ended December 31, 2008. Additionally, in September 2008 we achieved a clinical milestone under the Forest collaboration agreement and recognized revenue of \$2.6 million related to the milestone.

*Services.* The decrease in services revenue for the year ended December 31, 2008 compared to the year ended December 31, 2007 was primarily due to the winding down of service contracts amounting to \$3.2 million which was partially offset by the receipt of a one-time \$1.2 million payment in March 2008 as settlement of a contract dispute.

*Operating Expenses*

|                              | Years Ended<br>December 31, |               | Change        |           |
|------------------------------|-----------------------------|---------------|---------------|-----------|
|                              | 2007                        | 2008          | \$            | %         |
| (dollars in thousands)       |                             |               |               |           |
| <b>Operating expenses:</b>   |                             |               |               |           |
| Research and development     | \$ 57,246                   | \$ 59,809     | \$ 2,563      | 4.5%      |
| General and administrative   | 10,833                      | 18,328        | 7,495         | 69.2%     |
| <br>Total operating expenses | <br>\$ 68,079               | <br>\$ 78,137 | <br>\$ 10,058 | <br>14.8% |

*Research and Development Expense.* The increase in research and development expense for the year ended December 31, 2008 compared to the year ended December 31, 2007 was primarily a result of increased compensation, benefits and other employee related expenses of \$5.8 million related to the hiring of additional employees to support the linaclotide program; increased facility costs of \$9.0 million due to the expansion of our research facility in 2008; and a \$12.6 million credit to research and development expense due to a full year of reimbursement of costs under the Forest collaboration agreement for the year ended December 31, 2008 as compared to approximately three months for the year ended December 31, 2007.

*General and Administrative Expense.* The increase in general and administrative expense for the year ended December 31, 2008 compared to the year ended December 31, 2007 was primarily a result of increased compensation, benefits and other employee related expenses of \$4.9 million resulting from an increase in headcount to support our overall growth; increased consulting costs of \$1.3 million related to our pre-commercialization activities; and increased facility costs of \$1.3 million associated with the additional office space we leased in 2008.

Table of Contents*Other Income (Expense), Net*

|   | Years Ended<br>December 31, |               | Change            |                |
|---|-----------------------------|---------------|-------------------|----------------|
|   | 2007                        | 2008          | \$                | %              |
| (dollars in thousands)                      |                             |               |                   |                |
| Other income (expense):                     |                             |               |                   |                |
| Interest expense                            | \$ (263)                    | \$ (334)      | \$ (71)           | (27.0)%        |
| Interest and investment income              | 4,118                       | 2,124         | (1,994)           | (48.4)%        |
| Remeasurement of forward purchase contracts | 600                         | (900)         | (1,500)           | (250.0)%       |
| <b>Total other income (expense), net</b>    | <b>\$ 4,455</b>             | <b>\$ 890</b> | <b>\$ (3,565)</b> | <b>(80.0)%</b> |

*Interest Expense.* The increase in interest expense for the year ended December 31, 2008 compared to the year ended December 31, 2007 was a result of additional borrowings under our debt facility in 2008 as well as entering into two new capital leases.

*Interest and Investment Income.* The decrease in interest and investment income for the year ended December 31, 2008 compared to the year ended December 31, 2007 was due to lower prevailing interest rates during 2008 partially offset by higher average cash and investment balances resulting from the cash received under the Forest collaboration agreement.

*Remeasurement of Forward Purchase Contracts.* The decrease in the valuation of the Forest forward purchase contract for the year ended December 31, 2008 compared to December 31, 2007 resulted from change in the fair value of the Forest forward purchase contract at the time of remeasurement related to changes in the underlying valuation assumptions including, but not limited to, the clinical status of linaclotide, our enterprise values, timing and likelihood of the different liquidity events and the appropriate risk-adjusted discount rate.

*Net Loss Attributable to Noncontrolling Interest.* The increase of \$0.7 million in net loss attributable to noncontrolling interest was a result of a larger net loss for Microbia as a result of lower revenue and increased expenses for the year ended December 31, 2008 compared to the year ended December 31, 2007.

**Year Ended December 31, 2007 Compared to Year Ended December 31, 2006***Revenue*

|                            | Years Ended<br>December 31, |                  | Change          |               |
|----------------------------|-----------------------------|------------------|-----------------|---------------|
|                            | 2006                        | 2007             | \$              | %             |
| (dollars in thousands)     |                             |                  |                 |               |
| Revenue:                   |                             |                  |                 |               |
| Collaborative arrangements | \$                          | \$ 4,608         | \$ 4,608        | 100.0%        |
| Services                   | 3,140                       | 5,856            | 2,716           | 86.5%         |
| <b>Total revenue</b>       | <b>\$ 3,140</b>             | <b>\$ 10,464</b> | <b>\$ 7,324</b> | <b>233.3%</b> |

*Collaborative Arrangements.* The increase in revenue from collaborative arrangements for the year ended December 31, 2007 compared to the year ended December 31, 2006 resulted from the recognition of a total of \$4.6 million of deferred revenue related to the amortization of the initial \$9.0 million valuation of the Forest forward purchase contract and the \$70.0 million up-front license payment received from Forest.

*Services.* The increase in services revenue for the year ended December 31, 2007 compared to the year ended December 31, 2006 resulted from additional services under existing contracts.



Table of Contents*Operating Expenses*

|                                 | Years Ended<br>December 31, |                  | Change           |              |
|---------------------------------|-----------------------------|------------------|------------------|--------------|
|                                 | 2006                        | 2007             | \$               | %            |
|                                 | (dollars in thousands)      |                  |                  |              |
| <b>Operating expenses:</b>      |                             |                  |                  |              |
| Research and development        | \$ 35,543                   | \$ 57,246        | \$ 21,703        | 61.1%        |
| General and administrative      | 7,192                       | 10,833           | 3,641            | 50.6%        |
| <b>Total operating expenses</b> | <b>\$ 42,735</b>            | <b>\$ 68,079</b> | <b>\$ 25,344</b> | <b>59.3%</b> |

*Research and Development Expense.* The increase in research and development expense for the year ended December 31, 2007 compared to the year ended December 31, 2006 was primarily a result of increased compensation, benefits and other employee related expenses of \$5.3 million related to the hiring of additional employees to support the linaclotide program; an increase of \$19.9 million in spending related to our Phase 2 linaclotide trials; and increased facility costs of \$1.3 million related to additional research and development space leased in October 2006. These increases were partially offset by \$5.0 million for reimbursable research costs shared with Forest in accordance with the Forest collaboration agreement executed in 2007.

*General and Administrative Expense.* The increase in general and administrative expense for the year ended December 31, 2007 compared to the year ended December 31, 2006 was primarily a result of increased consulting costs of \$1.2 million related to our pre-commercialization activities; increased legal costs of \$0.9 million primarily for patent related work; and other general and administrative costs of \$1.0 million related to the development of our administrative infrastructure.

*Other Income (Expense), Net*

|   | Years Ended<br>December 31, |                 | Change          |              |
|---|-----------------------------|-----------------|-----------------|--------------|
|   | 2006                        | 2007            | \$              | %            |
|   | (dollars in thousands)      |                 |                 |              |
| <b>Other income (expense):</b>              |                             |                 |                 |              |
| Interest expense                            | \$ (217)                    | \$ (263)        | \$ (46)         | (21.2)%      |
| Interest and investment income              | 2,533                       | 4,118           | 1,585           | 62.6%        |
| Remeasurement of forward purchase contracts |                             | 600             | 600             | 100.0%       |
| <b>Total other income (expense), net</b>    | <b>\$ 2,316</b>             | <b>\$ 4,455</b> | <b>\$ 2,139</b> | <b>92.4%</b> |

*Interest Expense.* The increase in interest for the year ended December 31, 2007 compared to the year ended December 31, 2006 was primarily a result of additional borrowings under our debt facility.

*Interest and Investment Income.* The increase in interest and investment income for the year ended December 31, 2007 compared to the year ended December 31, 2006 was primarily related to higher average cash, cash equivalents and investment balances resulting from the sale in February 2007 of 8.0 million shares of our Series F convertible preferred stock at a per share price of \$6.25 from which we received approximately \$50.0 million of net proceeds.

*Remeasurement of Forward Purchase Contracts.* The increase in the valuation of the Forest forward purchase contract for the year ended December 31, 2007 compared to the year ended December 31, 2006 resulted from change in the fair value of the Forest forward purchase contract at the time of remeasurement related to changes in the underlying valuation assumptions including, but not limited to,

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the clinical status of linaclotide, our enterprise values, timing and likelihood of the different liquidity events and the appropriate risk adjusted discount rate.

*Net Loss Attributable to Noncontrolling Interest.* The increase of \$0.3 million in the loss attributable to noncontrolling interest was primarily a result of twelve months of losses in 2007 compared to four months of losses in 2006 since Microbia was not created until September 2006.

**Liquidity and Capital Resources**

The following table sets forth the major sources and uses of cash for each of the periods set forth below:

|  | December 31,   |            |             | Nine Months Ended<br>September 30, |             |
|--|----------------|------------|-------------|------------------------------------|-------------|
|  | 2006           | 2007       | 2008        | 2008                               | 2009        |
|  | (in thousands) |            |             |                                    |             |
| Net cash provided by<br>(used in):           |                |            |             |                                    |             |
| Operating activities                         | \$ (33,532)    | \$ (6,759) | \$ (28,195) | \$ (16,466)                        | \$ (14,249) |
| Investing activities                         | (5,615)        | (27,609)   | (15,073)    | (12,026)                           | 965         |
| Financing activities                         | 80,090         | 50,718     | 48,563      | 49,465                             | 26,831      |
| Net increase in cash and<br>cash equivalents | \$ 40,943      | \$ 16,350  | \$ 5,295    | \$ 20,973                          | \$ 13,547   |

We have incurred losses since our inception on January 5, 1998 and, as of September 30, 2009, we had a cumulative deficit of approximately \$290.6 million. We have financed our operations to date primarily through the sale of preferred stock and common stock, payments received under collaborative arrangements, including reimbursement of certain expenses, debt financings and interest earned on investments. Through September 30, 2009, we have received aggregate gross proceeds of approximately \$322.2 million from financings, of which approximately \$306.1 million was from the issuance of preferred stock, approximately \$1.0 million was from the issuance of common stock and approximately \$15.1 million was from debt financings. Through September 30, 2009, we have received aggregate gross proceeds of approximately \$138.0 million from up-front licensing and milestone payments. At September 30, 2009, we had \$98.9 million of cash, cash equivalents and available-for-sale securities. Our cash and cash equivalents include amounts held in money market funds, stated at cost plus accrued interest, which approximates fair market value. 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 A+ rated so as to primarily achieve liquidity and capital preservation.

On November 13, 2009, as a result of achieving a clinical milestone under the Almirall license agreement, we received cash proceeds of approximately \$15.0 million from the sale of 681,819 shares of our Series I convertible preferred stock at a price of \$22.00 per share to Almirall. On a pro forma basis, after giving effect to the license fee from Astellas and the equity investment by Almirall, at September 30, 2009, we have \$143.9 million of cash, cash equivalents and available-for-sale securities.

**Cash Flows From Operating Activities**

The decrease of \$2.2 million in net cash used in operations for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008 was primarily associated with an increase of \$9.1 million in the net changes in working capital relating to operations, partially offset by an increase in the net loss of \$5.4 million combined with an increase of \$1.6 million in the change in non-cash items such as depreciation, share-based compensation expense, remeasurement of the forward purchase contracts and accretion of the discount/premium on investment securities. The net change in working capital items relating to operations between the nine months ended September 30, 2009 and the nine months ended

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September 30, 2008 was primarily due to the receipt in the nine months ended September 30, 2009 of a \$38.0 million up-front payment from Almirall and a \$20.0 million milestone payment from Forest compared to the receipt in the nine months ended September 30, 2008 of a \$20.0 million up-front license fee from Forest, a \$10.0 million milestone payment from Forest, as well as \$4.6 million in cash reimbursements for tenant improvements which were recorded as deferred rent.

Net cash used in operations for the year ended December 31, 2008 compared to the year ended December 31, 2007 increased by \$21.4 million. This increase was primarily the result of a \$1.9 million increase in the net loss, a \$5.0 million increase in non-cash items such as depreciation, share-based compensation expense, remeasurement of the forward purchase contract and accretion of the discount/premium on investment securities and a \$24.6 million decrease in net changes in working capital items relating to operations. The net changes in working capital items were primarily driven by cash receipts and the recognition of deferred revenue under the Forest collaboration agreement as well as cash reimbursements for tenant improvements which were recorded as deferred rent.

Net cash used in operations for the year ended December 31, 2007 compared to the year ended December 31, 2006 decreased by \$26.8 million. This change was primarily a result of a \$43.1 million increase in net changes in working capital items relating to operations. The net changes in working capital items were primarily driven by the receipt of the Forest up-front license payment and the recognition of deferred revenue under the Forest collaboration agreement. This was partially offset by a \$15.9 million increase in the net loss and a \$0.4 million decrease in non-cash items such as depreciation, remeasurement of the forward purchase contract, share-based compensation expense and accretion of the discount/premium on investment securities.

**Cash Flows From Investing Activities**

The increase of \$13.0 million in net cash provided by investing activities for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008 was primarily the result of \$13.4 million less cash used for the purchase of property and equipment and \$35.9 million less cash used for the purchase of investments, partially offset by a \$36.4 million decrease in the cash received from the sales and maturities of investments.

Net cash used in investing activities decreased by \$12.5 million for the year ended December 31, 2008 compared to the year ended December 31, 2007. This decrease was primarily a result of a \$27.6 million increase in cash received from the sales and maturities of investments and a \$5.2 million decrease in the cash used for the purchase of investments; offset by a \$20.3 million increase in purchases of property and equipment primarily related to the leasehold improvements for our new facility and the purchase of laboratory equipment for the new facility.

Net cash used in investing activities increased by \$22.0 million for the year ended December 31, 2007 compared to the year ended December 31, 2006. This increase in cash used for investing activities was primarily a result of a \$50.8 million increase in purchases of investments; offset by a \$28.7 million increase in cash received from the sales and maturities of investments and a \$0.2 million decrease in purchases of property and equipment.

**Cash Flows From Financing Activities**

The decrease of \$22.6 million in net cash provided by financing activities for the nine months ended September 30, 2009 compared to the nine months ended September 30, 2008 was primarily due to lower proceeds from the sale of our convertible preferred stock, partially offset by higher proceeds from borrowings on our debt facility, net of payments made. During the nine months ended September 30, 2008 we received \$49.6 million of proceeds from the sale of 4,141,586 shares of our Series H convertible preferred stock while in the nine months ended September 30, 2009 we received \$25.0 million of proceeds from the sale of 2,083,333 shares of our Series G convertible preferred stock to Forest.

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Net cash provided by financing activities decreased by \$2.2 million for the year ended December 31, 2008 compared to the year ended December 31, 2007. This decrease was primarily the result of a \$1.2 million decrease in borrowings in 2008 and a \$0.8 million increase in payments on borrowings. Additionally, there was a decrease of \$0.4 million in the cash received from the issuance of Series H convertible preferred stock in 2008 compared to the issuance of Series F convertible preferred stock in 2007.

Net cash provided by financing activities decreased by \$29.4 million for the year ended December 31, 2007 compared to the year ended December 31, 2006. This decrease was primarily a result of a \$25.0 million decrease in proceeds from the issuance of our Series F convertible preferred stock offering in 2007 compared to the proceeds of our Series E convertible preferred stock offering in 2006, a \$7.0 million decrease in capital contributions from noncontrolling interest in 2006 and a \$0.3 million decrease in proceeds from borrowings, offset by a \$3.0 million decrease in payments on borrowings.

***Funding Requirements***

To date, we have not commercialized any products and have not achieved profitability. We anticipate that we will continue to incur substantial net losses for the next several years as we further develop and prepare for the potential commercial launch of linaclotide, continue to invest in our pipeline, develop the organization required to sell our product candidates and operate as a publicly traded company.

We have generated revenue from services, up-front license fees and milestones, but have not generated any product revenue since our inception and do not expect to generate any product revenue from our collaborative arrangements or the sale of products unless we receive regulatory approval for commercial sale of linaclotide. We believe the net proceeds from this offering, together with our existing cash, cash equivalents and investment balances, interest income we earn on these balances, and amounts we expect to receive from our collaborators under existing contractual obligations will be sufficient to meet our anticipated cash requirements to complete development and commercialize linaclotide with our partner Forest for the U.S. market, and to fund our currently contemplated research and development efforts for at least the next five years, based on our current business plan. However, it is difficult to predict the actual rate of product sales and related collaborative arrangement revenue until the product is approved by the FDA and the specific language allowed by the FDA on the label is known. If our available cash, cash equivalents and investment balances, net proceeds from this offering, and amounts we expect to receive from our collaborators are insufficient to satisfy our liquidity requirements or if sales are less than anticipated, we may seek to sell additional equity or debt securities or secure new collaborative agreements. The sale of additional equity may result in dilution to our stockholders. If we raise additional funds through the issuance of debt securities, these securities would have rights senior to those of our common stock and could contain covenants that would restrict our operations. Any required additional capital may not be available on reasonable terms, if at all. If we are unable to obtain additional financing, we may be required to reduce the scope of, delay, or eliminate some or all of, our planned research, development and commercialization activities, or attempt to obtain funds through arrangements that may require us to relinquish rights to certain of our technologies or drug candidates, which could materially harm our business.

Our forecast of the period of time through which our financial resources will be adequate to support our operations, the costs to obtain regulatory approval, and the costs to commercialize our product candidates are forward-looking statements and involve 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 prospectus. We have based these estimates on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect.

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Due to the numerous risks and uncertainties associated with the development of our products, 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 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 time and costs involved in obtaining regulatory approvals for our product candidates;

the rate of progress and cost of our commercialization activities;

the success of our research and development efforts;

the expenses we incur in marketing and selling our product candidates;

the revenue generated by sales of our product candidates;

the emergence of competing or complementary technological 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 (although we currently have no commitments or agreements relating to any of these types of transactions).

**Contractual Commitments and Obligations**

Under our collaborative agreement with Forest, we share equally with Forest all development and commercialization costs related to linaclotide in the U.S. The actual amounts that we pay Forest will depend on numerous factors outside of our control, including the success of our clinical development efforts with respect to linaclotide, the content and timing of decisions made by the FDA, the reimbursement and competitive landscape around linaclotide and our other product candidates, and other factors described under the heading "Risk Factors."

Our most significant clinical trial expenditures are to CROs. The contracts with CROs generally are cancellable, with notice, at our option and do not have any cancellation penalties. These items are not included in the table below.

The following table summarizes our contractual obligations at December 31, 2008 (excluding interest).

|                               | Total     | Payments Due by Period |                |           | More Than 5<br>Years |
|-------------------------------|-----------|------------------------|----------------|-----------|----------------------|
|                               |           | Less Than<br>1 Year    | 1 3 Years      | 3 5 Years |                      |
|                               |           |                        |                |           |                      |
|                               |           |                        | (in thousands) |           |                      |
| Long-term debt                | \$ 1,815  | \$ 943                 | \$ 872         | \$        | \$                   |
| Capital lease obligations     | 306       | 117                    | 189            |           |                      |
| Operating lease obligations   | 60,322    | 8,769                  | 20,053         | 16,691    | 14,809               |
| Total contractual obligations | \$ 62,443 | \$ 9,829               | \$ 21,114      | \$ 16,691 | \$ 14,809            |

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As of September 30, 2009, we did not incur any additional obligations that materially change the disclosure of our contractual obligations as shown in the table above.

Our commitment for long-term debt relates to our master loan agreement for the financing of purchases of laboratory and other equipment. As of December 31, 2008, there were no funds available under the master loan agreement to finance future equipment purchases. Not shown in the table above are

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commitments related to a new master loan and security agreement entered into in January 2009 with the same financing company that provided the prior financing to purchase our laboratory, computer, and other equipment. The new master loan and security agreement provides us up to \$6.0 million of available funding through December of 2009. At September 30, 2009, approximately \$2.6 million of borrowings have been made under the new master loan and security agreement. Borrowings under the new master loan and security agreement are being repaid with interest over periods of either 36 or 48 months. The new master loan and security agreement requires interest and principal payable in monthly installments on the outstanding borrowings ranging from \$2,000 to \$27,000 through July 2013. Outstanding borrowings under the new master loan and security agreement bear interest at a fixed rate of 12.5% for the duration of the term, and are collateralized by the laboratory and other equipment. At September 30, 2009, approximately \$3.4 million was outstanding under all loan and security agreements.

Our commitment for capital lease obligations relates to leased computer equipment.

Our commitments for operating leases relate to our lease of office and laboratory space in Cambridge, Massachusetts and Microbia's office and laboratory space in Lexington, Massachusetts.

**Related Party Transactions**

We have and currently obtain legal services from a law firm that is an investor of ours. We paid approximately \$0.3 million, \$0.1 million, \$0.1 million, \$0.1 million and \$0 in legal fees to this investor during the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2008 and 2009, respectively.

In September 2006, Tate & Lyle Investments, Ltd. ("T&L") became a related party when we sold to them 1,823,529 shares of common stock of Microbia at the aggregate purchase price of approximately \$2,000, and sold 7,000,000 shares of convertible preferred stock of Microbia at the aggregate purchase price of \$7.0 million. T&L accounted for approximately 7%, 29%, 10%, 10% and 6% of our revenue for the years ended December 31, 2006, 2007 and 2008 and for the nine months ended September 30, 2008 and 2009, respectively.

In September 2009, Forest became a related party when we sold to them 2,083,333 shares of our convertible preferred stock at a price of \$12.00 per share for cash proceeds of \$25.0 million. Forest accounted for approximately 0%, 44%, 83%, 81% and 78% of our revenue for the years ended December 31, 2006, 2007 and 2008 and for the nine months ended September 30, 2008 and 2009, respectively.

In November 2009, Almirall became a related party when we sold to them 681,819 shares of our convertible preferred stock at a price of \$22.00 per share for cash proceeds of \$15.0 million. Almirall accounted for approximately 16% of our revenue for the nine months ended September 30, 2009.

**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**

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board, or FASB, or other standard setting bodies that are adopted by us as of the specified effective date.

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Unless otherwise discussed, we believe that the impact of recently issued standards that are not yet effective will not have a material impact on our consolidated financial position or results of operations upon adoption.

***Recently Issued Accounting Standards***

In August 2009, the FASB issued Accounting Standards Update No. 2009-05, *Measuring Liabilities at Fair Value*, or ASU 2009-05. ASU 2009-05 amends Accounting Standards Codification Topic 820, *Fair Value Measurements*. Specifically, ASU 2009-05 provides clarification that in circumstances in which a quoted price in an active market for the identical liability is not available, a reporting entity is required to measure fair value using one or more of the following methods: (1) a valuation technique that uses (a) the quoted price of the identical liability when traded as an asset or (b) quoted prices for similar liabilities or similar liabilities when traded as assets and/or (2) a valuation technique that is consistent with the principles of Topic 820 of the Accounting Standards Codification, or Codification, (e.g. an income approach or market approach). ASU 2009-05 also clarifies that when estimating the fair value of a liability, a reporting entity is not required to adjust to include inputs relating to the existence of transfer restrictions on that liability. The adoption of this standard did not have an impact on our financial position or results of operations.

In October 2009, the FASB issued ASU No. 2009-13, *Multiple-Deliverable Revenue Arrangements*, or ASU 2009-13. ASU 2009-13, amends existing revenue recognition accounting pronouncements that are currently within the scope of FASB Accounting Standards Codification, or ASC, Subtopic 605-25 (previously included within EITF 00-21, *Revenue Arrangements with Multiple Deliverables*, or EITF 00-21). The consensus to ASU 2009-13 provides accounting principles and application guidance on whether multiple deliverables exist, how the arrangement should be separated, and the consideration allocated. This guidance eliminates the requirement to establish the fair value of undelivered products and services and instead provides for separate revenue recognition based upon management's estimate of the selling price for an undelivered item when there is no other means to determine the fair value of that undelivered item. EITF 00-21 previously required that the fair value of the undelivered item be the price of the item either sold in a separate transaction between unrelated third parties or the price charged for each item when the item is sold separately by the vendor. This was difficult to determine when the product was not individually sold because of its unique features. Under EITF 00-21, if the fair value of all of the elements in the arrangement was not determinable, then revenue was deferred until all of the items were delivered or fair value was determined. This new approach is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010 and allows for retroactive application. We are currently evaluating the potential impact of this standard on our financial position and results of operations.

***Recently Adopted Accounting Standards***

Effective January 1, 2009, we adopted new accounting guidance related to accounting for uncertainty in income taxes. This accounting standard clarifies the recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This accounting standard also provides guidance on recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. We have not identified any material uncertain tax positions for which reserves would be required and the adoption of this accounting standard did not have an effect on our consolidated financial statements.

Effective January 1, 2009, we adopted a newly issued accounting standard for business combinations. This standard requires an acquiring company to measure all assets acquired and liabilities assumed, including contingent considerations and all contractual contingencies, at fair value as of the acquisition date. In addition, an acquiring company is required to capitalize in-process research and development and either amortize it over the life of the product, or write it off if the project is abandoned or impaired. This guidance is applicable to acquisitions completed after January 1, 2009 and as we did not have any business



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combinations in the first nine months of 2009, the adoption did not impact our financial position or results of operations. The standard also amended accounting for uncertainty in income taxes as required by the *Income Tax* Topic of the Codification. Previously, accounting standards generally required post-acquisition adjustments related to business combination deferred tax asset valuation allowances and liabilities for uncertain tax positions to be recorded as an increase or decrease to goodwill. This new standard does not permit this accounting and, generally, requires any such changes to be recorded in current period income tax expense. Thus, all changes to valuation allowances and liabilities for uncertain tax positions established in acquisition accounting, whether the business combination was accounted for under this guidance, will be recognized in current period income tax expense.

Effective January 1, 2009, we adopted new guidance for the accounting, reporting and disclosure of noncontrolling interests which requires, among other things, that noncontrolling interests be recorded as equity in the consolidated financial statements. The adoption of this new guidance resulted in the reclassification of noncontrolling interests (previously referred to as minority interests) to a separate component of stockholders' equity (deficit) on the consolidated balance sheet. Additionally, net loss attributable to noncontrolling interests is now shown separately from parent net loss in the consolidated statement of operations. Prior periods have been restated to reflect the presentation and disclosure requirements of the new guidance. Refer to Note 2, *Summary of Significant Accounting Policies* of this Form S-1 for additional information on the adoption of the new accounting standard for noncontrolling interests.

In April, 2009, the FASB issued a new accounting standard providing guidance for the accounting of assets acquired and liabilities assumed in a business combination that arise from contingencies. This guidance amends and clarifies previous accounting standards to address application issues regarding the initial recognition and measurement, subsequent measurement and accounting, and disclosure of assets and liabilities arising from contingencies in a business combination. This guidance is applicable to acquisitions completed after January 1, 2009. As we did not have any business combinations in the first nine months of 2009, the adoption did not impact our financial position or results of operations.

In May 2009, the FASB established general standards of accounting for and disclosures of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. It requires the disclosure of the date through which an entity has evaluated subsequent events and the basis for selecting that date, that is, whether that date represents the date the financial statements were issued or were available to be issued. Our adoption of these standards had no material impact on our financial position, results of operations and cash flows.

## **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 deposits, 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 10% 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.

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Recently, there has been concern in the credit markets regarding the value of a variety of mortgage-backed and auction rate securities and the resulting effect on various securities markets. We do not currently have any auction rate securities. 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 investments do not contain excessive risk, we cannot provide absolute assurance that in the future our investments will not be subject to adverse changes in market value. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits. Given the current instability of financial institutions, we cannot be assured that we will not experience losses on these deposits.

Our long-term debt and capital lease obligations bear interest at a fixed rate and therefore have minimal exposure to changes in interest rates.

***Foreign Currency Risk***

We have no operations outside the U.S. and do not have any foreign currency or other derivative financial instruments.

***Effects of Inflation***

We do not believe that inflation and changing prices over the years ended December 31, 2007 and 2008 and the nine months ended September 30, 2009 had a significant impact on our results of operations.

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**BUSINESS**

**Our Company**

We are an entrepreneurial pharmaceutical company that discovers, develops and intends to commercialize innovative medicines targeting important therapeutic needs. Our goal is to build the next great pharmaceutical company, an outstanding business that will thrive and endure well beyond our lifetimes and generate substantial returns for our shareholders. In order to be successful, we will need to overcome the enormous challenges inherent in the pharmaceutical product development model. Developing a novel therapeutic agent can take a decade or more and cost hundreds of millions of dollars, and most drug candidates fail to reach the market. We recognize that most companies undertaking this endeavor fail, yet despite the significant risks and our own experiences with multiple failed drug candidates, we are enthusiastic and passionate about our mission to deliver differentiated medicines to patients. To achieve our mission, we are building a sustainable culture centered on creating and marketing important new drugs. If we are successful, we plan to reinvest a portion of our future cash flows into our research and development organization in order to accelerate and enhance our ability to bring new products to market. Our experienced team of researchers is currently focused on a portfolio of internally discovered drug candidates that includes one Phase 3 drug candidate (linaclotide), one Phase 1 pain drug candidate, and multiple preclinical programs.

We believe that linaclotide could present patients and healthcare practitioners with a unique therapy for a major medical need not yet met by existing therapies. Linaclotide is a first-in-class compound currently in confirmatory Phase 3 clinical trials evaluating its safety and efficacy for the treatment of patients with irritable bowel syndrome with constipation (IBS-C) or chronic constipation (CC). IBS-C and CC are gastrointestinal disorders that affect millions of sufferers worldwide, according to our analysis of studies performed by N.J. Talley (published in 1995 in the *American Journal of Epidemiology*), P.D.R. Higgins (published in 2004 in the *American Journal of Gastroenterology*) and A.P.S. Hungin (published in 2003 in *Alimentary Pharmacology and Therapeutics*) as well as 2007 U.S. census data. Linaclotide recently achieved favorable efficacy and safety results in two Phase 3 CC trials, meeting all 32 primary and secondary endpoints, including the improvement of abdominal symptoms such as bloating and discomfort as well as constipation symptoms, across both doses evaluated in these independent trials involving 1,287 subjects. We expect to have data from our Phase 3 IBS-C trials in the second half of 2010. If those trials are successful, we intend to file a New Drug Application, or NDA, with the Food and Drug Administration, or FDA, in the first half of 2011, seeking approval to market linaclotide to IBS-C and CC patients age 18 and older in the U.S. If linaclotide is approved for those indications, we may seek to expand linaclotide's market opportunity by exploring its utility in other gastrointestinal indications and in the pediatric population.

Linaclotide was designed by Ironwood scientists to target the defining attributes of IBS-C: abdominal pain, discomfort, bloating and constipation. Linaclotide acts locally in the gut with no detectable systemic exposure in humans at therapeutic doses. In the six Phase 2 and Phase 3 clinical trials we have completed to date in over 2,000 IBS-C and CC patients, linaclotide has demonstrated rapid and sustained improvement of the multiple symptoms of IBS-C and CC, with good tolerability and convenient once-daily oral dosing.

In a Phase 2b study in patients with IBS-C, linaclotide rapidly reduced abdominal pain, abdominal discomfort and bloating, and improved constipation symptoms, throughout the 12-week treatment period of the trial, with improvements noted for all symptoms assessed within the first week of initiation of therapy. In particular, abdominal pain was reduced 37% to 47%, and pain reduction was observed within the first week following initiation of therapy and was sustained throughout the treatment period, even among patients with severe or very severe abdominal pain.

In a Phase 2b study in patients with CC, linaclotide rapidly reduced abdominal discomfort and bloating, and improved constipation symptoms, throughout the 4-week treatment period of the trial.

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In five of the six Phase 2 and Phase 3 studies, diarrhea was the most common adverse event (seen in 5% to 20% of subjects), and the most common cause for discontinuation in 1% to 7% of the patients in the trials. Diarrhea has generally been mild to moderate.

We have pursued a partnering strategy for commercializing linaclotide that has enabled us to retain significant control over linaclotide's development and commercialization, share the costs with high-quality collaborators whose capabilities complement ours, and retain approximately half of linaclotide's future long-term value in the major pharmaceutical markets, should linaclotide meet our sales expectations. To date, licensing fees, milestone payments, related equity investments and development costs received from our linaclotide partners total greater than \$250 million.

In September 2007, we entered into a partnership with Forest Laboratories, Inc., or Forest, to co-develop and co-market linaclotide in the U.S. Under the terms of the collaboration agreement, we and Forest are jointly and equally funding the development and commercialization of linaclotide in the U.S., with equal share of any profits. Forest also has exclusive rights to develop and commercialize linaclotide in Canada and Mexico, and will pay us royalties in the mid-teens on any net sales in these countries. In addition to having reimbursed us for half of linaclotide's development costs since September 2007, Forest has paid us \$100 million in license fees and milestone payments to date and has purchased \$25 million of our convertible preferred stock pursuant to the collaboration agreement. Remaining pre-commercial milestone payments could total up to \$105 million. If linaclotide is successfully developed and commercialized in the U.S., total licensing, milestone payments and related equity investments to us under the Forest collaboration agreement could total up to \$330 million, including the \$125 million that has already been paid to us. Unless terminated by either us or Forest for material breach, violation of law, bankruptcy or certain adverse changes of control of the other party, or by Forest for convenience, the collaboration agreement will continue in full force and effect with respect to each of the U.S., Canada and Mexico as long as we and Forest are developing or commercializing a product under the agreement.

In April 2009, we entered into a license agreement with Almirall, S.A., or Almirall, to develop and commercialize linaclotide in Europe (including the Commonwealth of Independent States countries and Turkey) for the treatment of IBS-C and other gastrointestinal conditions. Under the terms of the license agreement, Almirall has paid us \$38 million in license fees and milestone payments and has purchased \$15 million of our convertible preferred stock. Remaining pre-commercial milestone payments could total up to \$40 million. Almirall is responsible for activities and expenses relating to regulatory approval and commercialization in the European market. If Almirall receives approval to market and sell linaclotide in Europe, we will receive gross royalties which escalate based on sales volume in the territory, beginning in the mid-twenties, less the transfer price paid for the active pharmaceutical ingredient. Unless terminated by either us or Almirall for material breach, violation of law or bankruptcy, by Almirall for convenience, or by us in the event of an adverse change of control of Almirall, the license agreement will continue in full force and effect on a country-by-country basis until Almirall is no longer developing or commercializing linaclotide in such country.

In November 2009, we entered into a license agreement with Astellas Pharma Inc., or Astellas, to develop and commercialize linaclotide for the treatment of IBS-C and other gastrointestinal conditions in Japan, South Korea, Taiwan, Thailand, the Philippines and Indonesia. Under the terms of the license agreement, Astellas paid us a \$30 million up-front licensing fee. Remaining pre-commercial milestone payments could total up to \$45 million. Astellas is responsible for activities and expenses relating to regulatory approval and commercialization in those markets. If Astellas receives approval to market and sell linaclotide, we will receive gross royalties which escalate based on sales volume in the territory, beginning in the low-twenties, less the transfer price paid for the active pharmaceutical ingredient. Unless terminated in all or certain countries by either us or Astellas for material breach or bankruptcy, by Astellas for convenience, or by us in the event of an adverse change of control of Astellas, the license agreement will continue in full force and effect until the later of (a) the last-to-expire valid claim of our patent rights for linaclotide in the countries listed above has expired or (b) Astellas is no longer developing or commercializing linaclotide in all of the countries listed above.

We have retained all rights to linaclotide outside of the territories discussed above.

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In addition to five years of exclusivity under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, that would be granted if linaclotide is approved by the FDA, linaclotide is covered by a U.S. composition of matter patent that expires in 2025, subject to possible patent term extension. Linaclotide is also covered by an European Union composition of matter patent that expires in 2024, subject to possible patent term extension. A patent application is pending in Japan, and if issued, would expire in 2024.

We have multiple product candidates in earlier stages of development and are pursuing various therapeutic opportunities. 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, positive data. In addition to linaclotide, our other clinical stage candidate is IW-6118, an inhibitor of Fatty Acid Amide Hydrolase, or FAAH, being evaluated for the treatment of pain and inflammation. In a Phase I study, IW-6118 demonstrated favorable pharmacokinetics and dose-related elevation of biomarkers suggesting that IW-6118 inhibits FAAH in humans. We are also conducting early stage, preclinical research on approximately eight therapeutic targets in gastrointestinal pain, inflammation and cardiovascular indications.

In addition, we are actively engaged in identifying externally-discovered drug candidates at various stages of clinical development and accessing them through in-licensing or acquisition. In evaluating potential assets, we apply the same criteria as those used for investments in internally-discovered assets. To date, we have not in-licensed any drug candidates, but we do expect to do so from time to time.

**Owner-related Business Principles**

Before investing in Ironwood, we encourage all potential new co-owners to read the owner-related business principles below that guide our overall strategy and decision making.

**1. We view our shareholders as partners and co-owners in our business.**

With our cash on hand and up to \$190 million in pre-commercial milestone payments payable to us from linaclotide partners, the anticipated proceeds from this offering should be sufficient to enable us to launch and commercialize linaclotide in the U.S. together with our partner Forest, and to fund our currently contemplated research and development efforts for at least the next five years, based on our current business plan. Since it is possible that we will not offer additional equity capital for a number of years, a priority for this offering is to augment our current shareholder group by adding additional, long-term focused co-owners.

**2. We believe we can best maximize long-term shareholder value by building a great pharmaceutical franchise.**

We believe that Ironwood has the potential to deliver outstanding long-term returns to shareholders who: (i) are sober to the risks inherent in the pharmaceutical product development model and to the potential dramatic highs and lows along the way, and (ii) are comfortable with management's focus on superior long-term cash flows, instead of the steadiness or consistency of our short-term growth in accounting earnings.

Since the pharmaceutical product development cycle is lengthy and unpredictable, we believe it is critical to have a long-term strategic horizon. We work hard to embed our long-term focus into our policies and practices, which may give us a competitive advantage in attracting like-minded shareholders and the highest caliber researchers. Our current and future employees may perceive both financial and qualitative advantages in having their inventions or hard work result in marketed drugs that they and their fellow shareholders continue to own. Some of our key policies and practices that are aligned with this imperative include:

- a. Our dual class equity voting structure (which applies only in the event of change of control votes) is designed to concentrate change of control decisions in the hands of long-term focused owners

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who have a history of experience with us. Please read the "Description of Capital Stock" for additional information regarding our capital structure.

- b. Compensation is weighted to equity over salary for all of our employees, and many employees have a significant portion of their incentive compensation in milestone-based equity grants that reward achievement of major value-creating events a number of years out from the time of grant.
- c. We have adopted a change of control severance plan for all of our employees that is intended to encourage them to bring forward their best ideas by providing them with the comfort that if a change of control occurs and their employment is terminated, they will still have an opportunity to share in the economic value that they have helped create for shareholders.
- d. Many of the members of our board of directors are substantial investors in the company. Furthermore, each director is required to hold all shares of stock acquired as payment for his or her service as a director throughout his or her term on the board.
- e. Our partnerships with Forest, Almirall and Astellas all include standstill agreements, which serve to protect us from an unwelcome acquisition attempt by one of our partners. In addition, we have change of control provisions in our partnership agreements in order to protect the economic value of linaclotide should the acquirer of one of our partners be unable or unwilling to devote the time and resources required to make the program successful.

**3. We are and will remain careful stewards of our shareholders' capital.**

We work intensely to allocate capital carefully and prudently, continually reinforcing a lean, cost-conscious culture.

While we are mindful of the declining productivity and inherent challenges of pharmaceutical research and development, we intend to invest in discovery research for many years to come. Our singular passion is to create and develop novel drug candidates, seeking to integrate the most successful drugmaking practices of the past and the best of today's cutting-edge technologies and basic research advances. While we hope to improve the productivity and efficiency of our drug creation efforts over time, our discovery process revolves around small, highly interactive, cross-functional teams. We believe that this is one area where our relatively small size is a competitive advantage, so for the foreseeable future, we do not expect our drug discovery team to grow beyond 100-150 scientists. We will continue to prioritize constrained resources and maintain organizational discipline. Once internally- or externally-derived candidates advance into development, compounds follow careful stage-gated plans, with further advancement depending on clear data points. Since most pharmaceutical research and development projects fail, it is critical that our teams are rigorous in driving to early go/no go decisions, following the data, terminating unsuccessful programs, and allocating scarce dollars and talent to the most promising efforts, thus enhancing the likelihood of late phase development success.

**4. We believe commercializing our drugs is a crucial element of our long-term success.**

For the foreseeable future, we intend to play an active role in the commercialization of our products in the U.S., and to outlicense commercialization rights for other territories. We believe in the long-term value of our drug candidates, so we seek collaborations that provide meaningful economics and incentives for us and any potential partner. Furthermore, we seek partners who share our values, culture, processes, and vision for our products, which we believe will enable us to work with those partners successfully for the entire potential patent life of our drugs.

**5. Our financial goal is to maximize long-term per share cash flows.**

Our goal is to maximize long-term cash flows per share, and we will prioritize this even if it leads to uneven short-term financial results from an accounting perspective. If and when we become profitable, we expect and accept uneven earnings growth. Our underlying product development model is risky and

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unpredictable, and we will not advance marginal development candidates or consummate suboptimal in-license transactions in an attempt to fill anticipated gaps in revenue growth. Successful drugs can be enormously beneficial to patients and highly profitable and rewarding to shareholders, and we believe strongly in our ability to occasionally (but not in regular or predictable fashion) create and commercialize great medicines that make a meaningful difference in patients' lives.

If and when we reach profitability, we do not intend to issue quarterly or annual earnings guidance, however we plan to be transparent about the key elements of our performance, including near-term operating plans and longer-term strategic goals.

**Our Strategy**

Our goal is to build the next great pharmaceutical company by discovering, developing and commercializing innovative and differentiated medicines that target important unmet needs. Key elements of our strategy include:

attract and incentivize a team with a singular passion for creating and commercializing medicines that can make a significant difference in patients' lives;

successfully commercialize linaclotide in collaboration with Forest in the U.S.;

support our international partners to commercialize linaclotide outside of the U.S.;

if approved for IBS-C and CC, develop linaclotide for the treatment of other gastrointestinal disorders and for the pediatric population;

invest in our pipeline of novel product candidates and evaluate candidates outside of the company for in-licensing or acquisition opportunities;

participate in a meaningful way in the economics of the drugs that we bring to the market; and

execute our strategy with our shareholders' long-term interests in mind by seeking to maximize long-term per share cash flows.

**Linaclotide**

*Overview*

The gastrointestinal tract has many roles in human physiology, including the intake, breakdown and absorption of vital nutrients and fluids as well as the elimination of waste. In healthy individuals, waste is formed into stools and eliminated by the process of bowel movements. Bowel movements in healthy individuals cause minimal pain or discomfort and occur at various frequencies ranging from three times daily to three times weekly. IBS-C and CC are functional gastrointestinal disorders that afflict millions of sufferers worldwide. IBS-C is characterized by frequent and recurrent abdominal pain and/or discomfort and constipation symptoms (*e.g.* infrequent bowel movements, hard/lumpy stools, straining during defecation). CC is primarily characterized by constipation symptoms, but a majority of these patients report experiencing bloating and abdominal discomfort as among their most bothersome symptoms. Available treatment options primarily improve constipation, leading healthcare providers to diagnose and manage IBS-C and CC based on stool frequency. However, patients view these conditions as multi-symptom disorders, and while laxatives can be effective at relieving constipation symptoms, they do not necessarily improve abdominal pain, discomfort or bloating, and can often exacerbate these symptoms. This disconnect between patients and physicians, amplified by patients' embarrassment to discuss all of their gastrointestinal symptoms, often delays diagnosis and may compromise treatment, possibly causing additional suffering and disruption to patients' daily activities.





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IBS-C and CC are chronic conditions characterized by frequent and bothersome symptoms that dramatically affect patients' daily lives. We believe that gastro esophageal reflux disease, or GERD, serves as a reasonable analogue to illustrate the potential for a treatment that effectively relieves chronic gastrointestinal symptoms. Based on a study performed by M. Camilleri published in 2005 in *Clinical Gastroenterology and Hepatology* and 2007 U.S. census data, we estimate that in 2007, approximately 40 million people in the U.S. suffered from GERD. The typical GERD sufferer, who experiences frequent episodes of heartburn poorly controlled by over the counter products, will commonly seek medical care and is generally treated with a proton pump inhibitor, such as Prilosec (omeprazole), Nexium (esomeprazole magnesium), Prevacid (lansoprazole), or Protonix (pantoprazole). According to IMS Health, peak sales of the proton pump inhibitor class reached \$12.8 billion in November 2007. The proton pump inhibitors generally provide relief of key heartburn symptoms within the first week of treatment and have a favorable safety and tolerability profile. Once GERD patients experience relief of heartburn, they tend to be highly adherent to therapy, taking a proton pump inhibitor for approximately 200 days a year, according to IMS Health. The relief of bothersome symptoms and the recurrence of symptoms following discontinuation, serve to reinforce patient adherence to chronic therapy for functional disorders, like GERD, IBS-C and CC.

*U.S. IBS-C and CC Opportunity*

Based on the Talley and Higgins studies, studies performed by F.A. Luscombe (published in 2000 in *Quality of Life Research*) and J.F. Johanson (published in 2007 in *Alimentary Pharmacology and Therapeutics*), and 2007 U.S. census data, we estimate that in 2007, approximately 35 million to 46 million people in the U.S. suffered from symptoms of IBS-C and CC, of whom between 9 million to 15.5 million patients sought medical care. As a result of the less than optimal treatment options currently available, patients seeking care experienced a very low level of satisfaction. Due to patients' lack of satisfaction with existing treatment options, about 70% of patients stop prescription therapy within one month, according to IMS Health. It is estimated that patients seek medical care from five or more different healthcare providers over the course of their illness with limited or no success, as shown in a 2009 study by D.A. Drossman in the *Journal of Clinical Gastroenterology*. Many of the remaining patients are too embarrassed to discuss the full range of their symptoms, or for other reasons do not see the need to seek medical care and continue to suffer in silence while unsuccessfully self-treating with fiber, OTC laxatives and other remedies which improve constipation, but often exacerbate pain and bloating.

*Irritable Bowel Syndrome with Constipation.* Based on the Talley study and 2007 U.S. census data, we estimate that in 2007, approximately 12 million people or 5.2% of the U.S. adult population suffered from symptoms associated with IBS-C. As shown in a study conducted by the International Foundation of Functional Gastrointestinal Disorders, or IFFGD, in 2002, almost 35% of all IBS-C patients report suffering from some related symptoms daily. Based on this data and the Luscombe study, we estimate that up to 7 million of these patients sought medical attention for their symptoms. Based on the Talley, Luscombe and Johanson studies and 2007 U.S. census data, we estimate that between 5 million to 9 million sufferers have not consulted a physician and attempt to manage their symptoms with over the counter fiber and laxatives. Patients with IBS-C who seek medical care receive either a recommendation from their physician for an over the counter product or a prescription medication. As shown in a study conducted by the IFFGD in 2007, for all treated IBS-C patients, there continues to be a low rate of satisfaction with relief of their symptoms, with 92% of patients reporting that they are not fully satisfied with their treatments; and 77% of patients reporting that they were unsatisfied with overall care by their physician.

*Chronic Constipation.* Based on the Higgins study and 2007 U.S. census data, we estimate that in 2007, 23 million to 34 million people, or 10% to 15% of the U.S. adult population, were suffering from CC. Based on this data and the Johanson study, we estimate that of the total CC sufferers, only 6 million to 8.5 million patients suffering from CC sought medical care. Almost all of these patients, whether or not seeking medical care for their symptoms, took an over the counter or prescription treatment, or both. Similar to IBS-C, there continues to be a low rate of treatment satisfaction, with over 70% of those taking

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over the counter and prescription laxatives reporting that they are not fully satisfied with their treatment results as shown in the Johanson study.

As shown in the figure below, according to L.E. Brandt in a study published in 2005 in the *American Journal of Gastroenterology*, the symptoms underlying both disorders can be viewed on a continuum. During a consultation, patients will often discuss only the predominant symptom making it difficult for physicians to effectively diagnose and treat. For most patients, constipation is also accompanied by a set of symptoms broader than straining and infrequency of bowel movements. Given the limitations of available treatment options in addressing multiple symptoms, physicians tend to focus on the most easily treatable symptom, constipation. Our market research suggests that most physicians view abdominal pain and bloating as difficult to treat. We believe that linaclotide's profile could offer health care providers the opportunity to identify, diagnose, and treat the other important symptoms experienced by IBS-C and CC patients.

*IBS-C and CC Opportunity Outside of U.S.* We believe that the prevalence rates of IBS-C in Europe and Japan are similar to the prevalence rates in the U.S.

*Burden of Illness.* Both IBS-C and CC adversely affect the quality of life of patients, leading to increased absenteeism from work or school and increased costs to the healthcare system. According to both a study by A.P.S. Hungin published in 2005 in *Alimentary Pharmacology & Therapeutics* and the Johanson study, patients with IBS-C and CC reportedly suffer from their symptoms on average 166 and 97 days per year, respectively, and, according to the Drossman study, over one third have experienced their symptoms for more than ten years. In a typical month, IBS-C and CC patients will miss an average of one to three days of school or work, according to Johanson's study and a study by B. Cash published in 2005 in *The American Journal of Medical Care*, and their productivity will be disrupted an additional four to five days per month, according to the Cash study. When the level of suffering becomes acutely overwhelming for patients, they seek care at an ambulatory care facility. In 2004, CC was the second most common cause for ambulatory care visits after GERD, according to a 2008 article by J.E. Everhart published in *Functional Intestinal Disorders*. According to the Everhart article, CC accounted for 6.3 million ambulatory care visits (when considered as part of any listed diagnosis) and IBS accounted for 3 million ambulatory care visits. Estimates of the indirect and direct costs associated with these conditions range upwards of \$25 billion, according to a study published in 2000 by M. Camilleri and D.E. Williams in *Pharmacoeconomics*.

*Treatment Options for IBS-C and CC.* By the time patients seek care from a physician, they have typically tried a number of available remedies and remain unsatisfied. Most IBS-C and CC patients initially attempt self-treatment with over the counter medications such as laxatives, stool softeners or fiber supplementation, as well as attempts to modify their diet. While some of these therapies offer limited success in transit-related symptoms, they offer little to no effect on other bothersome symptoms from which patients are suffering. Unfortunately, physicians have very limited treatment options beyond what is readily available to the patient alone. Physicians typically rely on fiber and laxatives, which can exacerbate bloating and abdominal pain, the same symptoms from which many patients are seeking relief and which are the most troubling to treat. In an attempt to help alleviate the more severe abdominal symptoms associated with IBS-C and CC, healthcare providers sometimes prescribe medications that have not been approved by the FDA for these indications, such as anti-depressant or antispasmodic agents.

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Polyethylene glycol, or PEG (such as Miralax), and lactulose, account for the majority of prescription and over the counter laxative treatments. Both agents demonstrate an increase in stool frequency and consistency but do not improve bloating or abdominal discomfort. Clinical trials and product labels document several adverse effects with PEG and lactulose, including exacerbation of bloating, cramping and, according to the Brandt study, up to a 40% incidence of diarrhea. Overall, up to 75% of patients taking prescription laxatives report not being completely satisfied with the predictability of when they will experience a bowel movement on treatment, and 50% were not completely satisfied with relief of the multiple symptoms associated with constipation, according to the Johanson study.

In 2002, the FDA approved Zelnorm, the first new drug for the treatment of IBS-C, and in 2004, Zelnorm was approved for the treatment of CC. Zelnorm is a serotonin 5-HT<sub>4</sub> receptor agonist, with a mechanism of action completely separate and distinct from the mechanism of action underlying linaclotide's activity. As a newly available treatment option to potentially address some of the symptoms beyond the scope of laxatives and fiber, Zelnorm achieved great success in raising patient and physician awareness of IBS-C and CC. During the five years that Zelnorm was promoted, total prescriptions in the category grew three fold, and in 2006, there were more than 16 million total prescriptions written for treating patients with IBS-C and CC, according to IMS Health. Prior to its withdrawal, in 2006, Zelnorm total sales were approximately \$561 million. In 2007, Zelnorm was withdrawn from the market by its manufacturer due to an analysis that found a higher chance of heart attack, stroke and chest pain in patients treated with Zelnorm as compared to placebo. Despite modest effectiveness relieving abdominal pain (1% to 10% of patients responding to treatment as compared to placebo) and bloating (4% to 11% of patients responding to treatment as compared to placebo) as described on the Zelnorm product label, Zelnorm succeeded in establishing a symptom-based approach highlighting the need to recognize and treat, on a chronic basis, both the abdominal and constipation symptoms afflicting these patients.

Currently, the only available prescription therapy for IBS-C and CC is Amitiza, which was approved for the treatment of CC in 2006, and for IBS-C in 2008. Amitiza sales have been modest in comparison to Zelnorm sales prior to its withdrawal from the market, according to IMS Health.

Although a significant unmet need exists for better treatments for IBS-C and CC, we believe that there are very few treatments in late-stage clinical development. The most recent entrant to the CC marketplace, solely in Europe, is Resolor (prucalopride). Resolor was recently approved by the European Medicines Agency and is indicated for the treatment of CC in women for whom laxatives have failed to provide adequate relief. Resolor, which will be marketed by Movetis, is a serotonin 5-HT<sub>4</sub> receptor agonist like Zelnorm. Johnson & Johnson has U.S. rights to prucalopride. Currently, we believe there is only one compound in late stage clinical development, velusetrag (being developed by Theravance), which is also a serotonin 5-HT<sub>4</sub> receptor agonist like Zelnorm, and which has completed Phase 2 trials for CC. We believe that there are a number of earlier stage compounds in development.

*The Linaclotide Opportunity.* Based on the Talley, Luscombe, Johanson and IFFGD studies and 2007 U.S. census data, we believe that there are over 10 million IBS-C and CC patients in the U.S. who suffer from multiple symptoms, are actively seeking therapy and are dissatisfied with current treatment options. Moreover, physicians overwhelmingly report a need for an efficacious treatment with demonstrated safety that can provide rapid, convenient, and effective multi-symptom relief, relieving abdominal pain and discomfort, bloating and constipation symptoms.

Linaclotide is a unique and promising potential treatment for patients suffering from both abdominal and constipation symptoms related to IBS-C and CC. Based on the clinical profile we have observed to date, we believe linaclotide is well positioned to provide IBS-C and CC patients with much needed reduction in abdominal and constipation symptoms, with a low incidence of adverse events, and a convenient once daily, oral dosing regimen.

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**Preclinical Pharmacology, Safety, and Toxicology**

*Pharmacology: Unique Mechanism of Action*

The underlying causes of the abdominal pain, discomfort and bloating suffered by patients with lower gastrointestinal disorders like IBS-C and CC are poorly understood. Further, because current therapeutic agents offer limited improvement in these symptoms, there has been limited medical research in this area. Since our clinical studies indicate that linaclotide provides rapid and sustained improvement of these symptoms, we have invested significant effort to define the mechanisms of linaclotide's physiological effects.

Linaclotide is a 14 amino acid peptide agonist of guanylate cyclase type-C, or GC-C, a receptor found on the epithelial cells that line the intestine. Activation of GC-C leads to increases in intracellular and extracellular cyclic guanosine monophosphate, or cGMP, levels. cGMP is a well characterized "second messenger" that relays and amplifies signals received at receptors on the cell surface to target molecules in the cytosol and/or nucleus of a cell. We believe increased cGMP has dual effects on intestinal function. First, as the figure below shows, cGMP can exit the epithelial cells to block pain signaling by inhibiting the pain-sensing neurons that carry signals from the gastrointestinal tract to the central nervous system (afferent pain fibers). Second, cGMP can remain inside the epithelial cell to activate protein kinase GII, or PKGII, which activates the protein Cystic Fibrosis Transmembrane conductance Regulator, or CFTR, by phosphorylation, or P, to stimulate electrolyte ( $\text{Na}^+$  = sodium,  $\text{Cl}^-$  = chloride, and  $\text{HCO}_3^-$  = bicarbonate) and fluid ( $\text{H}_2\text{O}$  = water) secretion into the intestinal lumen. The resulting increase in intestinal fluid volume accelerates intestinal transit.

Our preclinical work supports the above model for the actions of linaclotide. Regarding the effect on pain sensation, we have found that increased extracellular cGMP inhibited noxious-stimulus-induced firing of afferent pain fibers. In addition, oral dosing with either linaclotide or directly with cGMP significantly reduced abdominal pain responses in a number of preclinical models. While much work remains to be done, we hypothesize that the reduction in abdominal pain, abdominal discomfort, and visceral hypersensitivity seen both preclinically and clinically is a result of increased extracellular cGMP, which may reduce firing of pain-sensing neurons and thus decrease sensitivity to otherwise painful stimuli.

Additionally, in other preclinical studies, linaclotide was shown to increase intracellular cGMP, leading to activation of channels in intestinal cell membranes that resulted in the secretion of ions and fluid out of intestinal cells and into the intestinal lumen. Increased fluid in the intestinal lumen causes accelerated intestinal transit.

Importantly, linaclotide's effects on pain sensation and gastrointestinal transit/secretion are dependent on the presence of the GC-C receptor; in preclinical experiments where the GC-C receptor was genetically deleted, the effects of linaclotide on pain sensation and secretion were eliminated.

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The binding and activity of linaclotide at the GC-C receptor is highly specific. Linaclotide has no effect on the serotonin system, unlike Zelnorm, Resolor, cisapride (Propulsid, which was approved for heartburn caused by GERD), or alosetron (Lotronex, which was approved for irritable bowel syndrome with diarrhea), each of which work through serotonin receptors in the intestine. Zelnorm, Propulsid and Lotronex were all withdrawn from the market because of safety concerns.

*Preclinical Safety*

Linaclotide exhibits very limited oral bioavailability in all species tested, and it does not require absorption into the bloodstream to exert its pharmacological effect. This very limited exposure is due to minimal absorption of linaclotide through the intestinal epithelium. We believe that linaclotide's limited systemic exposure may reduce the likelihood of side effects.

We have investigated the intestinal fate and metabolism of linaclotide. Linaclotide is processed by the enzyme carboxypeptidase, which removes a single amino acid (tyrosine) from the end of linaclotide. The resulting 13 amino acid metabolite has similar activity to linaclotide in all assays tested. Both linaclotide and this active metabolite are degraded in the intestine by a sequential process of disulfide bond disruption, cleavage to inactive peptide fragments, and ultimate digestion to natural amino acids.

We consider linaclotide to have a highly favorable preclinical safety profile. Linaclotide's preclinical safety profile has been evaluated in both safety pharmacology and general toxicology studies following single intravenous and oral doses and repeat oral doses in rodent and non-rodent species. Linaclotide exhibits its desired pharmacological effects at doses that are much lower than those that could cause an adverse effect in toxicology studies, with the no-observed-adverse-effect level in these preclinical studies being at least 1,000 times higher than the highest human dose in any Phase 3 trial. Intravenous administration of up to five milligrams per kilogram of linaclotide had no effect on cardiovascular or respiratory function. In a 26-week chronic toxicity study, the no-observed-adverse-effect level was greater than or equal to 4,000-times the highest human dose for any Phase 3 study. In a 39-week chronic toxicity study, the no-observed-adverse-effect level was 1,000-times the highest human dose for any Phase 3 study.

In reproductive toxicity studies, the no-observed-adverse-effect level was determined to be 1,000-times the maximum dose studied in Phase 3 clinical studies.

We have also completed dosing for two years in carcinogenicity studies, and expect to have the final analysis in the first quarter of 2010.

**Clinical**

We are conducting a comprehensive clinical program consisting of 13 studies in over 4,600 people. Nine of the studies have been completed; three in healthy volunteers, two in IBS-C patients, and four in CC patients. Additionally, two Phase 3 studies in IBS-C patients and two long-term safety studies are ongoing.

***Healthy Volunteer Studies***

Three Phase 1 studies conducted in healthy volunteers were completed to obtain an understanding of linaclotide's safety and pharmacodynamic effects, to determine whether co-administration of linaclotide with food modulates linaclotide's pharmacodynamic effects, and to determine whether linaclotide showed minimal systemic exposure after oral administration as was observed in preclinical studies.

In the first two Phase 1 studies, single doses of up to 3,000 micrograms, or mcg, of linaclotide in 30 healthy male and female subjects, and once daily doses of up to 1,000 mcg over a seven-day period in 48 healthy male and female subjects, were generally well tolerated. Linaclotide was administered as an oral solution in this study. Linaclotide and its active metabolite were not measurable in the plasma of any subject at any dose level or time point, despite the ability of methods to measure as little as three nanograms of linaclotide or its metabolite in a milliliter of plasma. There were no dose-related increases in

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the number of subjects reporting treatment-emergent adverse events, or TEAEs, after linaclotide administration,

In a Phase 1 food-effect study in 19 healthy non-constipated volunteers, linaclotide administration in the fed state resulted in more frequent and looser stools as compared to linaclotide administration in the fasted state. In this study, despite the use of improved methods that can measure as little as 0.2 nanograms of linaclotide or 2 nanograms of its metabolite in a milliliter of plasma, there were no measurable levels of either compound in individuals dosed with 300 mcg of linaclotide in either the fed or fasted state. In this same study, a single supratherapeutic dose of 3,000 mcg (10 times higher than the highest Phase 3 dose) was administered immediately following seven consecutive days of administration of 300 mcg linaclotide once daily. Linaclotide was detected in the plasma of two of 18 subjects following administration of the 3,000 mcg dose, and the active metabolite of linaclotide was not detected in any subject. Exposure levels of linaclotide in these two subjects were not high enough or sufficiently sustained to allow calculation of pharmacokinetic parameters. The majority of subjects experienced gastrointestinal-related TEAEs during the study (primarily diarrhea), which were mild or moderate in severity and resolved following treatment.

***Studies in CC and IBS-C Patients***

In Phase 2 and Phase 3 studies in CC and IBS-C patients, the following key symptoms were measured:

***Spontaneous Bowel Movements (SBMs):*** Bowel movements that occur in the absence of laxative, enema, or suppository usage within the preceding 24 hours

***Complete SBMs (CSBMs):*** SBMs accompanied by the patient self-reporting a feeling of complete evacuation

***Stool Consistency using the Bristol Stool Form Scale:*** a 7-point ordinal scale (1=separate hard lumps like nuts [difficult to pass]; 2=sausage shaped but lumpy; 3=like a sausage but with cracks on surface; 4=like a sausage or snake, smooth and soft; 5=soft blobs with clear-cut edges [passed easily], 6=fluffy pieces with ragged edges, a mushy stool; 7=watery, no solid pieces [entirely liquid])

***Straining (during bowel movements):*** a 5-point ordinal severity scale (1=not at all, 2=a little bit, 3=a moderate amount, 4=a great deal, 5=an extreme amount)

***Abdominal Pain:*** a 5-point ordinal severity scale (1=none, 2=mild, 3=moderate, 4=severe, and 5=very severe)

***Abdominal Discomfort:*** a 5-point ordinal severity scale (1=none, 2=mild, 3=moderate, 4=severe, and 5=very severe)

***Bloating:*** a 5-point ordinal severity scale (1=none, 2=mild, 3=moderate, 4=severe, and 5=very severe)

***Constipation Severity:*** a 5-point ordinal severity scale (1=none, 2=mild, 3=moderate, 4=severe, and 5=very severe)

***IBS Symptom Severity:*** a 5-point ordinal severity scale (1=none, 2=mild, 3=moderate, 4=severe, and 5=very severe)

***Phase 2***

We conducted four Phase 2 studies, two in patients with IBS-C and two in patients with CC, to evaluate linaclotide's safety, efficacy, and dose response.

***Phase 2 IBS-C Studies***

**Phase 2a IBS-C Study.** A single-center Phase 2a motility study was conducted in 36 female patients with IBS-C. The study evaluated doses of 100 and 1,000 mcg for effects on upper and lower gastrointestinal motility when administered orally in solution once daily for five days. Bowel symptoms and safety

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parameters were also measured. In this study, the 1,000 mcg dose of linaclotide significantly accelerated lower gastrointestinal motility, as measured as ascending colonic emptying and overall colonic transit at 48 hours. No effect of linaclotide 1,000 mcg dose on upper gastrointestinal motility, as measured by gastric emptying or small bowel transit, was observed in this study. There was also a dose-dependent improvement in bowel symptoms. Headache was the most common TEAE.

**Phase 2b IBS-C Study.** A randomized, double-blind, placebo-controlled study was conducted in 420 IBS-C patients at 92 sites in the U.S. and Canada. The study enrolled IBS-C patients age 18 years or older with at least mild abdominal pain/discomfort, fewer than three CSBMs per week, and no more than six SBMs per week during the pre-treatment period. The study had a two-week pre-treatment baseline period, a 12-week treatment period, and a two-week post-treatment period. Four doses of linaclotide were evaluated: 75 mcg, 150 mcg, 300 mcg and 600 mcg, administered once daily as oral capsules. The primary endpoint of the study was the change from baseline in weekly CSBM frequency in the evaluable population. However, data are shown below for the more inclusive intent-to-treat, or ITT, population, as that is the primary endpoint population for Phase 3. Additional endpoints included the change from baseline in other bowel symptoms (SBMs, stool consistency, straining), daily abdominal symptoms (pain, discomfort, and bloating), and weekly global severity assessments (IBS symptom severity, constipation severity).

During the baseline period, the average CSBM frequency was 0.3 CSBMs per week, and 68% of patients had no CSBMs during this period. The change from baseline in weekly CSBM frequency versus placebo was statistically significant (p-value < 0.01) in all linaclotide dosing arms compared to the placebo group. The p-value is a measure of probability that the difference between the placebo group and the linaclotide group is due to chance (*e.g.*, p = 0.01 means that there is a 1% (0.01 = 1.0%) chance that the difference seen between the placebo and linaclotide group is the result of random chance as opposed to the linaclotide treatment). A p-value less than or equal to 0.05 (0.05 = 5%) is commonly used as a criterion for statistical significance.

**Phase 2b IBS-C Primary Endpoint: Change from Pre-treatment in CSBM Frequency**

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\*p<0.05, \*\*p<0.01, \*\*\*p<0.001  
Note: ITT population



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Linaclotide treatment decreased abdominal pain, abdominal discomfort, bloating and global measures of IBS severity and constipation severity in the study. The pretreatment baseline values on the five-point ordinal severity scale (1=none, 2=mild, 3=moderate, 4=severe, and 5=very severe) ranged from 2.87 to 3.13 for abdominal pain, 3.11 to 3.34 for abdominal discomfort, 3.32 to 3.56 for bloating, 3.56 to 3.73 for IBS severity and 3.47 to 3.80 for constipation severity. Improvement in the abdominal symptoms and global measurements of severity ranged from 25.5% to 53.8% compared to placebo rates of 16.1% to 25.6% across the dose groups as shown in the table below. In particular, the 300 mcg dose (the dose level being evaluated in Phase 3 IBS-C trials) demonstrated a 46.8% relative reduction in the mean abdominal pain score versus 25.6% in the placebo arm.

**Phase 2b IBS-C: Improvement as Percent Change from Baseline\***

| <b>Endpoint</b>       | <b>Placebo</b> | <b>75 mcg</b> | <b>150 mcg</b> | <b>300 mcg</b> | <b>600 mcg</b> |
|-----------------------|----------------|---------------|----------------|----------------|----------------|
| Abdominal pain        | 25.6%          | 37.1%         | 36.9%          | 46.8%          | 44.4%          |
| Abdominal discomfort  | 22.1%          | 31.3%         | 32.5%          | 42.7%          | 38.6%          |
| Bloating              | 16.1%          | 27.3%         | 25.5%          | 37.3%          | 31.6%          |
| IBS severity          | 22.2%          | 35.0%         | 34.1%          | 42.1%          | 41.0%          |
| Constipation severity | 23.3%          | 42.3%         | 41.1%          | 53.8%          | 48.8%          |

\*

ITT population. Improvement as percent change from baseline calculated as the percent difference in the treatment group's mean change from baseline value relative to the mean baseline score.

Abdominal pain improved within the first week of treatment and the effect was sustained over the 12-week treatment period as shown below.

**Abdominal Pain**

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Note: ITT population

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Linacotide also demonstrated a significant reduction in abdominal pain frequency as measured by an increase in the median percentage of pain-free days in the 300 mcg group compared to the placebo group (18.5% vs. 2.0%). At the 75 mcg, 150 mcg, and 600 mcg dose groups, there was a numerical but not statistically significant increase in the percentage of pain-free days relative to placebo.

Significant improvements in other bowel habits, including frequency of SBMs, straining and stool consistency (*i.e.*, less hard stools) were also demonstrated, and were seen within the first week of treatment. The percentages of patients reporting a CSBM within 24 hours of initial dosing ranged from 27% to 37% for the linacotide dose groups compared to 13% for the placebo group ( $p < 0.05$  for all linacotide dose groups compared to placebo). All improvements were statistically significant for at least three of the four linacotide dose groups for each endpoint. The 300 mcg dose, which is currently being assessed in Phase 3 IBS-C trials, demonstrated statistically significant effects across all secondary endpoints. Effects were seen within the first week of dosing, often within the first three days, and continued over the 12 weeks of treatment. Linacotide provided statistically significant improvement in multiple symptoms of IBS-C in this study.

We analyzed the Phase 2b IBS-C data utilizing the Phase 3 primary efficacy parameters (see "Phase 3 IBS-C Trials" below). Responder rates for the placebo group, the pooled linacotide-treated group (75, 150, 300, and 600 mcg aggregated), and the 300 mcg group (the Phase 3 IBS-C dose) were determined. The responder rate for the 12-week abdominal pain and CSBM (APC) responder was 10% in the placebo group, 20% for the pooled linacotide-treated group, and 27% for the 300 mcg group. The responder rate for the 12-week CSBM responder was 13% in the placebo group, 26% for the pooled linacotide-treated group, and 31% for the 300 mcg group. The responder rate for the 12-week abdominal pain responder was 30% in the placebo group, 44% for the pooled linacotide-treated group, and 48% for the 300 mcg group.

The most common TEAE in the linacotide-treated groups was diarrhea (occurring in 11% to 18% of patients), which was the primary cause of discontinuation for 1% to 7% of patients. Most reports of diarrhea were mild to moderate; nine linacotide-treated patients reported severe diarrhea. Other TEAEs occurred with similar frequency across the placebo and linacotide dose groups.

**Phase 2b IBS-C: Treatment-emergent Adverse Events**

TEAEs occurring in  $\geq 3\%$  of patients in any of the linacotide groups and  $>$  placebo

| Treatment-emergent adverse event (TEAE) | Placebo<br>n=85 | 75 mcg<br>n=79  | 150 mcg<br>n=82 | Linacotide      |                 | All<br>n=335     |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
|   |                 |                 |                 | 300 mcg<br>n=85 | 600 mcg<br>n=89 |                  |
| <b>Any TEAE</b>                         | <b>35 (41%)</b> | <b>41 (52%)</b> | <b>40 (49%)</b> | <b>50 (59%)</b> | <b>61 (69%)</b> | <b>192 (57%)</b> |
| Diarrhea                                | 1 (1%)          | 9 (11%)         | 10 (12%)        | 14 (16%)        | 16 (18%)        | 49 (15%)         |
| Abdominal pain                          | 3 (4%)          | 4 (5%)          | 3 (4%)          | 4 (5%)          | 7 (8%)          | 18 (5%)          |
| Urinary tract infection                 | 2 (2%)          | 7 (9%)          | 1 (1%)          | 5 (6%)          | 1 (1%)          | 14 (4%)          |
| Nausea                                  | 5 (6%)          | 1 (1%)          | 8 (10%)         | 1 (1%)          | 3 (3%)          | 13 (4%)          |
| Nasopharyngitis                         | 5 (6%)          | 3 (4%)          | 6 (7%)          | 1 (1%)          | 1 (1%)          | 11 (3%)          |
| Upper respiratory tract infection       | 3 (4%)          | 0               | 2 (2%)          | 4 (5%)          | 5 (6%)          | 11 (3%)          |
| Sinusitis                               | 2 (2%)          | 3 (4%)          | 2 (2%)          | 3 (4%)          | 2 (2%)          | 10 (3%)          |
| Bronchitis                              | 0               | 2 (3%)          | 1 (1%)          | 1 (1%)          | 3 (3%)          | 7 (2%)           |
| Back pain                               | 1 (1%)          | 0               | 4 (5%)          | 1 (1%)          | 1 (1%)          | 6 (2%)           |
| Fecal incontinence                      | 0               | 0               | 1 (1%)          | 0               | 3 (3%)          | 4 (1%)           |

*Phase 2 CC Studies*

**Phase 2a CC Study.** A randomized, placebo-controlled study was conducted in 42 CC patients at 14 sites. The study evaluated doses of 100, 300 and 1,000 mcg administered orally once daily as an oral solution for 14 days. Bowel and abdominal symptoms as well as safety parameters were measured. In this

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study, linaclotide increased SBM frequency and CSBM frequency compared to placebo. Linaclotide also improved stool consistency (*i.e.*, decreased stool hardness), decreased straining severity and decreased abdominal discomfort when compared to placebo. The most common TEAE was diarrhea.

**Phase 2b CC Study.** A randomized, double-blind, placebo-controlled study was conducted in 310 CC patients at 57 sites in the U.S. The study enrolled patients age 18 years or older who had fewer than three CSBMs per week and no more than six SBMs per week in the pre-treatment period. The study had a two-week pre-treatment baseline period, a four-week treatment period and a two-week post-treatment period. Four doses of linaclotide were evaluated: 75 mcg, 150 mcg, 300 mcg, and 600 mcg, administered once daily as oral capsules. The primary endpoint of the study was the change from baseline in weekly SBM frequency in the evaluable population. However, data are shown for the more inclusive ITT population as that is the primary endpoint population for Phase 3. Additional endpoints included the change from baseline in other bowel symptoms (CSBMs, stool consistency, training) and daily abdominal symptoms (discomfort and bloating), as well as the global assessment of constipation severity.

The change from baseline versus placebo for weekly SBM frequency increased from a baseline of 2.3 per week in all treatment groups and was statistically significant in all linaclotide dosing arms compared to the placebo group. Weekly SBM frequency increased with the dose of linaclotide administered. Linaclotide improved all other bowel habits, including frequency of CSBMs, straining, and stool consistency (*i.e.*, less hard stools). All improvements were statistically significant for each endpoint and for all four linaclotide dose groups, except straining at the 75 mcg dose level. Improvements were sustained over the four-week treatment period.

**Phase 2b CC: Primary Endpoint: Change from Pre-treatment in SBM Frequency**

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\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

Note: ITT population

The percentages of patients reporting a CSBM within 24 hours of initial dosing ranged from 14% to 36% for the linaclotide dose groups compared to 7% for the placebo group (p<0.05 for the 75, 300 and 600 mcg dose groups compared to placebo).

Linaclotide treatment decreased abdominal discomfort, bloating and constipation severity in the study. The pretreatment baseline values ranged from 2.36 to 2.50 for abdominal discomfort, 2.69 to 2.83 for bloating and 3.25 to 3.58 for constipation severity. Improvement of these symptoms ranged from 17.2%

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to 40.9% compared to placebo rates of 2.5% to 6.6% (see table below). Onset of improvement in these symptoms generally occurred within the first week of treatment.

**Phase 2b CC: Improvement as Percent Change from Baseline\***

| Endpoint              | Placebo | 75 mcg | 150 mcg | 300 mcg | 600 mcg |
|-----------------------|---------|--------|---------|---------|---------|
| Abdominal discomfort  | 3.8%    | 25.0%  | 23.4%   | 18.2%   | 21.8%   |
| Bloating              | 2.5%    | 24.6%  | 25.9%   | 17.6%   | 17.2%   |
| Constipation severity | 6.6%    | 35.2%  | 38.6%   | 38.3%   | 40.9%   |

\*

ITT population. Improvement as percent change from baseline calculated as the percent difference in the treatment group's mean change from baseline value relative to the mean baseline score.

The most common and only dose-dependent TEAE in the linaclotide-treated groups was diarrhea (occurring in 5% to 14% of patients), which was the primary cause of discontinuation for 2% to 5% of patients. Most reports of diarrhea were of mild or moderate severity, with two linaclotide-treated patients reporting severe diarrhea (both in the 600 mcg group). Other TEAEs occurred with similar frequency across the placebo and linaclotide dose groups (see table below).

**Linaclotide Phase 2b CC: Treatment-emergent Adverse Events**

TEAEs occurring in  $\geq 3\%$  of patients in any of the linaclotide groups and  $>$  placebo

| Treatment-emergent adverse event (TEAE) | Placebo<br>n=69 | 75 mcg<br>n=59  | 150 mcg<br>n=56 | Linaclotide     |                 | All<br>n=240    |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|   |                 |                 |                 | 300 mcg<br>n=62 | 600 mcg<br>n=63 |                 |
| <b>Any TEAE</b>                         | <b>22 (32%)</b> | <b>21 (36%)</b> | <b>18 (32%)</b> | <b>18 (29%)</b> | <b>24 (38%)</b> | <b>81 (34%)</b> |
| Diarrhea                                | 2 (3%)          | 3 (5%)          | 5 (9%)          | 3 (5%)          | 9 (14%)         | 20 (8%)         |
| Abdominal pain                          | 3 (4%)          | 2 (3%)          | 5 (9%)          | 2 (3%)          | 2 (3%)          | 11 (5%)         |
| Nausea                                  | 1 (1%)          | 2 (3%)          | 2 (4%)          | 1 (2%)          | 2 (3%)          | 7 (3%)          |
| Urinary tract infection                 | 1 (1%)          | 1 (2%)          | 2 (4%)          | 1 (2%)          | 1 (2%)          | 5 (2%)          |
| Dizziness                               | 0               | 0               | 0               | 1 (2%)          | 3 (5%)          | 4 (2%)          |
| Vomiting                                | 1 (1%)          | 1 (2%)          | 1 (2%)          | 0               | 2 (3%)          | 4 (2%)          |
| Bowel sounds abnormal                   | 0               | 0               | 1 (2%)          | 0               | 2 (3%)          | 3 (1%)          |
| Bronchitis                              | 2 (3%)          | 2 (3%)          | 0               | 0               | 0               | 2 (1%)          |
| Influenza                               | 0               | 0               | 2 (4%)          | 0               | 0               | 2 (1%)          |

**Phase 1 and Phase 2 Serious Adverse Event Summary**

There were no serious adverse events in the Phase 1 studies. Serious adverse events occurred in less than 1% of patients in the Phase 2 program and were similarly distributed across placebo and linaclotide treated groups.

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*Phase 3*

The Phase 3 program consists of two long-term safety studies and four pivotal efficacy trials: two in patients with IBS-C and two in patients with CC. The Phase 3 trials were designed based on our experience from the Phase 2 program, which provided an understanding of linaclotide's potential therapeutic effect on abdominal symptoms (*e.g.*, abdominal bloating, discomfort and pain) and constipation (frequency, straining and stool consistency) and provided insight into the appropriate methods for measuring these symptoms. The consistent results for the primary and secondary efficacy measures as well as safety parameters observed throughout the Phase 2 program were also reflected in marked improvements in global assessments (*e.g.*, constipation severity, IBS severity). With this in mind, we designed the Phase 3 trials as larger confirmatory trials targeting the same patient populations (similar inclusion and exclusion criteria) and similar endpoints. In order to increase the statistical power (>95% for the primary endpoint), we increased the size of the Phase 3 studies to 200 patients per group for CC compared to 50 patients per group in Phase 2 and 400 patients per group for IBS-C compared to 80 patients per group in Phase 2. We also extended the length of the treatment period of the CC trials to 12 weeks from four weeks in Phase 2 and extended one of the IBS-C trials to six months of treatment compared to the 12 weeks utilized in Phase 2 (the primary Phase 3 endpoint remains at 12 weeks). To better align our measurements of abdominal symptoms in the IBS-C Phase 3 studies with those preferred by regulatory authorities, we modified the measurement tool used by patients to describe their abdominal symptoms from a 5-point scale to an 11-point scale (0-10). Our experience with a similar scale in Phase 2b IBS-C study indicated that the 11-point scale provided similar responses to those observed with the 5-point scale and may detect change with greater precision.

The doses of linaclotide referenced in connection with our Phase 1 and Phase 2 studies represented the total peptide content, which, in addition to linaclotide, includes inactive linaclotide-related peptides. Beginning with Phase 3 and going forward, dose level designations refer solely to linaclotide content. Thus, the 150 mcg total peptide dose in Phase 2 has active linaclotide content equivalent to the 133 mcg dose in Phase 3 and going forward. Similarly, the 300 mcg total peptide dose in Phase 2 has active linaclotide content equivalent to the 266 mcg dose in Phase 3 and going forward. This does not reflect any change in the amounts of linaclotide delivered between the trials or the formulation, but rather an improvement in analytic methods and the way we reference the dose levels.

*Phase 3 IBS-C Trials*

In July 2009, we initiated two confirmatory Phase 3, multi-center, randomized, double-blind, placebo-controlled trials assessing the safety and efficacy of linaclotide in patients with IBS-C in the U.S. and Canada. Each trial will target enrollment of 800 IBS-C patients. Patients enrolled in the trials are to have fewer than three CSBMs and no more than five SBMs per week during the pretreatment period, with an average abdominal pain score of at least 3.0 on an 11-point scale (0=none, 10=very severe). Patients are being randomized to receive placebo or 266 mcg linaclotide administered once daily as an oral capsule. There are three primary efficacy parameters: 12-week abdominal pain and CSBM responder; 12-week responder; and 12-week abdominal pain responder. A 12-week CSBM responder is a patient who had three or more CSBMs per week and an increase of at least one CSBM per week over baseline for at least nine of the 12 weeks of the treatment period. A 12-week abdominal pain responder is a patient who has at least a 30% relative reduction in abdominal pain compared to baseline for at least nine out of the 12 weeks in the treatment period. Finally, a 12-week abdominal pain and constipation responder is a patient who meets both the responder criteria for abdominal pain and constipation for at least nine out of the 12 weeks in the treatment period.

We anticipate having top-line data from both trials in the second half of 2010.

Table of Contents*Phase 3 CC Trials*

In November 2009, we announced positive top-line results from two confirmatory Phase 3 multi-center, randomized, double-blind, placebo-controlled studies assessing the safety and efficacy of linaclotide administered once daily as an oral capsule in patients with CC. In both trials, statistical significance was achieved for the primary endpoint of 12-week CSBM responder at the 2 doses studied in each trial (133 mcg/day: p-values  $\leq 0.0012$  and 266 mcg/day: p-values  $< 0.0001$ ). In both trials, statistical significance was achieved for all pre-specified secondary endpoints, which included measures of bloating, abdominal discomfort, and constipation severity.

As illustrated in the table below, data from the Phase 3 CC program were consistent with the Phase 2b CC study described earlier, and support the potential for linaclotide to improve the multiple symptoms associated with CC.

**Phase 3 CC Trials: Statistical Significance of Linaclotide Effects as Compared to Placebo**

| Endpoint                   | Trial 303<br>(n=642) |          | Trial 01<br>(n=630) |          |
|----------------------------|----------------------|----------|---------------------|----------|
|                            | 133 mcg              | 266 mcg  | 133 mcg             | 266 mcg  |
| <b>Primary endpoint</b>    |                      |          |                     |          |
| 12-week CSBM responder     | p<0.0001             | p<0.0001 | p=0.0012            | p<0.0001 |
| <b>Secondary endpoints</b> |                      |          |                     |          |
| CSBM frequency             | p<0.0001             | p<0.0001 | p<0.0001            | p<0.0001 |
| SBM frequency              | p<0.0001             | p<0.0001 | p<0.0001            | p<0.0001 |
| Stool consistency          | p<0.0001             | p<0.0001 | p<0.0001            | p<0.0001 |
| Severity of straining      | p<0.0001             | p<0.0001 | p<0.0001            | p<0.0001 |
| Constipation severity      | p<0.0001             | p<0.0001 | p<0.0001            | p<0.0001 |
| Abdominal discomfort       | p=0.0003             | p=0.0063 | p=0.0006            | p=0.0001 |
| Bloating                   | p<0.0001             | p=0.0049 | p=0.0005            | p<0.0001 |

**Trial 01.** Trial 01 was conducted in 630 CC patients. The trial enrolled patients age 18 years or older who had fewer than three CSBMs per week and no more than six SBMs per week during the pre-treatment period. The trial included a two-week pre-treatment baseline period and a 12-week treatment period. The primary efficacy endpoint was a 12-week CSBM responder. A 12-week CSBM responder is a patient who had three or more CSBMs per week and an increase of at least one CSBM per week over baseline for at least nine of the 12 weeks of the treatment period. During the baseline period, the average CSBM frequency was 0.3 CSBMs per week and 72% of patients had no CSBMs during this period.

The 12-week CSBM responder rate was 16.0% in the 133 mcg linaclotide group (p=0.0012), and 21.3% in the 266 mcg linaclotide group (p<0.0001), a numerical increase of 2.6 and 3.5 fold, respectively, when compared to the placebo group, which exhibited a 6.0% responder rate (see table below). The additional endpoints shown in the table below were statistically significant at both the 133 mcg and 266 mcg dose levels.

Table of Contents**Phase 3 CC (Trial 01): Responder Endpoints\***

| Endpoint   | Placebo<br>(n = 215) | 133 mcg<br>(n = 213)         | 266 mcg<br>(n = 202)         |
|--|----------------------|------------------------------|------------------------------|
| <b>Primary Endpoint</b>                              |                      |                              |                              |
| 12-week CSBM responder <sup>(1)</sup>                | 6.0%                 | 16.0%<br>( <i>p</i> =0.0012) | 21.3%<br>( <i>p</i> <0.0001) |
| <b>Additional Endpoints</b>                          |                      |                              |                              |
| CSBM rate change ≥1 responder <sup>(2)</sup>         | 13.0%                | 31.0%<br>( <i>p</i> <0.0001) | 40.1%<br>( <i>p</i> <0.0001) |
| CSBM rate ≥3 responder <sup>(3)</sup>                | 6.0%                 | 16.0%<br>( <i>p</i> =0.0012) | 21.8%<br>( <i>p</i> <0.0001) |
| 12-week CSBM mean change ≥1 responder <sup>(4)</sup> | 25.6%                | 49.3%<br>( <i>p</i> <0.0001) | 56.9%<br>( <i>p</i> <0.0001) |

\* ITT population

- (1) Patient must have had a CSBM weekly frequency rate that was three or greater and increased by one or more from baseline for at least nine of the 12 weeks of the treatment period.
- (2) Patient must have had a CSBM weekly frequency rate that was increased by one or more from baseline for at least nine of the 12 weeks of the treatment period.
- (3) Patient must have had a CSBM weekly frequency rate that was three or greater for at least nine of the 12 weeks of the treatment period.
- (4) Patient must have had an overall mean CSBM frequency rate that was increased one or more from baseline over the treatment period.

Linaclotide-treated patients demonstrated a significant increase in average weekly CSBMs from baseline (0.6 for placebo; 2.0 for 133 mcg, *p*<0.0001; 2.7 for 266 mcg, *p*<0.0001) and an increase in average weekly SBMs from baseline (1.1 for placebo; 3.4 for 133 mcg, *p*<0.0001; 3.7 for 266 mcg, *p*<0.0001).



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The increase in stool frequency occurred in the first week and was sustained over the 12 weeks of treatment as shown in the figure below.

**Mean Weekly CSBMs\***

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\* "Pre-Tx" is the pre-treatment period

In addition to the endpoints detailed above, the remaining secondary endpoints measured in this study; abdominal discomfort, bloating, constipation severity, stool consistency and straining; were statistically significant for linaclotide versus placebo at both doses.

In a post-hoc analysis, improvements in abdominal discomfort, bloating and constipation severity were observed as shown in the table below. Baseline values for these endpoints ranged from 2.47 to 2.56 for abdominal discomfort, 2.73 to 2.82 for bloating and 3.31 to 3.34 for constipation severity.

**Phase 3 CC (Trial 01): Improvement as Percent Change from Baseline\***

| Endpoint              | Placebo | 133 mcg | 266 mcg |
|-----------------------|---------|---------|---------|
| Abdominal discomfort  | 19.5%   | 31.1%   | 33.5%   |
| Bloating              | 13.0%   | 24.3%   | 27.3%   |
| Constipation severity | 14.4%   | 40.2%   | 42.7%   |

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\*

ITT population. Improvement as percent change from baseline calculated as the percent difference in the treatment group's mean change from baseline value relative to the mean baseline score.

The most common TEAE associated with linaclotide treatment in Trial 01 was diarrhea (15% to 20% of patients, compared to 3% for placebo). Diarrhea led to discontinuation in 5% to 6% of linaclotide

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treated patients compared to 0.5% of patients receiving placebo. Other TEAEs were similarly distributed across the treatment groups. Serious adverse events occurred in 2% of patients and were similarly distributed across the placebo and linaclotide treatment groups. There was one death during the treatment period, and one death outside of the treatment period, both of which were deemed unrelated to treatment by the investigators.

**Phase 3 CC (Trial 01): Treatment-emergent Adverse Events**

TEAEs occurring in  $\geq 3\%$  of patients in any of the linaclotide groups and  $>$  placebo

| Treatment-emergent adverse event (TEAE) | Linaclotide      |                  |                  |                  |
|---|------------------|------------------|------------------|------------------|
|   | Placebo<br>N=215 | 133 mcg<br>N=213 | 266 mcg<br>N=205 | All<br>N=418     |
| <b>Any TEAE</b>                         | <b>116 (54%)</b> | <b>138 (65%)</b> | <b>116 (57%)</b> | <b>254 (61%)</b> |
| Diarrhea                                | 6 (3%)           | 42 (20%)         | 30 (15%)         | 72 (17%)         |
| Flatulence                              | 13 (6%)          | 16 (8%)          | 13 (6%)          | 29 (7%)          |
| Upper respiratory tract infection       | 14 (7%)          | 16 (8%)          | 9 (4%)           | 25 (6%)          |
| Abdominal pain                          | 5 (2%)           | 11 (5%)          | 11 (5%)          | 22 (5%)          |
| Nausea                                  | 7 (3%)           | 8 (4%)           | 9 (4%)           | 17 (4%)          |
| Abdominal distension                    | 7 (3%)           | 7 (3%)           | 8 (4%)           | 15 (4%)          |
| Urinary tract infection                 | 8 (4%)           | 8 (4%)           | 6 (3%)           | 14 (3%)          |
| Sinusitis                               | 5 (2%)           | 8 (4%)           | 4 (2%)           | 12 (3%)          |
| Nasopharyngitis                         | 7 (3%)           | 3 (1%)           | 8 (4%)           | 11 (3%)          |

**Trial 303.** Trial 303 was conducted in 643 patients, and was identical to Trial 01 in design except Trial 303 also included a four-week randomized withdrawal period, as described below. During the baseline period, the average CSBM frequency was 0.3 CSBMs per week and 68% of patients had no CSBMs during this period.

The 12-week CSBM responder rate was 21.2% in the 133 mcg linaclotide group ( $p < 0.0001$ ) and 19.4% in the 266 mcg linaclotide group ( $p < 0.0001$ ), a numerical increase of 6.3 and 5.8 fold, respectively, when compared to the placebo group, which exhibited a 3.3% responder rate.

The additional endpoints shown in the table below were statistically significant at both the 133 mcg and 266 mcg dose levels.

**Phase 3 CC (Trial 303): Responder Endpoints\***

| Endpoint   | Placebo<br>(N = 209) | 133 mcg<br>(N = 217) | 266 mcg<br>(N = 216) |
|--|----------------------|----------------------|----------------------|
| <b>Primary Endpoint</b>                                    |                      |                      |                      |
| 12-week CSBM responder <sup>(1)</sup>                      | 3.3%                 | 21.2%                | 19.4%                |
|  |                      | ( $p < 0.0001$ )     | ( $p < 0.0001$ )     |
| <b>Additional Endpoints</b>                                |                      |                      |                      |
| CSBM rate change $\geq 1$ responder <sup>(2)</sup>         | 11.0%                | 39.2%                | 37.0%                |
|  |                      | ( $p < 0.0001$ )     | ( $p < 0.0001$ )     |
| CSBM rate $\geq 3$ responder <sup>(3)</sup>                | 3.8%                 | 21.7%                | 19.4%                |
|  |                      | ( $p < 0.0001$ )     | ( $p < 0.0001$ )     |
| 12-week CSBM mean change $\geq 1$ responder <sup>(4)</sup> | 22.5%                | 55.8%                | 52.8%                |
|  |                      | ( $p < 0.0001$ )     | ( $p < 0.0001$ )     |

\*

ITT population

(1)

Patient must have had a CSBM weekly frequency rate that was three or greater and increased by one or more from baseline for at least nine of the 12 weeks of the treatment period.

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- (2) Patient must have had a CSBM weekly frequency rate that was increased by one or more from baseline for at least nine of the 12 weeks of the treatment period.
- (3) Patient must have had a CSBM weekly frequency rate that was three or greater for at least nine of the 12 weeks of the treatment period
- (4) Patient must have had an overall mean CSBM frequency rate that was increased one or more from baseline over the treatment period.

Linaclotide-treated patients demonstrated a significant increase in average weekly CSBMs from baseline (0.5 for placebo; 1.9 for 133 mcg,  $p < 0.0001$ ; 2.0 for 266 mcg,  $p < 0.0001$ ) and a significant increase in average weekly SBMs from baseline (1.1 for placebo; 3.0 for 133 mcg,  $p < 0.0001$ ; 3.0 for 266 mcg,  $p < 0.0001$ ). The increase in stool frequency occurred in the first week and was sustained over the 12 weeks of treatment.

In addition to the endpoints detailed above, the remaining secondary endpoints measured in Trial 303; abdominal discomfort, bloating, constipation severity, stool consistency and straining; were statistically significant for linaclotide versus placebo at both doses.

In a post hoc analysis, improvements in abdominal discomfort, bloating and constipation severity were observed as shown in the table below. Baseline values for these endpoints ranged from 2.46 to 2.52 for abdominal discomfort, 2.74 to 2.81 for bloating, and 3.25 to 3.32 for constipation severity.

**Phase 3 CC (Trial 303): Improvement as Percent Change from Baseline\***

| Endpoint                     | Placebo | 133 mcg | 266 mcg |
|------------------------------|---------|---------|---------|
| <b>Abdominal discomfort</b>  | 21.1%   | 32.9%   | 30.3%   |
| <b>Bloating</b>              | 13.2%   | 26.9%   | 22.0%   |
| <b>Constipation severity</b> | 13.9%   | 40.5%   | 37.2%   |

\*

ITT population. Improvement as percent change from baseline calculated as the percent difference in the treatment group's mean change from baseline value relative to the mean baseline score.

As mentioned above, Trial 303 included a four-week randomized withdrawal period. During the 12-week treatment period in Trial 303, patients were randomized to placebo, 133 mcg or 266 mcg linaclotide. Following the 12-week treatment period, patients were re-randomized to either placebo or linaclotide according to five different treatment sequences as described below:

placebo to linaclotide 266 mcg;

linaclotide 133 mcg to placebo;

linaclotide 133 mcg to linaclotide 133 mcg;

linaclotide 266 mcg to placebo; or

linaclotide 266 mcg to linaclotide 266 mcg.

In the randomized withdrawal period, linaclotide-treated groups re-randomized to placebo exhibited bowel and abdominal symptoms similar to those seen in the placebo group during the treatment period, without evidence that linaclotide made the subjects' original pre-treatment symptoms worse. Additionally, the placebo group, when allocated to 266 mcg linaclotide treatment group in the randomized withdrawal period, showed improvements in symptoms similar to those observed in the groups initially treated with linaclotide. Linaclotide-treated groups who continued linaclotide following re-randomization continued to demonstrate a sustained effect over the four-week randomized withdrawal period.

This pattern is illustrated in the figures below for CSBM frequency and constipation severity.

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**Mean Weekly CSBMs\***

**Mean Weekly Constipation Severity\***

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- \* "Pre-Tx" is the pre-treatment period
  - \* Includes randomized withdrawal (RW) period

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The TEAEs for Trial 303 are shown in the table below. The most common adverse event associated with linaclotide treatment was diarrhea (12% to 14%, compared to 7% for placebo). Diarrhea led to discontinuation in 3% of linaclotide treated patients compared to 0.5% of patients receiving placebo. Other adverse events were similarly distributed across the treatment groups. Serious adverse events occurred in 2% of patients and were similarly distributed across placebo and linaclotide treatment groups. There were no deaths during this trial.

**Phase 3 CC (Trial 303): Treatment-emergent Adverse Events**

TEAEs occurring in  $\geq 3\%$  of patients in any of the linaclotide groups and  $>$  placebo

| Treatment-emergent adverse events (TEAE) | Linaclotide      |                  |                  |                  |
|--|------------------|------------------|------------------|------------------|
|  | Placebo<br>N=209 | 133 mcg<br>N=217 | 266 mcg<br>N=217 | All<br>N=434     |
| <b>Any TEAE</b>                          | <b>105 (50%)</b> | <b>122 (56%)</b> | <b>119 (55%)</b> | <b>241 (56%)</b> |
| Diarrhea                                 | 14 (7%)          | 27 (12%)         | 30 (14%)         | 57 (13%)         |
| Headache                                 | 8 (4%)           | 7 (3%)           | 10 (5%)          | 17 (4%)          |
| Flatulence                               | 9 (4%)           | 8 (4%)           | 8 (4%)           | 16 (4%)          |
| Nausea                                   | 8 (4%)           | 7 (3%)           | 9 (4%)           | 16 (4%)          |
| Abdominal distension                     | 3 (1%)           | 8 (4%)           | 7 (3%)           | 15 (3%)          |
| Abdominal pain                           | 8 (4%)           | 6 (3%)           | 9 (4%)           | 15 (3%)          |
| Nasopharyngitis                          | 6 (3%)           | 6 (3%)           | 9 (4%)           | 15 (3%)          |
| Sinusitis                                | 3 (1%)           | 5 (2%)           | 7 (3%)           | 12 (3%)          |
| Abdominal pain upper                     | 3 (1%)           | 7 (3%)           | 3 (1%)           | 10 (2%)          |

In a broad sample from both trials ( $>300$  patients), using methods that can measure as little as 0.2 nanograms of linaclotide or two nanograms of its active metabolite in a milliliter of plasma, there were no measurable plasma levels of linaclotide or its active metabolite.

*Pre-specified Subpopulation Analysis*

In an integrated analysis of results from male patients from the two Phase 3 CC trials, a statistically significant increase in responders was observed as assessed by the primary endpoint. Likewise, in a similar integrated analysis of elderly patients (65 years or older) from the two Phase 3 CC trials, a statistically significant effect was observed. Details are depicted in the table below.

**Phase 3 CC Trials: Primary Endpoint in Pre-specified Subpopulations\***

|   | Placebo<br>(N = 46) | 133 mcg<br>(N = 44) | 266 mcg<br>(N = 51) |
|---|---------------------|---------------------|---------------------|
| <b>Male Patients</b>  |                     |                     |                     |
| 12-week CSBM responder <sup>(1)</sup>                       | 4.3%                | 29.5%               | 29.4%               |
|   |                     | ( <i>p</i> =0.0028) | ( <i>p</i> =0.0014) |
|   | Placebo<br>(N = 55) | 133 mcg<br>(N = 51) | 266 mcg<br>(N = 48) |
| <b>Elderly Patients (<math>\geq 65</math> years of age)</b> |                     |                     |                     |
| 12-week CSBM responder <sup>(1)</sup>                       | 5.5%                | 33.3%               | 20.8%               |
|   |                     | ( <i>p</i> =0.0004) | ( <i>p</i> =0.0312) |

\*

ITT population, pooled across both Ph3 CC trials (Trial 01 and Trial 303)

(1)

Patient must have had a CSBM weekly frequency rate that was three or greater and increased by one or more from baseline for at least nine of the 12 weeks of the treatment period.



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***Long-Term Safety Studies***

We are conducting two open-label long-term safety studies, or LTSS, which have been underway since September 2008. The long-term safety studies were undertaken to assess the safety and tolerability profile of linaclotide treatment over six to 12 months and longer, as required by U.S. regulatory requirements for a new chemical entity intended for long-term treatment (chronic or repeated intermittent use for longer than six months), and to provide continued linaclotide therapy to patients who have requested continued access. Patients who complete any of the linaclotide Phase 2 or Phase 3 trials are eligible to enroll in the LTSS. In addition, patients who complete the pre-treatment period of one of the Phase 3 efficacy studies, but who fail to be randomized for reasons not related to their classification as having CC or IBS-C, are also eligible to enroll in the LTSS. We expect these studies to include greater than 2,500 patients and they are designed to further evaluate the safety and tolerability of linaclotide at the 266 mcg dose. To date, we have enrolled over 1,500 patients in these studies.

**Sales and Marketing**

For the foreseeable future, we intend to develop and commercialize our drugs in the U.S. alone or with partners, while out-licensing commercialization rights for other territories. In executing our strategy, our goal is to retain significant control over the development process and commercial execution for our products, while participating in a meaningful way in the economics of all drugs that we bring to the market.

We plan to develop our commercial organization around linaclotide, with the intent to leverage this organization for future products. To deliver on our strategy, we intend to create a high-quality commercial organization dedicated to bringing innovative, highly-valued healthcare solutions to our customers, including patients, payors, and healthcare providers.

*Maximizing the Value of Linaclotide in the U.S.*

Our commercial strategy for linaclotide, if approved, will be to establish linaclotide as the prescription product of choice for both IBS-C and CC. We, together with our U.S. commercialization partner Forest, plan to build awareness that patients suffer from multiple, highly bothersome symptoms of IBS-C and CC, and that these symptoms can dramatically impair sufferers' quality of life.

Forest has demonstrated the ability to successfully launch innovative products, penetrate primary care markets and drive the growth of multiple brands in highly competitive markets. Forest brings large and experienced sales, national accounts, trade relations, operations and management teams providing ready access to primary care offices and key managed care accounts. We have strong alignment with Forest and a shared vision for linaclotide. The combined marketing team possesses a deep understanding of gastroenterology and primary care customers, and this knowledge will be leveraged to craft a compelling medical message and promotional campaign.

If linaclotide is approved, we intend to maximize its potential value in the U.S. by demonstrating linaclotide's anticipated clinical benefits and good tolerability in the treatment of the multiple symptoms relating to IBS-C and CC. Based on its unique mechanism of action and its clinical data, we believe linaclotide:

could offer rapid, multi-symptom reduction of IBS-C and CC symptoms;

could address the needs of many of the patients who currently are not fully satisfied with prescription treatment options;

could address the needs of many patients who are treated by healthcare providers with over the counter options, or who are self-medicating with over the counter options;

could enhance patient compliance due to its favorable tolerability; and

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may ease some lingering safety concerns caused by the withdrawal of several prior drugs in this category, because linaclotide has limited systemic exposure and does not impact serotonin receptors, unlike prior drugs indicated for IBS-C and/or CC.

We intend to build strong ties with the medical community by efficiently providing disease awareness information, product information and treatment solutions to enable physicians to more effectively identify, diagnose and manage patient care in these patient populations. We intend to:

educate healthcare providers and provide patient assessment tools to diagnose and monitor treatment response;

establish the importance of pain and discomfort as a driver for patients to seek therapy, and a cause of dissatisfaction with current therapies;

introduce linaclotide's novel mechanism of action, which may provide a rationale for the efficacy and safety of linaclotide; and

position linaclotide as a viable treatment for the effective relief of the multiple symptoms of IBS-C and CC.

We plan to educate patients suffering from symptoms relating to IBS-C and CC to enable them to recognize that they have a real medical disorder and could possibly benefit from treatment. We intend to:

raise patient awareness through the use of symptom awareness messages and outreach to patient advocacy groups, because we believe, as demonstrated in the GERD market, that patients can easily self-identify with symptomatic disorders and can be motivated to demand improvement in care;

improve the patient-physician dialogue, helping physicians to appreciate the significant level of patient suffering, alleviate the embarrassment that can inhibit patients from fully disclosing the extent of their symptoms, and expose the limitations of existing prescription and over the counter therapies; and

empower the millions of patients who previously requested prescription therapies for agents such as Zelnorm and remain frustrated with current treatment options, to demand more comprehensive care and access to linaclotide, if approved.

We believe a successful patient education strategy will be a critical component in closing the significant gap between diagnosed and effectively treated patients. We will consider the use of direct-to-consumer promotional campaigns, which have been used successfully in the past to drive patient awareness and demand for treatment. We also intend to use other efficient communication channels and point of care education solutions to educate and enable patients to discuss their symptoms and treatment response with physicians. A large scale general awareness campaign will be considered after we evaluate the impact of our targeted patient education efforts aimed at currently dissatisfied patients seeking an alternative.

We intend to build a commercial organization, including our own primary and specialty care field force in the U.S., complementing and leveraging our partner Forest's demonstrated ability and experience in successfully launching innovative products and penetrating primary care markets. In addition:

we hope to complement the Forest selling activities with a focused effort on gastrointestinal specialists and the highest volume primary care offices;

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upon any commercial launch of linaclotide, we expect to be responsible for up to 35% of the field sales effort, in a geographically distributed manner, and will be tasked with calling on primary care physicians and specialists;

we expect to be responsible for up to 35% of the medical science liaison efforts; and

we intend to develop innovative internal capabilities, utilizing state of the art technologies to reach patients in varied locations, including the doctor's office, the pharmacy and on the internet, in an effort to encourage the adoption of linaclotide and attempt to optimize patient adherence.

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We also hope to maximize patient access to treatment with linaclotide on affordable terms. We intend to:

create a compelling evidence-based value dossier supported by key opinion leaders and patient advocates to secure payor reimbursement;

offer linaclotide at a price that reflects its anticipated efficacy and safety profile relative to other existing therapies; and

seek an appropriate status for linaclotide on the formularies of managed care payors.

*Maximizing the Value of Linaclotide Outside the U.S.*

We have out-licensed commercialization rights for territories outside of the U.S. to Almirall in Europe and Astellas in Japan, South Korea, Taiwan, Thailand, the Philippines and Indonesia.

In April 2009, we entered into a licensing agreement with Almirall to develop and commercialize linaclotide in Europe (including the Commonwealth of Independent States countries and Turkey) for the treatment of IBS-C and other gastrointestinal conditions. Under the terms of the license agreement, Almirall has paid us \$53 million, which included a \$38 million up-front licensing fee paid upon execution of the license agreement. Remaining pre-commercial licensing fees, milestone payments and related equity investments could total up to \$40 million. In addition, we will receive escalating royalties on linaclotide sales should Almirall receive approval to market and sell linaclotide in Europe. Almirall is responsible for activities and expenses relating to regulatory approval and commercialization in the European market.

Almirall provides access to the highest potential European markets with an established sales presence in each of the United Kingdom, Italy, France, Germany and Spain, and also has a presence in Belgium, Poland, Portugal and Switzerland. Almirall plans to coordinate sales and marketing efforts from its central office in an effort to ensure consistency of the overall brand strategy and objectively assess performance. Almirall's knowledge of the local markets should help to facilitate regulatory access, reimbursement and market penetration through a customized approach to implementing promotional and selling campaigns in the European Union.

In November 2009, we entered into a licensing agreement with Astellas to develop and commercialize linaclotide for the treatment of IBS-C and other gastrointestinal conditions in Japan, South Korea, Taiwan, Thailand, the Philippines and Indonesia. Under the terms of the license agreement, Astellas paid us a \$30 million up-front licensing fee. Remaining pre-commercial milestone payments could total up to \$45 million. Astellas is responsible for activities and expenses relating to regulatory approval and commercialization in those markets. If Astellas receives approval to market and sell linaclotide, we will receive escalating royalties on linaclotide sales.

Astellas is one of Japan's largest pharmaceutical companies and has top commercial capabilities in both primary care and specialty categories throughout Asia. Their demonstrated ability to market innovative medicines and their growing gastrointestinal franchise in Japan make them an ideal partner for Ironwood.

**Pipeline Strategy**

We invest significant effort defining and refining our research and development process and teaching internally our approach to drug-making. We favor programs with early decision points, well validated targets, predictive preclinical models, initial chemical leads and clear paths to approval, all in the context of a target product profile that can address significant unmet or underserved clinical needs. We emphasize data-driven decision making, strive to advance or terminate projects early based on clearly defined go/no go criteria, prioritize programs at all stages and fluidly allocate our capital to the most promising programs. We continue to work diligently to ensure this disciplined approach is ingrained in our culture and processes

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and expect that our research productivity will continue to improve as our team gains more experience and capabilities. Moreover, we hope that as our passion and style of drug-making becomes better validated and more widely known, we will be able to attract additional like-minded researchers to join our cause.

To date, all of our product candidates have been discovered internally. We believe our discovery team has created a number of promising candidates over the past few years and has developed an extensive intellectual property estate in each of these areas. In addition we are actively seeking to identify attractive external opportunities. We utilize the same critical filters for investment when evaluating external programs as we do with our own, internally-derived candidates.

**Pipeline**

We aim to create differentiated, first-in-class/best-in-class medicines that provide relief and clear therapeutic benefits to patients suffering from chronic diseases. To support this vision, we have ongoing efforts to identify product candidates that strengthen our pipeline, including treatments for upper gastrointestinal disorders, pain and inflammation, asthma and allergic disease, and cardiovascular disease.

An example of one of our internally discovered candidates meeting the above criteria is IW-6118, a novel mechanism agent for the treatment of pain that acts by inhibiting the enzyme Fatty Acid Amide Hydrolase, or FAAH. There remains a substantial unmet need for drugs with improved efficacy and side-effect profiles to manage pain, and we believe few novel mechanism agents to treat pain are in clinical development. FAAH metabolizes bioactive lipid molecules, known as fatty acid amides, or FAAs, that have important analgesic and anti-inflammatory properties. Inhibition of FAAH has been shown preclinically to increase levels of FAAs, reduce pain sensation, and decrease inflammation, indicating that FAAH inhibitors could provide an innovative means to provide pain relief in humans.

IW-6118 is a novel small molecule inhibitor of FAAH, that decreased inflammation and pain and elevated FAAs in preclinical models. We have an active investigational new drug application, or IND, for IW-6118 and are currently investigating the safety, tolerability, and pharmacokinetic properties of this molecule in Phase 1 studies. In addition, the effects of IW-6118 on the plasma levels of FAAs are also being assessed. Our data indicate that IW-6118 has favorable pharmacokinetics and that IW-6118 dosing elevates FAAs, suggesting that this molecule effectively inhibits FAAH in humans.

**Manufacturing and Supply**

We do not have manufacturing capabilities, and we currently use contract manufacturers for the manufacturing of linaclotide and our other product candidates. Accordingly, unless or until we develop or acquire sufficient manufacturing capabilities, we will depend on third parties to manufacture linaclotide and any future products that we may develop or acquire. We are in the process of seeking long-term commercial supply contracts with two active pharmaceutical ingredient manufacturers, and we anticipate that we will be able to negotiate these third-party agreements on commercially reasonable terms. We believe both manufacturers have the capabilities to produce linaclotide in accordance with current good manufacturing practices, or GMP, on a sufficient scale to meet our commercial needs. It is a fundamental part of our commercial strategy to maintain two or more active pharmaceutical ingredient suppliers to ensure continuity in our supply chain. In addition, we have in-house expertise to manage our two contract manufacturing partners effectively.

Each of our collaboration partners, Forest, Almirall and Astellas, is responsible for completing the drug product manufacturing process of linaclotide by finishing and packaging linaclotide active pharmaceutical ingredient into capsules, and we will be dependent upon our partners' success in producing drug product for commercial sales. We believe these partners have sufficient capabilities to complete the manufacturing process successfully in-house.

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Linaclotide is a 14 amino acid peptide, manufactured via solid-phase synthesis using naturally occurring amino acids. There is little or no precedent for producing a convenient, room-temperature stable dosage form of an orally-delivered peptide drug with a significant market opportunity. Our team developed a formulation with simple, safe excipients that was shown to be stable at room temperature for at least 24 months in various development batches. In addition, we have demonstrated stability under accelerated conditions of 40°C with 75% relative humidity for six months, which, in accordance with industry standards, is predictive of stability of greater than 18 months at room temperature conditions. We optimized our formulation following the achievement of development batch stability, and prepared scale up batches and Phase 3 clinical trial material for stability testing. Both show acceptable stability under accelerated conditions for six months and have shown acceptable room temperature stability at the six and 12 month time points. We will continue to monitor those batches as well as additional drug product registration batches for stability in the coming months.

We believe our efforts to date will lead to a formulation that is both cost effective and able to meet the stability requirements for pharmaceutical products. Our work in this area has created an opportunity to seek additional intellectual property protections around the linaclotide program. In conjunction with Forest, we have filed patent applications worldwide to cover the room temperature stable linaclotide formulation as well as related formulations. If claims covering the room temperature stable formulation are allowed, they would expire in 2029 in the U.S. These patent rights would be subject to any potential patent term adjustments or extensions and/or supplemental protection certificates extending such term extensions in countries where such extensions may become available.

**Microbia**

We are the majority stockholder of Microbia, Inc., or Microbia, a biomanufacturing company based in Lexington, Massachusetts. Microbia was spun out of Ironwood in 2006 and focuses on building a specialty biochemicals business based on a proprietary strain-development platform. Microbia's technology platform has been designed to produce high-quality, competitively-priced specialty ingredients and industrial biomaterials from renewable resources.

Microbia designs microbes for the cost-effective biomanufacturing of products from renewable resources. This technology may be applicable to a wide array of product opportunities. Microbia's initial focus is on carotenoids, which are of a broad class of chemicals based on the 5-carbon isoprene structure. Commonly found in nature, these chemicals have traditionally been manufactured from petrochemical-derived raw materials. Current commercial applications for carotenoids include natural flavor and aroma compounds, nutritional supplements, pharmaceutical intermediates and a variety of industrial chemicals. In addition to these already developed uses, newer applications under development include high octane biofuels and other industrial chemicals such as rubber substitutes.

**Patents and Proprietary Rights**

We actively seek to protect the proprietary technology that we consider important to our business, including pursuing patents that cover our products and compositions, their methods of use and the processes for their manufacture, as well as any other relevant inventions and improvements that are commercially important to the development of our business. We also rely on trade secrets that may be important to the development of our business.

Our success will depend significantly on our ability to obtain and maintain patent and other proprietary protection for the technology, inventions and improvements we consider important to our business; defend our patents; preserve the confidentiality of our trade secrets; and operate without infringing the patents and proprietary rights of third parties.

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*Linaclotide and GC-C Patent Portfolio*

Our linaclotide patent portfolio is currently composed of two issued U.S. patents; a granted European patent (which has been validated in 31 European countries and in Hong Kong); four issued patents in other foreign jurisdictions; nine pending U.S. non-provisional patent applications; five pending U.S. provisional patent applications; two pending Patent Cooperation Treaty, or PCT, applications; and 46 pending foreign patent applications, all of which relate to issued U.S. patents, pending U.S. non-provisional patent applications or pending PCT applications. We own all of the issued patents and own or jointly own all of the pending applications.

The issued U.S. patents, which will expire in 2025, contain claims directed to the linaclotide molecule, pharmaceutical compositions thereof, methods of using linaclotide to treat gastrointestinal disorders and processes for making the molecule. If claims in our pending patent covering the room temperature stable formulation are allowed, they would expire in August 2029. The granted European patent, which will expire in 2024, contains claims directed to the linaclotide molecule, pharmaceutical compositions thereof and uses of linaclotide to prepare medicaments for treating gastrointestinal disorders. The pending PCT, U.S., foreign and provisional applications contain claims directed to linaclotide and related molecules, pharmaceutical formulations thereof, methods of using linaclotide to treat various diseases and disorders and processes for making the molecule. These patent applications, if issued, will expire between 2024 and 2030.

In addition to the patents and patent applications related to linaclotide, we currently have one issued U.S. patent, five pending U.S. non-provisional patent applications, one pending PCT application and five pending foreign non-provisional patent applications, all of which relate to the U.S. issued patent or pending U.S. non-provisional patent applications, which are directed to other GC-C agonist molecules, pharmaceutical compositions thereof, methods of using these molecules to treat various diseases and disorders and processes of synthesizing the molecules. The issued U.S. patent will expire in 2024. The patent applications, if issued, will expire between 2024 and 2029.

*Additional Intellectual Property*

Our pipeline patent portfolio is currently composed of three issued U.S. patents; a granted European patent (which has been validated in 31 European countries and in Hong Kong); six issued patents in other foreign jurisdictions; 15 pending U.S. non-provisional patent applications; three pending U.S. provisional applications; nine pending PCT applications; and 67 pending foreign patent applications, all of which relate to issued U.S. patents or pending U.S. non-provisional patent applications. We own all of the issued patents and own or jointly own all of the pending applications. One of the issued U.S. patents expires in 2022, and the other two patents expire in 2024. The European patent and the other foreign issued patents expire in 2024. The pending patent applications, if issued, will expire between 2024 and 2030.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the date of filing the non-provisional application. In the U.S., a patent's term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office in granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier-filed patent.

The patent term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, which permits patent term restoration as compensation for the patent term lost during the FDA regulatory review process. The Hatch-Waxman Act permits a patent term extension of up to five years beyond the expiration of the patent. The length of the patent term extension is related to the length of time the drug is under regulatory review. Patent extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Similar provisions are available in Europe and other foreign jurisdictions to extend the term of a patent that covers an approved drug. We expect to apply for patent term extensions for some of

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our current patents, depending upon the length of clinical trials and other factors involved in the filing of an NDA.

**Government Regulation**

In the United States, pharmaceutical products are subject to extensive regulation by the FDA. The Federal Food, Drug, and Cosmetic Act and other federal and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. The FDA has very broad enforcement authority and failure to abide by applicable regulatory requirements can result in administrative or judicial sanctions being imposed on us, including warning letters, refusals of government contracts, clinical holds, civil penalties, injunctions, restitution, disgorgement of profits, recall or seizure of products, total or partial suspension of production or distribution, withdrawal of approval, refusal to approve pending applications, and criminal prosecution.

***FDA Approval Process***

We believe that our product candidates, including linaclotide, will be regulated by the FDA as drugs. No manufacturer may market a new drug until it has submitted an NDA to the FDA, and the FDA has approved it. The steps required before the FDA may approve an NDA generally include:

preclinical laboratory tests and animal tests conducted in compliance with FDA's good laboratory practice requirements;

development, manufacture and testing of active pharmaceutical product and dosage forms suitable for human use in compliance with current good manufacturing practices, or GMP;

the submission to the FDA of an investigational new drug application, or IND, for human clinical testing, which must become effective before human clinical trials may begin;

adequate and well-controlled human clinical trials to establish the safety and efficacy of the product for its specific intended use(s);

the submission to the FDA of an NDA; and

FDA review and approval of the NDA.

Preclinical tests include laboratory evaluation of the product candidate, as well as animal studies to assess the potential safety and efficacy of the product candidate. The conduct of the pre-clinical tests must comply with federal regulations and requirements including good laboratory practices. We must submit the results of the preclinical tests, together with manufacturing information, analytical data and a proposed clinical trial protocol to the FDA as part of an IND, which must become effective before we may commence human clinical trials. The IND will automatically become effective 30 days after its receipt by the FDA, unless the FDA raises concerns or questions before that time about the conduct of the proposed trials. In such a case, we must work with the FDA to resolve any outstanding concerns before clinical trials can proceed. We cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trials. The study protocol and informed consent information for patients in clinical trials must also be submitted to an institutional review board for approval. An institutional review board may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the institutional review board's requirements or may impose other conditions.

Clinical trials involve the administration of the product candidate to humans under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials are typically conducted in three sequential phases, though the phases may overlap or be combined. In Phase I, the initial introduction of the drug into healthy human subjects, the drug is usually tested for





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safety (adverse effects), dosage tolerance and pharmacologic action, as well as to understand how the drug is taken up by and distributed within the body. Phase 2 usually involves studies in a limited patient population (individuals with the disease under study) to:

evaluate preliminarily the efficacy of the drug for specific, targeted conditions;

determine dosage tolerance and appropriate dosage as well as other important information about how to design larger Phase 3 trials; and

identify possible adverse effects and safety risks.

Phase 3 trials generally further evaluate clinical efficacy and test for safety within an expanded patient population. The conduct of the clinical trials is subject to extensive regulation, including compliance with good clinical practice regulations and guidance.

The FDA may order the temporary or permanent discontinuation of a clinical trial at any time or impose other sanctions if it believes that the clinical trial is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial patients. We may also suspend clinical trials at any time on various grounds.

The results of the preclinical and clinical studies, together with other detailed information, including the manufacture and composition of the product candidate, are submitted to the FDA in the form of an NDA requesting approval to market the drug. FDA approval of the NDA is required before marketing of the product may begin in the U.S. If the NDA contains all pertinent information and data, the FDA will "file" the application and begin review. The FDA may "refuse to file" the NDA if it does not contain all pertinent information and data. In that case, the applicant may resubmit the NDA when it contains the missing information and data. Once the submission is accepted for filing, the FDA begins an in-depth review. The FDA has agreed to certain performance goals in the review of new drug applications. Most such applications for non-priority drug products are reviewed within 10 months. The review process, however, may be extended by FDA requests for additional information, preclinical or clinical studies, clarification regarding information already provided in the submission, or submission of a risk evaluation and mitigation strategy. The FDA may refer an application to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. Before approving an NDA, the FDA will typically inspect the facilities at which the product candidate is manufactured and will not approve the product candidate unless GMP compliance is satisfactory. FDA also typically inspects facilities responsible for performing animal testing, as well as clinical investigators who participate in clinical trials. The FDA may refuse to approve an NDA if applicable regulatory criteria are not satisfied, or may require additional testing or information. The FDA may also limit the indications for use and/or require post-marketing testing and surveillance to monitor the safety or efficacy of a product. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing.

The testing and approval process requires substantial time, effort and financial resources, and our product candidates may not be approved on a timely basis, if at all. The time and expense required to perform the clinical testing necessary to obtain FDA approval for regulated products can frequently exceed the time and expense of the research and development initially required to create the product. The results of preclinical studies and initial clinical trials of our product candidates, including linaclotide, are not necessarily predictive of the results from large-scale clinical trials, and clinical trials may be subject to additional costs, delays or modifications due to a number of factors, including difficulty in obtaining enough patients, investigators or product candidate supply. Failure by us or our collaborators, licensors or licensees, including Forest, Almirall and Astellas, to obtain, or any delay in obtaining, regulatory approvals or in complying with requirements could adversely affect the commercialization of product candidates and our ability to receive product or royalty revenues.

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***Hatch-Waxman Act***

The Hatch-Waxman Act established abbreviated approval procedures for generic drugs. Approval to market and distribute these drugs is obtained by submitting an Abbreviated New Drug Application, or ANDA, with the FDA. The application for generic drugs is "abbreviated" because it need not include preclinical or clinical data to demonstrate safety and effectiveness and may instead rely on the FDA's previous finding that the brand drug, or reference drug, is safe and effective. In order to obtain approval of an ANDA, an applicant must, among other things, establish that its product is bioequivalent to an existing approved drug and that it has the same active ingredient(s), strength, dosage form, and the same route of administration. A generic drug is considered bioequivalent to its reference drug if testing demonstrates that the rate and extent of absorption of the generic drug is not significantly different from the rate and extent of absorption of the reference drug when administered under similar experimental conditions.

The Hatch-Waxman Act also provides incentives by awarding, in certain circumstances, certain legal protections from generic competition. This protection comes in the form of a non-patent exclusivity period, during which the FDA may not accept or approve a generic drug, whether the application for such drug is submitted through an ANDA or a through another form of application, known as a 505(b)(2) application.

The Hatch-Waxman Act grants five years of exclusivity when a company develops and gains NDA approval of a new chemical entity that has not been previously approved by the FDA. This exclusivity provides that the FDA may not accept an ANDA or 505(b)(2) application for five years after the date of approval of previously approved drug, or four years in the case of an ANDA or 505(b)(2) application that challenges a patent claiming the reference drug (see discussion below regarding patent challenges). The Hatch-Waxman Act also provides three years of exclusivity for approved applications for drugs that are not new chemical entities, if the application contains the results of new clinical investigations (other than bioavailability studies) that were essential to approval of the application. Examples of such applications include applications for new indications, dosage forms (including new drug delivery systems), strengths, or conditions of use for an already approved product. This three-year exclusivity period protects against FDA approval of ANDAs and 505(b)(2) applications for generic drugs that include the innovation that required clinical data; it does not prohibit the FDA from accepting or approving ANDAs or 505(b)(2) NDAs for generic drugs that do not include the innovation.

*Paragraph IV Certifications.* Under the Hatch-Waxman Act, NDA applicants and NDA holders must provide information about certain patents claiming their drugs for listing in the FDA publication, "Approved Drug Products with Therapeutic Equivalence Evaluations," also known as the "Orange Book." When an ANDA or 505(b)(2) application is submitted, it must contain one of several possible certifications regarding each of the patents listed in the Orange Book for the reference drug. A certification that a listed patent is invalid or will not be infringed by the sale of the proposed product is called a "Paragraph IV" certification.

Within 30 days of the acceptance by the FDA of an ANDA or 505(b)(2) application containing a Paragraph IV certification, the applicant must notify the NDA holder and patent owner that the application has been submitted, and provide the factual and legal basis for the applicant's opinion that the patent is invalid or not infringed. The NDA holder or patent holder may then initiate a patent infringement suit in response to the Paragraph IV notice. If this is done within 45 days of receiving notice of the Paragraph IV certification, a one-time 30-month stay of the FDA's ability to approve the ANDA or 505(b)(2) application is triggered. The FDA may approve the proposed product before the expiration of the 30-month stay only if a court finds the patent invalid or not infringed, or if the court shortens the period because the parties have failed to cooperate in expediting the litigation.

*Patent Term Restoration.* Under the Hatch-Waxman Act, a portion of the patent term lost during product development and FDA review of an NDA or 505(b)(2) application is restored if approval of the application is the first permitted commercial marketing of a drug containing the active ingredient. The patent term restoration period is generally one-half the time between the effective date of the IND and the

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date of submission of the NDA, plus the time between the date of submission of the NDA and the date of FDA approval of the product. The maximum period of restoration is five years, and the patent cannot be extended to more than 14 years from the date of FDA approval of the product. Only one patent claiming each approved product is eligible for restoration and the patent holder must apply for restoration within 60 days of approval. The U.S. Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for patent term restoration.

***Other Regulatory Requirements***

After approval, drug products are subject to extensive continuing regulation by the FDA, which include company obligations to manufacture products in accordance with GMP, maintain and provide to the FDA updated safety and efficacy information, report adverse experiences with the product, keep certain records and submit periodic reports, obtain FDA approval of certain manufacturing or labeling changes, and comply with FDA promotion and advertising requirements and restrictions. Failure to meet these obligations can result in various adverse consequences, both voluntary and FDA-imposed, including product recalls, withdrawal of approval, restrictions on marketing, and the imposition of civil fines and criminal penalties against the NDA holder. In addition, later discovery of previously unknown safety or efficacy issues may result in restrictions on the product, manufacturer or NDA holder.

We and any manufacturers of our products are required to comply with applicable FDA manufacturing requirements contained in the FDA's GMP regulations. GMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation. The manufacturing facilities for our products must meet GMP requirements to the satisfaction of the FDA pursuant to a pre-approval inspection before we can use them to manufacture our products. We and any third-party manufacturers are also subject to periodic inspections of facilities by the FDA and other authorities, including procedures and operations used in the testing and manufacture of our products to assess our compliance with applicable regulations.

With respect to post-market product advertising and promotion, the FDA imposes a number of complex regulations on entities that advertise and promote pharmaceuticals, which include, among others, standards for direct-to-consumer advertising, promoting drugs for uses or in patient populations that are not described in the drug's approved labeling (known as "off-label use"), industry-sponsored scientific and educational activities, and promotional activities involving the internet. Failure to comply with FDA requirements can have negative consequences, including adverse publicity, enforcement letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such off-label uses.

Changes to some of the conditions established in an approved application, including changes in indications, labeling, or manufacturing processes or facilities, require submission and FDA approval of a new NDA or NDA supplement before the change can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that in the original application, and the FDA uses the same procedures and actions in reviewing NDA supplements as it does in reviewing NDAs.

Adverse event reporting and submission of periodic reports is required following FDA approval of an NDA. The FDA also may require post-marketing testing, known as Phase 4 testing, risk minimization action plans, and surveillance to monitor the effects of an approved product or place conditions on an approval that could restrict the distribution or use of the product.

Outside the United States, our and our collaborators' abilities to market a product are contingent upon receiving marketing authorization from the appropriate regulatory authorities. The requirements governing marketing authorization, pricing and reimbursement vary widely from jurisdiction to jurisdiction. At present, foreign marketing authorizations are applied for at a national level, although

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within the European Union registration procedures are available to companies wishing to market a product in more than one European Union member state.

**Corporate Information**

We were incorporated in Delaware in 1998. Prior to April 7, 2008, we were named Microbia, Inc., which is now the name of our majority-owned subsidiary (formerly Microbia Precision Engineering, Inc.). Our address is 320 Bent Street, Cambridge, Massachusetts 02141. Our telephone number is 617-621-7722. Our website address is [www.ironwoodpharma.com](http://www.ironwoodpharma.com). Information contained in, and that can be accessed through, our website is not incorporated into and does not form a part of this prospectus.

**Employees**

As of December 31, 2009, we had 165 employees. Approximately 50 were scientists engaged in discovery research, 73 were in our drug development organization, and 42 were in sales and general and administrative functions. None of our employees are represented by a labor union, and we consider our employee relations to be good.

**Property and Facilities**

Our corporate headquarters and principal operations are located in Cambridge, Massachusetts, where we lease and occupy approximately 114,400 rentable square feet of office and laboratory space in two buildings located at 301 Binney Street and 320 Bent Street. Pursuant to our lease at 301 Binney Street, we will add approximately 38,800 square feet of lab and office space at this location on or before January 1, 2011. The term of our lease at 301 Binney Street expires on January 31, 2016, with our option to extend the term of the lease for two additional five year periods. The term of our lease at 320 Bent Street expires on December 31, 2010, with our option to extend the term of the lease for three additional five year periods. We believe that our facilities are suitable and adequate for our needs.

**Legal Proceedings**

On November 7, 2008, we filed a complaint in the United States District Court for the District of Columbia (*Ironwood Pharmaceuticals, Inc. v. Hon. Jon W. Dudas*) against the U.S. Patent and Trademark Office seeking judgment that the patent term adjustment of U.S. Patent 7,371,727 be lengthened from 411 days to 702 days. We believe that the U.S. Patent and Trademark Office miscalculated the patent term adjustment for one of our patents. The case is currently stayed pending final disposition of the appeal of *Wyeth and Elan Pharma International Ltd. v. Hon. Jon W. Dudas* regarding a similar legal issue. The Wyeth appeal was decided January 7, 2010 in favor of Wyeth and the U.S. Patent and Trademark Office announced on January 21, 2010 that it would not seek further review of this case. Neither the U.S. Patent and Trademark Office nor the Department of Justice has indicated when the stay will be lifted or what action will be taken in our suit or in any of the over 100 cases filed by other parties as a result of the Wyeth decision at the district court level last year. We do not expect that this litigation, regardless of the decision, will have a material adverse effect on our business.

Table of Contents**MANAGEMENT****Executive Officers and Directors**

The following table sets forth the name, age and position of each of our executive officers and directors as of the date of this offering:

| Name                                       | Age | Position   |
|--|-----|--|
| Peter M. Hecht, Ph.D.                      | 46  | Chief Executive Officer, Director  |
| Michael J. Higgins                         | 47  | Senior Vice President, Chief Operating Officer and Chief Financial Officer |
| Mark G. Currie, Ph.D.                      | 55  | Senior Vice President, R&D and Chief Scientific Officer                    |
| Thomas A. McCourt                          | 52  | Senior Vice President, Marketing and Sales and Chief Commercial Officer    |
| Joseph C. Cook, Jr. <sup>(1)(2)(4)</sup>   | 68  | Director and Chairman of the Board   |
| George H. Conrades <sup>(1)(2)</sup>       | 70  | Director   |
| David Ebersman <sup>(3)</sup>              | 40  | Director   |
| Marsha H. Fanucci <sup>(1)</sup>           | 56  | Director   |
| Terrance G. McGuire <sup>(2)</sup>         | 53  | Director   |
| Gina Bornino Miller <sup>(2)</sup>         | 49  | Director   |
| Bryan E. Roberts, Ph.D. <sup>(3)(5)</sup>  | 43  | Director   |
| David E. Shaw <sup>(3)</sup>               | 58  | Director   |
| Christopher T. Walsh, Ph.D. <sup>(3)</sup> | 65  | Director   |

- (1) Member of audit committee.
- (2) Member of governance and nominating committee.
- (3) Member of compensation committee.
- (4) Mr. Cook will step down as chairman of the board of directors (but will remain a director) in July 2010.
- (5) Dr. Roberts will become the chairman of the board of directors in July 2010.

**Peter M. Hecht** has served as our chief executive officer since our founding in 1998. Prior to founding Ironwood, Dr. Hecht was a research fellow at Whitehead Institute for Biomedical Research. Dr. Hecht serves on the boards of directors of Whitehead Institute and Microbia, Inc., our majority-owned subsidiary. He also serves on the Leadership Council for The David H. Koch Institute for Integrative Cancer Research at the Massachusetts Institute of Technology and the advisory board of Infante Sano. Dr. Hecht earned a B.S. in mathematics and an M.S. in biology from Stanford University, and holds a Ph.D. in molecular biology from the University of California at Berkeley.

**Michael J. Higgins** has served as our chief operating officer and chief financial officer since joining Ironwood in 2003. Prior to 2003, Mr. Higgins held a variety of senior business positions at Genzyme Corporation, including vice president of corporate finance. He serves on the board of directors of Microbia, Inc., our majority-owned subsidiary. Mr. Higgins earned a B.S. from Cornell University and an M.B.A. from the Amos Tuck School of Business Administration at Dartmouth College.

**Mark G. Currie** serves as our senior vice president of research and development and chief scientific officer, and has led our R&D efforts since joining us in 2002. Prior to joining Ironwood, he directed cardiovascular and central nervous system disease research as vice president of discovery research at Sepracor Inc. Previously, Dr. Currie initiated, built and led discovery pharmacology and also served as

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director of arthritis and inflammation at Monsanto Company. Dr. Currie earned a B.S. in biology from the University of South Alabama and holds a Ph.D. in cell biology from the Bowman-Gray School of Medicine of Wake Forest University.

**Thomas A. McCourt** has served as our senior vice president of marketing and sales and chief commercial officer since joining Ironwood in September 2009. Prior to joining Ironwood, Mr. McCourt led the U.S. brand team for denosumab at Amgen Inc. from April 2008 to August 2009. Prior to that, he was with Novartis AG from 2001 to 2008, where he directed the launch and growth of Zelnorm for the treatment of patients with IBS-C and chronic constipation and held a number of senior commercial roles, including vice president of strategic marketing and operations. Mr. McCourt was also part of the founding team at Astra Merck Inc., leading the development of the medical affairs and science liaison group and then serving as brand manager for Prilosec. Mr. McCourt has a degree in pharmacy from the University of Wisconsin.

**Joseph C. Cook, Jr.** has served as our chairman of the board of directors since co-founding our company in 1998. Mr. Cook is a principal and co-founder of Mountain Group Capital, LLC, a private investment company. He serves on the board of directors for Corcept Therapeutics, Inc., a biopharmaceutical company, and is a founder and serves as chairman of the board of Clinical Products Ltd., a company marketing a medical food for people with diabetes. Mr. Cook served as chairman of the board of Amylin Pharmaceuticals, Inc. from 1998 to 2009 and was chief executive officer from 1998 to 2003. He spent 28 years at Eli Lilly and Co., retiring from Lilly in 1993 after spending his last seven years there in a variety of senior management positions. In 2009, Mr. Cook received the Pinnacle Award for Life Science Leadership from the Rady School of Management at the University of California at San Diego. Mr. Cook received a B.S. in Engineering from the University of Tennessee in 1965.

**George H. Conrades** has served as director since December 2005. Mr. Conrades has been the executive chairman of Akamai Technologies, Inc. since 2005, prior to which he served as their chairman and chief executive officer from 1999 to 2005 and as a director from 1998 to 2005. Mr. Conrades has also been a venture partner of Polaris Venture Partners, an early stage investment company, since August 1998. From August 1997 to July 1998, Mr. Conrades served as executive vice president of GTE and president of GTE Internetworking, an integrated telecommunications services firm. Mr. Conrades served as chief executive officer of BBN Corporation, a national Internet services provider and internet technology research and development company, from January 1994 until its acquisition by GTE Internetworking in July 1997. Prior to joining BBN Corporation, Mr. Conrades was a senior vice president at International Business Machines Corporation, or IBM, a developer of computer systems, software, storage systems and microelectronics, and a member of IBM's corporate management board. Mr. Conrades is currently a director of Harley-Davidson, Inc., a motorcycle manufacturer, and Oracle Corporation, an enterprise software company, and currently serves on the Board of Trustees for the Scripps Research Institute, Ohio Wesleyan University and New Profit, an early stage venture philanthropy investment organization. Mr. Conrades received a B.S. in physics and math from Ohio Wesleyan University and an M.B.A. from the University of Chicago.

**David Ebersman** has served as director since July 2009. Mr. Ebersman is currently chief financial officer of Facebook, a privately-held social utility company. Prior to joining Facebook, he worked in a number of positions at Genentech, Inc., a leading public biotechnology company, until its acquisition by Hoffmann-La Roche in March 2009. At Genentech, he was appointed executive vice president in January 2006 and chief financial officer in March 2005. Previously, he served as senior vice president, finance from January 2005 through March 2005 and senior vice president, product operations from May 2001 through January 2005. He joined Genentech in February 1994 as a business development analyst and subsequently served as manager, business development from February 1995 to February 1996, director, business development from February 1996 to March 1998, senior director, product development from March 1998 to February 1999 and vice president, product development from February 1999 to May 2001. Prior to joining Genentech, Mr. Ebersman held the position of research analyst at Oppenheimer & Company, Inc. Mr. Ebersman was selected as a Fellow in the Henry Crown Fellowship Program. Mr. Ebersman received a B.A. in economics and international relations from Brown University.

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**Marsha H. Fanucci** has served as director since October 2009. Ms. Fanucci served as senior vice president and chief financial officer of Millennium Pharmaceuticals, Inc. from July 2004 through January 2009, where she was responsible for corporate strategy, treasury, financial planning and reporting and operations. While at Millennium, she also served as vice president, finance and corporate strategy and vice president, corporate development and strategy. Previously, she was vice president of corporate development and strategy at Genzyme Corporation, a biotechnology company, from 1998 to 2000. From 1987 to 1998, Ms. Fanucci was employed at Arthur D. Little, Inc. where she most recently served as vice president and director. Ms. Fanucci presently serves on the board of directors of Momenta Pharmaceuticals, Inc. She received her B.S. in pharmacy from West Virginia University and her M.B.A. from Northeastern University.

**Terrance G. McGuire** has served as director since 1998. Mr. McGuire was a co-founder and is currently a general partner of Polaris Venture Partners. Prior to starting Polaris Venture Partners in 1996, Mr. McGuire spent seven years at Burr, Egan, Deleage & Co., investing in early stage medical and information technology companies. He serves on the board of directors of several private companies and has served on the boards of Akamai Technologies, Inc., Aspect Medical Systems, Inc., Cubist Pharmaceuticals, Inc., deCODE genetics, Inc. and various private companies. Mr. McGuire is currently the chairman of the National Venture Capital Association, which represents ninety percent of the venture capitalists in the U.S., chairman of the board of the Thayer School of Engineering at Dartmouth College, and a member of the boards of The David H. Koch Institute for Integrative Cancer Research at the Massachusetts Institute of Technology and The Arthur Rock Center for Entrepreneurship at Harvard Business School. Mr. McGuire earned a B.S. in physics and economics from Hobart College, an M.S. in engineering from The Thayer School at Dartmouth College and an M.B.A from Harvard Business School.

**Gina Bornino Miller** has served as director since our founding in 1998. Prior to co-founding Ironwood, Ms. Bornino Miller was the president and general manager for Quantum Corporation's Specialty Storage Products Group between 1993 and 1996. Ms. Bornino Miller's past work experience also includes vice president of corporate development and planning for Quantum Corporation, director of strategic planning at Silicon Graphics, Inc., various engineering and management positions in the high tech industry and strategy consulting across a variety of other industries. Ms. Bornino Miller serves as chairperson of the board of directors of Microbia, Inc., our majority-owned subsidiary.

**Bryan E. Roberts** has served as director since 2001. Dr. Roberts joined Venrock, a venture capital investment firm, in 1997, where he serves as partner. From 1989 to 1992, Dr. Roberts worked in the corporate finance department of Kidder, Peabody & Co., a brokerage company. Dr. Roberts serves on the board of directors of several private companies, and he has previously served on the board of directors of athenahealth, Inc., XenoPort, Inc. and Sirna Therapeutics, Inc. He received a B.A. from Dartmouth College and a Ph.D. in chemistry and chemical biology from Harvard University.

**David E. Shaw** has served as director since 2004. Mr. Shaw is managing director of Black Point Group LLC, a private equity partnership, and a partner with Venrock, a venture capital firm. Mr. Shaw was formerly an advisor to New Mountain Capital, LLC from 2004 to 2007. He served as executive chairman of Ikaria Holdings, Inc., a pharmaceutical company, from 2008-2009 and was their chief executive officer from 2007-2008. Mr. Shaw also serves as chairman of the board and chief executive officer of Fetch Enterprises, Inc. He is the founder and former chief executive of IDEXX Laboratories Inc., a medical technology company, and he has been active in other life science firms. Mr. Shaw holds a B.A. from the University of New Hampshire and an M.B.A. from the University of Maine.

**Christopher T. Walsh** has served as director since July 2003. Dr. Walsh has been the Hamilton Kuhn Professor of Biological Chemistry and Molecular Pharmacology at Harvard Medical School since 1991 and formerly was president of the Dana-Farber Cancer Institute and chairman of the Department of Biological Chemistry and Molecular Pharmacology at Harvard Medical School. He has performed extensive research in enzyme stereochemistry, reaction mechanisms and the mechanisms of action of anti-infective and



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immunosuppressive agents. Dr. Walsh serves on the Scientific Advisory Board for Eisai Inc., Epizyme Corporation, LS9, Inc. and the Bioventures Group of Health Care Ventures LLC. Dr. Walsh is also a board member of Achaogen Inc. and Proteostasis Therapeutics, Inc. Dr. Walsh received an A.B. in biology from Harvard University and a Ph.D. in life sciences from The Rockefeller University, New York.

There are no family relationships among any of our directors or executive officers.

**Code of Ethics**

We have adopted a code of business conduct and ethics applicable to our directors, executive officers and all other employees. A copy of that code will be available on our corporate website at <http://www.ironwoodpharma.com> upon completion of this offering. Any amendments to the code of ethics and business conduct, and any waivers thereto involving our executive officers, also will be available on our corporate website. A printed copy of these documents will be made available upon request. The content on our website is not incorporated by reference into this prospectus.

**Board Composition**

Our board of directors currently consists of ten members, nine of whom are non-employee members. Each director holds office until his or her successor is duly elected and qualified or until his or her death, resignation or removal.

In accordance with the terms of our certificate of incorporation and our by-laws that will become effective upon the completion of this offering, our board of directors will be divided into three classes, each of whose members will serve for staggered three year terms. Upon the completion of this offering, the members of the classes will be divided as follows:

the class I directors will be Drs. Hecht and Roberts, Ms. Bornino Miller and Mr. Shaw, and their term will expire at the annual meeting of stockholders to be held in 2011;

the class II directors will be Messrs. Conrades, Cook and Ebersman, and their term will expire at the annual meeting of stockholders to be held in 2012; and

the class III directors will be Ms. Fanucci, Mr. McGuire and Dr. Walsh, and their term will expire at the annual meeting of stockholders to be held in 2013.

Our certificate of incorporation that will become effective upon the completion of this offering will state that our board shall consist of between one and fifteen members, and the precise number of directors shall be fixed by a resolution of our board. Any vacancy in the board, including a vacancy that results from an increase in the number of directors, will be filled by a vote of the majority of the directors then in office. Any additional directorships resulting from an increase in the number of directors will be apportioned by the board among the three classes. This classification of the board of directors may have the effect of delaying or preventing changes in our control or management.

Our certificate of incorporation that will become effective upon the completion of this offering will provide that our directors may be removed only for cause by a majority of the stockholders entitled to vote on such removal. Upon the expiration of the term of a class of directors, directors in that class will be eligible to be elected for a new three-year term at the annual meeting of stockholders in the year in which their term expires.

As set forth in our corporate governance guidelines, our board of directors anticipates that its chairperson shall rotate every five years. The next rotation is scheduled to take place in July 2010, at which time Mr. Cook will step down as the chairman of the board (but will remain our director) and Dr. Roberts will assume the chairmanship.

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**Director Independence**

Under Rules 5605 and 5615 of the NASDAQ Marketplace Rules, a majority of a listed company's board of directors must be comprised of independent directors within one year of listing. In addition, NASDAQ Marketplace Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and governance and nominating committees be independent and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act. Under Rule 5605(a)(2) of the NASDAQ Marketplace Rules, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Based upon information requested from and provided by each director concerning their background, employment and affiliations, including family relationships, our board of directors has determined that none of Messrs. Cook, Conrades, Ebersman, McGuire and Shaw, Mss. Bornino Miller and Fanucci, and Drs. Roberts and Walsh, representing nine of our ten directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under Rule 5605(a)(2) of the NASDAQ Marketplace Rules. Our board of directors also determined that Messrs. Cook and Conrades and Ms. Fanucci, who comprise our audit committee; Messrs. Conrades, Cook and McGuire and Ms. Bornino Miller, who comprise our governance and nominating committee; and Messrs. Ebersman and Shaw and Drs. Roberts and Walsh, who comprise our compensation and HR committee, all satisfy the independence standards for such committees established by Rule 10A-3 under the Exchange Act, the SEC and the NASDAQ Marketplace Rules, as applicable. In making such determination, the board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances the board of directors deemed relevant in determining their independence.

**Board Committees**

Our board of directors has established an audit committee, a governance and nominating committee and a compensation and HR committee. Each committee operates under a charter that has been approved by our board. The chair of each of our committees will rotate every three to five years.

**Audit Committee.** The members of our audit committee are Messrs. Cook and Conrades and Ms. Fanucci. Mr. Cook presently chairs the audit committee. In July 2010, Mr. Cook will step down as chair of the audit committee (but will remain a member), at which time Ms. Fanucci will assume the chair. Our audit committee assists our board of directors in its oversight of the integrity of our financial statements and our independent registered public accounting firm's qualifications, independence and performance.

Our audit committee's responsibilities include:

reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements, earnings releases and related disclosures;

reviewing and discussing with management and our independent registered public accounting firm our internal controls and internal auditing procedures, including any material weaknesses in either;

discussing our accounting policies and all material correcting adjustments with our management and our independent registered public accounting firm;

monitoring our control over financial reporting and disclosure controls and procedures;

appointing, overseeing, setting the compensation for and, when necessary, terminating our independent registered public accounting firm;

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approving all audited services and all permitted non-audit, tax and other services to be performed by our independent registered public accounting firm;

discussing with the independent registered public accounting firm its independence and ensuring that it receives the written disclosures regarding these communications required by the Public Company Accounting Oversight Board;

reviewing and approving all transactions or series of similar transactions to which we were or are a party in which the amount involved exceeded or exceeds \$120,000 and in which any of our directors, executive officers, holders of more than 5% of any class of our voting securities, or any member of the immediate family of any of the foregoing persons, had or will have a direct or indirect material interest, other than compensation arrangements with directors and executive officers;

recommending whether the audited financial statements should be included in our annual report and preparing the audit committee report required by SEC rules;

reviewing all material communications between our management and our independent registered public accounting firm;

approving, reviewing and updating our code of business conduct and ethics; and

establishing procedures for the receipt, retention, investigation and treatment of accounting related complaints and concerns.

Ms. Fanucci is our audit committee financial expert, as is currently defined in Item 407(d)(5) of Regulation S-K.

***Governance and Nominating Committee.*** The members of our governance and nominating committee are Messrs. Cook, Conrades and McGuire and Ms. Bornino Miller. Mr. Conrades chairs the governance and nominating committee. In July 2010, Mr. Cook will step down as member of the governance and nominating committee.

Our governance and nominating committee's responsibilities include:

identifying individuals qualified to become members of our board of directors;

recommending to our board of directors the persons to be nominated for election as directors;

assisting our board of directors in recruiting such nominees;

recommending to our board of directors qualified individuals to serve as committee members;

performing an annual evaluation of our board of directors;

evaluating the need and, if necessary, creating a plan for the continuing education of our directors; and

assessing and reviewing our corporate governance guidelines and recommending any changes to our board of directors.

**Compensation and HR Committee.** The members of our compensation and HR committee, or our compensation committee, are Messrs. Ebersman and Shaw and Drs. Roberts and Walsh. Dr. Roberts chairs the compensation committee. In July 2010, Dr. Roberts will step down as chair of the compensation committee (and as a member), at which time Mr. Shaw will assume the chair. As described above, each member of our compensation committee satisfies the independence standards established by Rule 10A-3 under the Exchange Act, the SEC and the NASDAQ Marketplace Rules. In addition, each member of our compensation committee qualifies as a "non-employee director" under Rule 16b-3 of the Exchange Act. Our compensation committee assists the board of directors in the discharge of its responsibilities relating to the compensation of the board of directors and our executive officers.

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Our compensation committee's responsibilities include:

reviewing and approving corporate goals and objectives relevant to executive officer compensation and evaluating the performance of executive officers in light of those goals and objectives;

reviewing and approving, or recommending for approval by the independent directors, executive officer compensation, including salary, bonus and incentive compensation, deferred compensation, perquisites, equity compensation, benefits provided upon retirement, severance or other termination of employment, and any other forms of executive compensation;

reviewing and approving, or recommending for approval by the independent directors, our chief executive officer's compensation based on its evaluation of the chief executive officer's performance;

overseeing and administering our incentive compensation plans and equity-based plans and recommending the adoption of new incentive compensation plans and equity-based plans to our board of directors including the determination of the fair market value of our common stock;

making recommendations to our board of directors with respect to director compensation;

reviewing and discussing with management the compensation discussion and analysis required to be included in our filings with the SEC and recommending whether the compensation discussion and analysis should be included in such filings;

preparing the compensation committee report required by SEC; and

making recommendations to our board of directors with respect to management succession planning, including planning with respect to our chief executive officer.

**Compensation Committee Interlocks and Insider Participation**

None of the members of our compensation committee is or has at any time during the past fiscal year been an officer or employee of Ironwood. None of the members of the compensation committee has formerly been an officer of Ironwood. None of our executive officers serve, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any other entity that has one or more executive officers serving as a member of our board of directors or compensation committee. For a description of transactions between us and members of the compensation committee and entities affiliated with such members, please see "Certain Relationships and Related Party Transactions."

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**EXECUTIVE COMPENSATION**

**Compensation Discussion and Analysis**

This section discusses the principles underlying our policies and decisions with respect to the compensation of our executive officers who are named in the "Summary Compensation Table", or our "named executive officers", and all material factors relevant to an analysis of these policies and decisions. Our named executive officers are:

Peter M. Hecht, Ph.D., Chief Executive Officer;

Michael J. Higgins, Chief Operating Officer and Chief Financial Officer;

Mark G. Currie, Ph.D., Senior Vice President, Research and Development and Chief Scientific Officer; and

Thomas A. McCourt, Senior Vice President, Marketing and Sales and Chief Commercial Officer.

***Compensation Philosophy***

We are an entrepreneurial pharmaceutical company dedicated to creating, developing, and commercializing innovative human medicines. The objective of our compensation policies is to provide compensation and incentives which attract, motivate and reward outstanding talent across Ironwood through well-communicated programs that are aligned with our core values and business mission, and support a positive company culture. Our core values are to:

build a thriving and sustainable business by focusing on creating long term value;

maintain a collaborative environment which fosters innovation;

recognize and develop the abilities and interests of our employees, consistent with the needs of Ironwood;

act with integrity and humanity; and

have fun.

We are guided by the following principles with respect to our compensation determinations:

design compensation and incentive programs that align employee actions and motivations with the interests of our stockholders, support our business objectives and reward the achievement of key goals and milestones;

foster and support our performance-driven culture by setting clear, high-value goals, rewarding outstanding performers, and making sure our best performers know clearly how much we value their contributions;

as with all spending, serve as careful stewards of our stockholders' assets when making decisions to increase compensation or to make equity awards;

maximize our employees' sense of ownership so that they have a long-term owner's perspective, can see the impact of their efforts on our success, and can share in the benefits of that success through the opportunity to become stockholders of Ironwood via stock options and awards;

recognize that compensation is one of a number of tools to stimulate and reward productivity and great drug making, together with recognizing individual growth potential, providing a great workplace culture, and sharing in our success;

foster a strong team culture, focused on our principles of great drug making, which is reinforced through our compensation and incentive programs;

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design compensation and incentive programs that are fair, equitable and competitive; and

design compensation and incentive programs that are simple and understandable.

***Basis for Historical and Future Compensation Policies and Decisions***

Our compensation policies have historically been established by our board of directors, with the advice and recommendation of our compensation committee. As set forth in our compensation committee's written charter, adopted in 2008 and amended in 2009, the compensation committee has the responsibility of reviewing and approving, or recommending for approval to the full board, the compensation of our executive officers; annually reviewing and determining our chief executive officer's compensation based on the board's evaluation of his performance; recommending to the full board the adoption of new compensation plans; and administering our existing plans. In addition, the compensation committee is responsible for ensuring that our compensation policies are aligned with our compensation philosophy and guiding principles.

We do not have employment agreements with our named executive officers. Each component of each of our executive officer's initial compensation package was based on numerous factors, including:

the individual's particular background and circumstances, including prior relevant work experience and compensation paid prior to joining us;

the individual's role with us and the compensation paid to similar persons in the companies represented in the compensation data that we reviewed;

the demand for people with the individual's specific expertise and experience at the time of hire;

performance goals and other expectations for the position;

comparison to other executives within Ironwood having similar levels of expertise and experience; and

uniqueness of industry skills.

Historically, our compensation policies and individual compensation determinations have been based on an annual evaluation, and we have taken into consideration our results of operations, our long and short-term goals, individual goals, the competitive market for our executives with similar stage companies and general economic factors. In 2009, we engaged Pearl Meyer & Partners, or Pearl Meyer, to conduct a competitive assessment of compensation for selected executive positions with respect to base salary, actual total cash compensation, target total cash compensation, and long-term incentives. In addition, Pearl Meyer prepared a detailed equity dilution analysis, a review of the compensation strategy and philosophy of a group of companies we consider to be our peer group and a review of the short-term and long-term incentive practices of these peer companies. Pearl Meyer also compared our executive compensation to market compensation data from the Radford Biotechnology Executive Survey and the SIBS Executive Compensation Survey, two confidential survey sources based on revenue and executive officer position. Pearl Meyer's assessment of executive compensation showed generally that total cash compensation of our named executive officers was below the 25th percentile of the market data, but that our long-term incentive equity participation was above the median of the market data. The results of Pearl Meyer's assessment were presented to the compensation committee and will be taken into consideration when making future compensation decisions but will not be used to mandate any specific actions.

Our peer group, which was compiled by Pearl Meyer with input from us, the board of directors, and the compensation committee, is composed of the U.S. based, publicly-traded companies in the pharmaceutical, biotechnology and life sciences industries listed below, which have a median revenue of



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approximately \$116.0 million, a median market capitalization of \$870.3 million, a median R&D expense of \$72.8 million, and a commercial drug or drug candidate in later stage development (other than Alnylam):

Alexion Pharmaceuticals, Inc.;

Alnylam Pharmaceuticals, Inc.;

AMAG Pharmaceuticals, Inc.;

Auxilium Pharmaceuticals Inc.;

Medivation, Inc.;

Onyx Pharmaceuticals, Inc.;

Optimer Pharmaceuticals, Inc.;

Regeneron Pharmaceuticals, Inc.;

Salix Pharmaceuticals, Ltd.;

Theravance, Inc.;

Vertex Pharmaceuticals Incorporated; and

Xenoport, Inc.

***Elements of Executive Compensation and Determination of Amounts***

In 2009, the compensation program for our executive officers consisted principally of base salary and long-term compensation in the form of stock options. Our compensation program is weighted toward long-term compensation as opposed to short-term or cash-based compensation as we believe this better aligns our employees with our core values. If we achieve our corporate goals, we expect our stock price to rise and the stock option awards currently held by our executives to become the major component of overall compensation. To date, we have not implemented any cash bonus program for named executive officers or our employees as a whole. As discussed below, in 2009 we adopted a change of control severance benefit plan, or our change of control plan, applicable to all employees.

***Base Salary***

Base salaries for our executive officers are determined at commencement of employment and are generally re-evaluated annually and adjusted, if warranted, to realign salaries with market levels and to reflect the performance of the executive. In determining whether to adjust an executive's base salary, our compensation committee takes into consideration factors such as our performance in prior years, individual performance, general economic factors and compensation equity among our executive officers. The compensation committee sets base salaries

primarily based on the abilities, performance and experience of our named executive officers. The compensation committee also reviews our named executive officers' past compensation and compensation data for comparable positions in our industry. The compensation committee seeks to set base salaries for our named executive officers at competitive levels, generally targeting the 50th percentile as compared to peer group and survey data, but focuses on equity-based compensation for the reasons identified below.

*Equity-Based Compensation*

To reward and incentivize our named executive officers in a manner that best aligns their interests with our stockholders' interests, we use stock options as the primary incentive vehicles for long-term compensation. To date, stock options have been granted with both time and performance-based vesting conditions to each of our executive officers. We believe that stock options are an effective tool for meeting

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our compensation goal of increasing long-term stockholder value by tying the value of the stock options to our future performance. Because employees are able to profit from stock options only if our stock price increases relative to the stock option's exercise price, we believe stock options provide meaningful incentives to employees to increase the value of our stock over time. All employee stock options issued prior to this offering can be exercised prior to vesting, with any shares issued upon such exercise subject to repurchase by us in the event the executive is no longer employed by us. We have not granted any equity awards other than stock options to our named executive officers to date.

We plan to adopt a new equity incentive plan in connection with this offering. Similar to our previous and current equity incentive plans, our new equity incentive plan will encompass multiple forms of equity which may be issued in the future, including stock options and stock awards.

Our compensation committee does not apply a rigid formula in allocating stock options to executives as a group or to any particular executive, but does emphasize the achievement of corporate goals in determining approximately 75% of each annual performance award for our executive officers, other than Dr. Hecht. All of Dr. Hecht's annual performance award is based on the achievement of corporate objectives. In addition, our compensation committee exercises its judgment and discretion and considers, among other things, the role and responsibility of the executive, competitive factors, the amount of share-based equity compensation already held by the executive, the non-equity compensation received by the executive and the total number of options to be granted to all participants during the year. Our compensation committee makes an initial option grant to new employees and annual grants to our employees in connection with the annual review of our employees' compensation, as further discussed below, and throughout the year may award additional grants as circumstances warrant. The compensation committee has the discretion to reprice options under our existing equity plans but has not exercised this discretion to date.

We do not currently have any security ownership requirements for our named executive officers. In addition we have never had a program or policy in place to coordinate equity grants with the release of material non-public information.

*Initial Stock Option Awards*

We make an initial award of stock options to all new employees in connection with the commencement of their employment. These grants have an exercise price equal to the fair market value of our common stock on the grant date, as determined by our compensation committee, and vest over four years as to 25% of the shares on the first anniversary of the date of hire and as to 1/48<sup>th</sup> of the total shares each month thereafter for the next 36 months. The initial stock option awards are intended to provide the employee with incentive to build value in the organization over an extended period of time and to maintain competitive levels of total compensation.

*Annual Stock Option Awards*

Our practice is to make annual stock option awards to all employees as part of our annual compensation program, and historically we have granted such awards in February of each year based on our performance in the prior year. These grants have an exercise price equal to the fair market value of our common stock on the grant date, as determined by our compensation committee, and generally vest over four years as to 1.25% of the shares on each monthly anniversary of the vesting commencement date, which is January 1 of the applicable year, for the first 36 months, and as to 4.583% of the shares each month thereafter.

Historically, our management and compensation committee has reviewed anonymous private company compensation surveys and drawn upon the experience of our compensation committee members in determining long-term equity incentive awards. Based upon these factors, our compensation committee

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determines the size of the long-term equity incentives at levels it considers appropriate to create a meaningful opportunity for reward predicated on the creation of long-term stockholder value.

*Milestone-Based Stock Option Awards*

Our named executive officers and many of our employees have a significant portion of their incentive compensation in milestone-based equity awards that accelerate upon the achievement of major value-creating events which may occur many years from the date of grant. We believe performance based equity awards align our employees with our stockholders' best interests and motivate our employees to apply their best efforts toward the accomplishment of these value-creating events.

*Change of Control Severance Benefit Plan*

In May 2009, our compensation committee adopted a change of control severance benefit plan, or our change of control plan, that applies to all of our employees and provides for certain payments and benefits in connection with or following a termination of employment associated with a "change of control" (as defined therein). We adopted this change of control plan on the premise that innovative ideas and the associated intellectual property generated from these ideas are the basis upon which economic value is created in the biopharmaceutical industry and that our employees are the source of these value-creating ideas. The potential for a change of control or other event that could substantially change the nature and structure of Ironwood could therefore adversely affect our ability to recruit and motivate employees. The change of control plan was designed to encourage employees to bring forward their best ideas by providing them with the knowledge that if a change of control occurs, and their employment is terminated as a result thereof, they will have an opportunity to share in the value that they helped create for our stockholders, regardless of their employment status at Ironwood after the change of control. The key goals of our change of control plan are to recognize the value of employees' contributions to us through the acceleration of equity awards with time-based vesting and to ensure employees have a reasonable period of time within which to locate suitable employment without undue financial hardship. We believe that our change of control plan is a positive recruitment tool in attracting top talent to Ironwood.

A further description of the change of control plan and the potential payments to our named executive officers pursuant to the plan is set forth below under the heading "Potential Payments Upon Termination or Change in Control."

*Other Compensation*

We maintain broad-based benefits that are provided to all employees, including health insurance, life and disability insurance, dental insurance, fitness and transportation stipends, and a 401(k) plan with a 50% matching company contribution on the first \$6,000 of an employee's annual contribution. None of our named executive officers or other employees receives perquisites of any nature.

***Process for Determining Individual Compensation and Role of Executive Officers***

Historically, our compensation program follows a process that begins in January of each year during which the board finalizes its assessment of our corporate performance for the prior year. The compensation committee, in consultation with our chief executive officer, uses the board's assessment to determine the appropriate size of pools for salary increases and stock option awards to be awarded based on performance during the prior year compared to established goals. Each year, a target percentage of our budget is allocated toward salary increases on the basis of 100% achievement of corporate goals. Similarly, a stock option pool is established at a set percentage of our fully diluted shares, assuming 100% achievement of corporate goals. Upon completion of our goal assessment, both pools are calibrated for corporate performance. The compensation committee assigns a portion of these pools to those individuals holding positions at the vice president level or above, and designates the appropriate portion of each pool

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for allocation by management to all other employees. To assist the compensation committee in determining the size of the incentive pools, our management prepares a matrix of salary ranges and stock option awards for our positions based on industry comparisons and benchmark data from Radford surveys (that also provide the basis for determining salary offers for new hires), salary adjustments based on internal or external pay parity and promotional adjustments for the ensuing fiscal year. In February of each year, the compensation committee approves all of the annual stock option awards and salary increases.

During the first quarter of each year, the compensation committee and management assign the appropriate weights to each of our corporate and financial goals established during the prior year. Managers will subsequently conduct mid-year discussions with their direct reports on the progress of achieving individual performance goals. During the fourth quarter, the compensation committee conducts a preliminary assessment of corporate performance for the current year, employees begin conducting self-assessments, and managers begin collecting input from others within Ironwood and drafting performance reviews.

***Tax and Accounting Considerations***

While the compensation committee generally considered the financial accounting and tax implications of its executive compensation decisions, neither element was a material consideration in the compensation awarded to our named executive officers in 2009.

***Relationship of Elements of Compensation***

Our compensation structure is comprised primarily of base salary and stock options. In setting executive compensation, the compensation committee considers the aggregate compensation payable to an executive officer and the form of such compensation. We use stock options as a significant component of compensation because we believe that this best ties individual compensation to the creation of stockholder value. While we offer competitive base salaries, we believe share-based compensation is a significant motivator in attracting and motivating employees. Awards of stock options generally have either long-term vesting schedules, typically four years, or vest upon the achievement of important value-creating milestones. If an employee leaves our employ before the completion of the vesting period, then that employee does not receive any benefit from the non-vested portion of his award. We believe that this feature makes it more attractive to remain as our employee and these arrangements do not require substantial cash payments by us.

The compensation committee manages the expected impact of salary increases payable to our named executive officers by requiring that the size of any salary increases be tied to the attainment of corporate and individual goals.

The compensation committee may decide, as appropriate, to modify the mix of base salary, annual and long-term incentives to best fit an executive officer's specific circumstances or if required by competitive market conditions, to attract and motivate skilled personnel. For example, the compensation committee may decide to award additional stock options to an executive officer if the total number of stock option grants received during an individual's employment with us does not adequately reflect the executive's current position. We believe that this discretion and flexibility allows the compensation committee to better achieve our compensation objectives.

Table of Contents**Compensation Actions in 2009***2008 and 2009 Goals*

For 2008 and 2009, allocations of cash and stock options were, in large part, dependent upon us meeting certain weighted performance objectives. These performance objectives encompassed three categories for each year: (i) clinical and business development milestones for our most advanced product candidate, linaclotide, (ii) research milestones designed to encourage efficient innovation, and (iii) financial objectives aimed at the efficient use of our capital. In addition to our core goals, we also create aggressive stretch goals, which, if accomplished, can result in overachieving our annual goals. Historically, Dr. Hecht's performance evaluation was based primarily on the achievement of our corporate objectives. In addition to the achievement of corporate goals, our other named executive officers are evaluated on the achievement of additional individual goals which contribute toward, and relate directly to, the accomplishment of our corporate objectives. Our board of directors determined that we met 80% of our corporate objectives in 2008, which consisted of the following:

| <b>Corporate Goal</b>  | <b>Target Percentage (%)</b> | <b>Actual Level of Achievement (%)</b> |
|--|------------------------------|--|
| Initiate linaclotide Phase 3 trials, confirm commercial formulation, define ex-U.S. commercial strategy (stretch goal included the completion of an ex-U.S. transaction) | 50                           | 50                                     |
| Advance cardiovascular candidate into Phase 3  | 20                           | 0                                      |
| Pipeline advancement   | 20                           | 15                                     |
| Achieve year-end cash target of >\$90 million and expense control (stretch goal included the completion of a financing)  | 10                           | 15                                     |
| <b>Totals</b>  | <b>100</b>                   | <b>80</b>                              |

Based on our achievement of 80% of our corporate objectives in 2008, the option pool from which the named executive officers were awarded annual stock option grants in 2009 was proportionately reduced.

In addition to the 2008 corporate goals identified above, for which each of our named executive officers is directly accountable, the following is a summary of the 2008 individual goals for our named executive officers, other than Dr. Hecht, who was compensated on the basis of the achievement of our corporate goals, and Mr. McCourt, who did not join us until 2009:

| <b>Named Executive Officer</b> | <b>Summary of Individual Goals</b>  |
|--------------------------------|---|
| Mark Currie                    | <ul style="list-style-type: none"> <li>Lead strategic decisionmaking in advancing linaclotide through clinical trials</li> <li>Build and maintain strong relationship with collaboration partner</li> <li>Develop linaclotide "rest-of-world" strategy</li> <li>Lead research and discovery group to deliver on corporate pipeline goals</li> </ul> |
| Michael Higgins                | <ul style="list-style-type: none"> <li>Lead Ironwood strategy</li> <li>Develop linaclotide "rest-of-world" strategy</li> <li>Complete private financing</li> <li>Lead investor relations efforts</li> </ul>   |

Both Dr. Currie and Mr. Higgins were deemed to have met their individual objectives in 2008. Accordingly, they received their full incentive award from the pool that had been proportionately reduced based on the company's achievement of 80% of its corporate objectives. No bonuses or merit increases were awarded for 2008 performance.

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Our 2009 corporate goals will be used to determine compensation awards and adjustments in early 2010. In December of 2009, our board of directors determined that we met 105% of our corporate objectives, which consisted of the following:

| Corporate Goal   | Target<br>Percentage (%) | Actual Level of<br>Achievement (%) |
|--|--------------------------|------------------------------------|
| Advance linaclotide Phase 3 program, secure partnership for linaclotide ex-U.S, and finalize commercial manufacturing strategy | 60                       | 70                                 |
| Pipeline advancement   | 15                       | 10                                 |
| Achieve year-end cash target of >\$75 million and other financial objectives and expense control                               | 25                       | 25                                 |
| <b>Totals</b>  | 100                      | 105                                |

In addition to the 2009 corporate goals identified above, for which each of our named executive officers is directly accountable, the following is a summary of the 2009 individual goals for our named executive officers, other than Dr. Hecht, who is compensated on the basis of the achievement of our corporate goals, and Mr. McCourt, who did not join us until the fourth quarter of 2009:

| Named Executive Officer | Summary of Individual Goals  |
|-------------------------|--|
| Mark Currie             | <ul style="list-style-type: none"> <li>Meet enrollment goals for linaclotide clinical studies and generate phase 3 data</li> <li>Complete ex-U.S. transaction for linaclotide</li> <li>Bring one clinical candidate through phase 1 studies</li> <li>Submit additional IND for a new product candidate</li> <li>Develop two new clinical candidates</li> </ul> |

|                 |  |
|-----------------|--|
| Michael Higgins | <ul style="list-style-type: none"> <li>Secure linaclotide manufacturing supply chain</li> <li>Complete ex-U.S. transaction for linaclotide</li> <li>Prepare Ironwood for an initial public offering</li> <li>Develop linaclotide launch strategy</li> <li>Manage the expenses of the company to enable it to meet its corporate cash objectives</li> </ul> |
|-----------------|--|

The compensation committee will evaluate each named executive officer's individual performance in the first quarter of 2010.

### *Base Salary*

Our named executive officers currently receive the following base salaries: Dr. Hecht \$100,000, Mr. Higgins \$265,000, Dr. Currie \$315,000, and Mr. McCourt \$325,000. None of our named executive officers or other employees received an increase in base salary either for 2008 performance or during 2009, as our chief executive officer and compensation committee determined that we should maintain our current base salaries given the general economic environment at that time. Based on management's recommendation, in lieu of salary increases, the compensation committee authorized a merit and adjustment pool representing an average of 2% of base salary that was paid to each employee in February 2009 in a one-time lump sum payment. Mr. Higgins received a one-time payment of \$5,000 and Dr. Currie received \$8,000. Mr. McCourt, who joined us in September 2009, was not eligible for this one-time payment. Dr. Hecht elected not to receive the one-time merit payment.

Dr. Hecht's salary of \$100,000 represents the salary that he has been receiving since he began serving as chief executive officer in 1998. Dr. Hecht's compensation is reviewed annually by our compensation committee, but due to Dr. Hecht's desire to keep his cash compensation the same, the compensation committee has not recommended an increase in Dr. Hecht's cash compensation to date. Further,

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Dr. Hecht has indicated to the compensation committee that he would not expect an increase to his salary in the future.

*Annual Stock Option Grants and New Hire Grant*

On February 12, 2009, each of our named executive officers was awarded the following stock option grants of Class B common stock based on his performance during 2008.

| Named Executive Officer | 2009 Annual Option Grant for 2008 Performance<br>(# of Shares of Class B Common Stock Subject to Option) |
|-------------------------|--|
| Peter M. Hecht, Ph.D.   | 110,000  |
| Mark G. Currie, Ph.D.   | 175,000  |
| Michael J. Higgins      | 95,000   |

These options were granted under our Amended and Restated 2005 Stock Incentive Plan, or our 2005 Plan, have an exercise price of \$4.89 per share (which was the fair market value of our Class B common stock on the date of grant, as determined by our board of directors) and, with the exception of a portion of the option awarded to Dr. Currie, vest as to 1.25% of the award on each monthly anniversary following January 1, 2009 for the first 36 months, and as to 4.583% of the award each month thereafter. Options to purchase 50,000 shares of Class B common stock that were part of Dr. Currie's performance award vested in full on the date of the grant in recognition of the success of our Phase 2b program for our product candidate, linaclotide, due to Dr. Currie's primary responsibility for the program, and the remaining options vest in accordance with the foregoing schedule.

Mr. McCourt was not eligible for a performance grant in February of 2009 since he did not join us until September of 2009. Upon joining Ironwood, Mr. McCourt received a total of 200,000 time-based options to purchase shares of Class B common stock which vest over four years, and an additional 160,000 options to purchase Class B common stock that vest in increments of 40,000 each upon meeting certain performance milestones, including: (i) acceptance by the FDA of our first NDA; (ii) the first commercial sale of our product candidate linaclotide, (iii) acceptance by the FDA of our second NDA, and (iv) achieving a certain threshold in global pharmaceutical product sales.

*Milestone Grants*

In July of 2009, the board of directors granted options to purchase shares of Class B Common Stock to various employees, including Dr. Hecht, Mr. Higgins and Dr. Currie who each received options to purchase 40,000 shares of our Class B common stock, that will vest as to 50% of the shares upon our achievement of \$1 billion in global pharmaceutical product sales, and as to the remaining 50% of the shares upon the acceptance by the FDA of our second NDA. These options have an exercise price of \$5.48 per share and may be exercised prior to vesting, with any shares issued upon such exercise subject to repurchase by us in the event the employee terminates his employment with us. The compensation committee and the board of directors determined that these performance grants would be a strong motivational tool linked to real and value-creating events for us as a whole.



Table of Contents**Summary Compensation Table**

The following table sets forth information regarding the compensation paid or accrued during the fiscal year ended December 31, 2009 to each of our named executive officers.

| Name and Principal Position  | Year | Salary<br>(\$) | Bonus<br>\$( <sup>1</sup> ) | Option<br>Awards<br>\$( <sup>2</sup> ) | All Other<br>Compensation<br>\$( <sup>3</sup> ) | Total<br>(\$) |
|--|------|----------------|-----------------------------|--|---|---------------|
| Peter M. Hecht, Ph.D.<br>Chief Executive Officer   | 2009 | 100,000        | 0                           | 465,684                                | 4,410   | 570,094       |
| Michael J. Higgins<br>Chief Operating Officer and<br>Chief Financial Officer                                   | 2009 | 265,000        | 5,000                       | 177,771                                | 4,410   | 452,181       |
| Mark G. Currie, Ph.D.<br>Senior Vice President, R&D and<br>Chief Scientific Officer                            | 2009 | 315,000        | 8,000                       | 475,561                                | 4,410   | 802,971       |
| Thomas A. McCourt <sup>(4)</sup><br>Chief Commercial Officer and<br>Senior Vice President, Marketing and Sales | 2009 | 102,292        | 0                           | 52,698                                 | 1,961   | 156,951       |

(1) Consists of a one-time payment in lieu of a pay raise.

(2) Calculated in accordance with ASC 718, *Compensation - Stock Compensation*. The amount reflects the dollar amount realized by us for financial statement reporting purposes for 2009 without regard to any estimate of forfeitures related to service-based vesting conditions. For a discussion of the assumptions used in the valuation, see Note 15 to our consolidated financial statements for the nine months ended September 30, 2009 included elsewhere in this prospectus. See also our discussion of share-based compensation under "Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Policies and Estimates."

(3) Consists of matching contributions made under our 401(k) plan, as well as a transportation stipend and a fitness stipend. For Mr. McCourt, this amount also includes reimbursement of his relocation expenses incurred in connection with the commencement of his employment with us in September 2009. As set forth in Mr. McCourt's offer letter, we have agreed to reimburse Mr. McCourt up to \$300,000 for his relocation and other expenses incurred in connection with the commencement of his employment.

(4) Mr. McCourt began employment as our Chief Commercial Officer and Senior Vice President, Marketing and Sales on September 8, 2009. Mr. McCourt's annualized salary is \$325,000.

Table of Contents**Grants of Plan-Based Awards (2009)**

The following table sets forth information regarding equity awards granted to each of our named executive officers during the fiscal year ended December 31, 2009. All equity awards granted to our named executive officers in 2009 consisted of options to purchase shares of our Class B common stock and were granted under our 2005 Plan with an exercise price equal to the fair market value of our Class B common stock, as determined by our compensation committee, on the date of grant. The vesting schedule of each option included in the following table is described in the footnotes to the Outstanding Equity Awards at Fiscal Year-End (2009) table.

| Name                     | Grant Date | Estimated Future Payouts Under Equity Incentive Plan Awards Target (#) | All Other Option Awards: Number of Securities Underlying Options (#) | Exercise or Base Price of Option Awards (\$/Sh) | Grant Date Fair Value of Stock and Option Awards (\$) <sup>(1)</sup> |
|--------------------------|------------|--|--|---|--|
| Peter M. Hecht,<br>Ph.D. | 2/12/2009  |  | 110,000  | 4.89  | 324,808  |
|                          | 7/29/2009  | 40,000   |  | 5.48  | 135,072  |
| Michael J. Higgins       | 2/12/2009  |  | 95,000   | 4.89  | 280,516  |
|                          | 7/29/2009  | 40,000   |  | 5.48  | 135,072  |
| Mark G. Currie,<br>Ph.D. | 2/12/2009  |  | 50,000   | 4.89  | 147,640  |
|                          | 2/12/2009  |  | 125,000  | 4.89  | 369,100  |
|                          | 7/29/2009  | 40,000   |  | 5.48  | 135,072  |
| Thomas A. McCourt        | 9/8/2009   |  | 200,000  | 5.48  | 675,360  |
|                          | 9/8/2009   | 160,000  |  | 5.48  | 540,288  |

(1)

Represents the grant date fair value of the stock options calculated in accordance with ASC 718. For a discussion of the assumptions used in the valuation, see Note 15 to our consolidated financial statements for the nine months ended September 30, 2009 included elsewhere in this prospectus. See also our discussion of share-based compensation under "Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates."

**Employment Agreements**

We do not have employment agreements with any of our named executive officers. Upon commencement of employment, each named executive officer was offered a base salary and an initial stock option award, and, in the case of Mr. McCourt, reimbursement of up to \$300,000 for relocation and other expenses incurred in connection with the commencement of his employment. In addition, each named executive officer is granted annual stock option awards which have long-term vesting schedules, typically four years, or vest upon the achievement of important value-creating milestones as detailed in the footnotes to the Outstanding Equity Awards at Fiscal Year-End table. None of our named executive officers has severance benefits outside of the change of control plan discussed above, which covers all of our employees.

Table of Contents**Outstanding Equity Awards at Fiscal Year-End (2009)**

The following table sets forth information regarding outstanding equity awards held by each of our named executive officers on December 31, 2009, the last day of our last fiscal year.

| Name                  | Number of Securities Underlying Unexercised Options (#) |                              | Equity Incentive Plan Awards:  | Option Exercise Price (\$) | Option Expiration Date    |                          |
|-----------------------|---|------------------------------|--|----------------------------|---------------------------|--------------------------|
|                       | Exercisable <sup>(1)</sup>                              | Unexercisable <sup>(1)</sup> | Number of Securities Underlying Unexercised Options (#) <sup>(1)</sup> |                            |                           |                          |
| Peter M. Hecht, Ph.D. | 50,000  |                              |  | 0.41                       | 4/23/2012 <sup>(2)</sup>  |                          |
|                       | 100,000   |                              |  | 0.41                       | 4/23/2012 <sup>(3)</sup>  |                          |
|                       | 50,000  |                              |  | 0.60                       | 12/16/2013 <sup>(3)</sup> |                          |
|                       | 50,000  |                              |  | 0.60                       | 12/16/2013 <sup>(4)</sup> |                          |
|                       | 50,000  |                              |  | 0.60                       | 1/1/2014 <sup>(4)</sup>   |                          |
|                       | 100,000   |                              |  | 0.60                       | 3/1/2014 <sup>(5)</sup>   |                          |
|                       | 75,000  |                              |  | 0.60                       | 3/1/2014 <sup>(3)</sup>   |                          |
|                       | 90,000  |                              |  | 0.60                       | 3/1/2015 <sup>(3)</sup>   |                          |
|                       | 60,000  |                              |  | 0.60                       | 3/1/2015 <sup>(4)</sup>   |                          |
|                       | 60,000  |                              |  | 0.60                       | 3/1/2015 <sup>(6)</sup>   |                          |
|                       |   |                              |  | 800,000                    | 1.56                      | 3/14/2016 <sup>(7)</sup> |
|                       | 35,000  |                              |  |                            | 1.56                      | 3/13/2016 <sup>(3)</sup> |
|                       | 100,000   |                              |  |                            | 2.94                      | 1/22/2017 <sup>(3)</sup> |
| 140,000               |   |                              |  | 3.76                       | 1/31/2018 <sup>(3)</sup>  |                          |
| 110,000               |   |                              |  | 4.89                       | 2/11/2019 <sup>(3)</sup>  |                          |
|                       |   |                              | 40,000   | 5.48                       | 7/28/2019 <sup>(8)</sup>  |                          |
| Michael J. Higgins    | 225,000   |                              |  | 0.60                       | 7/15/2013 <sup>(2)</sup>  |                          |
|                       | 150,000   |                              |  | 0.60                       | 7/15/2013 <sup>(9)</sup>  |                          |
|                       | 50,000  |                              |  | 0.60                       | 3/1/2015 <sup>(3)</sup>   |                          |
|                       |   |                              | 200,000  | 1.56                       | 3/14/2016 <sup>(10)</sup> |                          |
|                       | 35,000  |                              |  | 1.56                       | 3/13/2016 <sup>(3)</sup>  |                          |
|                       | 50,000  |                              |  | 2.94                       | 1/22/2017 <sup>(3)</sup>  |                          |
|                       | 90,000  |                              |  | 3.76                       | 1/31/2018 <sup>(3)</sup>  |                          |
|                       | 95,000  |                              |  | 4.89                       | 2/11/2019 <sup>(3)</sup>  |                          |
|                       |   |                              | 40,000   | 5.48                       | 7/28/2019 <sup>(8)</sup>  |                          |
| Mark G. Currie, Ph.D. | 140,000   |                              |  | 0.60                       | 9/24/2012 <sup>(2)</sup>  |                          |
|                       | 75,000  |                              |  | 0.60                       | 2/24/2014 <sup>(5)</sup>  |                          |
|                       | 60,000  |                              |  | 0.60                       | 2/24/2014 <sup>(3)</sup>  |                          |
|                       | 95,000  |                              |  | 0.60                       | 3/1/2015 <sup>(3)</sup>   |                          |
|                       |   |                              | 300,000  | 1.56                       | 3/14/2016 <sup>(11)</sup> |                          |
|                       | 75,000  |                              |  | 1.56                       | 3/14/2016 <sup>(3)</sup>  |                          |
|                       | 90,000  |                              |  | 2.94                       | 1/22/2017 <sup>(3)</sup>  |                          |
|                       |   |                              | 300,000  | 2.94                       | 1/22/2017 <sup>(12)</sup> |                          |
|                       | 120,000   |                              |  | 3.76                       | 1/31/2018 <sup>(3)</sup>  |                          |
|                       | 50,000  |                              |  | 4.89                       | 2/11/2019 <sup>(13)</sup> |                          |
| 125,000               |   |                              | 4.89   | 2/11/2019 <sup>(3)</sup>   |                           |                          |
|                       |   |                              | 40,000   | 5.48                       | 7/28/2019 <sup>(8)</sup>  |                          |
| Thomas A. McCourt     | 200,000   |                              |  | 5.48                       | 9/7/2019 <sup>(2)</sup>   |                          |
|                       |   |                              | 160,000  | 5.48                       | 9/7/2019 <sup>(14)</sup>  |                          |

(1)

Represents options to purchase shares of our Class B common stock.

(2)

The options vest as to 25% of the shares on the first anniversary of the vesting commencement date and 1/48th of the shares each month thereafter for the next 36 months.

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- (3) The options vest as to 1.25% on each monthly anniversary of the vesting commencement date for the first 36 months, and as to 4.5833% of the shares on each monthly anniversary thereafter until fully vested.
- (4) The options vested in equal installments on each monthly anniversary of the vesting commencement date for 12 months.
- (5) The options vest as to all of the shares upon the earlier of commencement of our first Phase 2b trial and March 1, 2010.
- (6) The options vest as to all of the shares upon the completion of a substantial transaction as decided by the compensation committee.
- (7) The option vests as to (a) 10% of the shares immediately upon the first acceptance by the FDA of an NDA filed by us, and an additional 40% of the shares in equal monthly installments over the ensuing two year period; (b) 7.5% of the shares immediately upon the first commercial sale of our first product, and an additional 30% of the shares in equal monthly installments over the ensuing two year period; (c) 12.5% of the shares immediately upon our achievement of an average market capitalization of at least \$20.00 per share of Class A common stock for forty-five days out of any sixty day period on a split-adjusted basis; and (d) all unvested shares remaining on January 1, 2016.
- (8) The options vest as to (a) 50% of the shares upon the achievement of \$1 billion in global pharmaceutical product sales (including partnered or licensed product revenue) of a certain threshold and (b) 50% of the shares upon acceptance by the FDA of a second NDA for a product from an internal or external development program (excluding supplemental NDAs for linaclotide, but including NDAs for linaclotide combination products). External development programs shall be pre-qualified for milestone vesting eligibility by the compensation committee as of the time of program initiation at Ironwood.
- (9) The option vested as to (a) 25% of the shares immediately upon our achievement of a market capitalization of \$250 million; (b) 12.5% of the shares immediately upon our raising an aggregate of \$25 million cash in partnership agreements and equity financings subsequent to May 6, 2003; (c) 12.5% of the shares immediately upon our raising an aggregate of \$50 million cash in partnership agreements and equity financings; (d) 25% of the shares immediately upon our raising an aggregate of \$100 million cash in partnership agreements and equity financings; (e) 25% of the shares immediately upon the acceptance of one of our drug candidates into a Phase 2a study and one of our compounds into a Phase 2b clinical study.
- (10) The option vests as to (a) 50% of the shares immediately upon the first acceptance by the FDA of an NDA filed by us; (b) 25% of the shares immediately upon the first commercial sale of our first product; (c) 25% of the shares immediately upon our achievement of an average market capitalization of at least \$20.00 per share of Class A common stock for forty-five days out of any sixty day period on a split-adjusted basis; and (d) all unvested shares remaining on January 1, 2016.
- (11) The option vests as to (a) 50% of the shares immediately upon the first acceptance by the FDA of an NDA filed by us; (b) 50% of the shares immediately upon the first commercial sale of our first product; and (c) all of the unvested shares remaining on January 1, 2016.
- (12) The option vests as to (a) 25% of the shares immediately upon the entry of a novel Ironwood drug candidate (other than certain Ironwood compounds or linaclotide for gastrointestinal indications) into Phase 3 clinical studies; (b) 50% of the shares immediately upon the first acceptance by the FDA of an NDA filed by us for a novel Ironwood drug candidate (other than certain Ironwood compounds or linaclotide for gastrointestinal indications); (c) 25% of the shares immediately upon our achievement of an average market capitalization of at least \$20.00 per share of Class A common stock for forty-five days out of any sixty day period on a split-adjusted basis; and (d) all unvested shares remaining on January 22, 2017.
- (13) The option vested as to 100% of the shares on the grant date.
- (14) The option vests as to (a) 25% of the shares immediately upon the first acceptance by the FDA of an NDA filed by us; (b) 25% of the shares upon the first commercial sale of linaclotide; (c) 25% of the shares upon the achievement of \$1 billion in global pharmaceutical

product sales (including partnered or licensed product revenue); and (d) 25% of the shares upon acceptance by the FDA of a second NDA for a product from an internal or external development program (excluding supplemental NDAs for linaclotide, but including NDAs for linaclotide combination products). External development programs shall be pre-qualified for milestone.

Table of Contents**Potential Payments Upon Termination or Change of Control*****Change of Control Severance Benefit Plan***

In May 2009, our compensation committee adopted a change of control severance benefit plan, or our change of control plan, that applies to all of our employees, including our named executive officers, and provides for certain payments and benefits in connection with or following a termination of employment associated with a change of control. Pursuant to our change of control plan, in the event of a "Covered Termination" (as defined in the change of control plan), our employees are entitled to receive the following from Ironwood or its successor:

a lump-sum payment in an amount equal to six months of such employee's base salary at the time of termination;

a lump-sum payment in an amount equal to such employee's target bonus for the year in which the termination occurred, prorated for the portion of the year during which the employee was employed;

acceleration of all outstanding equity awards subject to time-based vesting as of the date of termination; and

continuation of health and dental benefits for six months following termination.

We will require any successor to assume and agree to perform the change of control plan in the same manner and to the same extent that we would be required to perform it if no such succession or assignment had taken place. See "Executive Compensation Compensation Discussion and Analysis Change of Control Severance Benefit Plan" for a more detailed description of our change of control plan.

Receipt of any payments or benefits under the change of control plan at the time of termination will be conditioned on the employee executing a written release of Ironwood from any and all claims arising in connection with his or her employment.

***Potential Payments Under Change of Control Severance Benefit Plan***

The following table presents our estimate of the amount of severance benefits to which each of the named executive officers would be entitled under the change of control plan in the event a Covered Termination of each named executive officer occurred on December 31, 2009. There are currently no other agreements or arrangements pursuant to which the named executive officers would receive severance benefits including termination without cause, termination for cause, termination by the executive for good reason, death or disability.

| Name                  | Cash<br>Severance (\$) | Bonus<br>(\$) <sup>(1)</sup> | Equity<br>Acceleration<br>(\$) <sup>(2)</sup> | Continuation<br>of Health<br>Benefits (\$) | Total (\$) <sup>(3)</sup> |
|-----------------------|------------------------|------------------------------|---|--|---------------------------|
| Peter M. Hecht, Ph.D. | 50,000                 | 0                            | 1,833,535                                     | 10,154                                     | 1,893,689                 |
| Michael J. Higgins    | 132,500                | 0                            | 1,250,699                                     | 10,264                                     | 1,393,463                 |
| Mark G. Currie, Ph.D. | 157,500                | 0                            | 1,780,094                                     | 9,778                                      | 1,947,372                 |
| Thomas A. McCourt     | 162,500                | 0                            | 1,154,000                                     | 10,264                                     | 1,326,764                 |

(1) There was no target bonus for 2009.

(2) Reflects the in-the-money value of the unvested portion of such named executive officer's options that have time-based vesting provisions. The value is calculated by multiplying the amount (if any) by which \$11.25, the initial public offering price, exceeds the exercise price of the option by the number of shares subject to the accelerated portion of the option.





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- (3) We will evaluate the following two alternative forms of payment and select the one that would maximize such executive's after-tax proceeds: (i) payment in full of the entire amount of the payments, or (ii) payment of only a part of the payments so that the executive receives the largest payment possible without the imposition of excise tax under Section 280G of the Code.

**Director Compensation**

The following table sets forth information regarding the compensation earned by each of our directors, other than Dr. Hecht who does not receive compensation for his service as a director, during the fiscal year ended December 31, 2009.

| Name                                   | Stock Awards<br>(\$) <sup>(1)(2)</sup> | Option Awards<br>(\$) <sup>(1)</sup> | All Other<br>Compensation (\$) | Total (\$) |
|--|--|--------------------------------------|--------------------------------|------------|
| Joseph C. Cook, Jr                     | 151,567                                | 21,739 <sup>(3)</sup>                |                                | 173,306    |
| Marsha H. Fanucci                      | 49,252                                 |                                      |                                | 49,252     |
| Stephen C. Knight, M.D. <sup>(4)</sup> | 14,567                                 |                                      |                                | 14,567     |
| Bryan E. Roberts, Ph.D.                | 14,567                                 |                                      |                                | 14,567     |
| Gina Bornino Miller                    | 151,567                                |                                      |                                | 151,567    |
| David E. Shaw                          | 151,567                                |                                      |                                | 151,567    |
| Christopher T. Walsh, Ph.D.            | 151,567                                | 29,528 <sup>(5)</sup>                | 50,000 <sup>(6)</sup>          | 231,095    |
| George H. Conrades                     | 14,567                                 |                                      |                                | 14,567     |
| Terrance G. McGuire                    | 14,567                                 |                                      |                                | 14,567     |
| David Ebersman                         | 73,126                                 |                                      |                                | 73,126     |

- (1) Calculated in accordance with ASC 718. The amount reflects the dollar amount realized by us for financial statement reporting purposes for 2009. For a discussion of the assumptions used in the valuations, see Note 15 to our consolidated financial statements for the nine months ended September 30, 2009 included elsewhere in this prospectus. See also our discussion of share-based compensation under "Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates."
- (2) In the year ended December 31, 2009, we granted: (a) 65,000 restricted shares of our Class B common stock to each of Mr. Cook, Ms. Bornino Miller, Mr. Shaw and Dr. Walsh, with each grant having an ASC 718 grant date fair value of \$356,200; (b) 40,000 restricted shares of our Class B common stock to each of Dr. Knight, Dr. Roberts, Mr. Conrades and Mr. McGuire, with each grant having an ASC 718 grant date fair value of \$219,200; (c) 50,686 restricted shares of our Class B common stock to Mr. Ebersman with such grant having an ASC 718 grant date fair value of \$277,759, and (d) 44,863 restricted shares of our Class B common stock to Ms. Fanucci with a grant date fair value of \$330,192. See below for a discussion of these restricted stock award grants.
- (3) In October 2009, Mr. Cook received 5,000 options to purchase shares of our Class B common stock for his service as the chairman of our board that vested in full on the date of grant and was outstanding as of December 31, 2009. The option grant has an ASC 718 grant date fair value of \$21,739. The following are the ASC 718 assumptions used to calculate the grant date fair value:

| Grant Date | Expected Term<br>(Years) | Risk-Free Rate<br>(%) | Expected Volatility<br>(%) | Dividend Yield<br>(%) |
|------------|--------------------------|-----------------------|----------------------------|-----------------------|
| 10/20/2009 | 6.5                      | 3.04                  | 58.90                      | 0                     |

As of December 31, 2009, Mr. Cook has 40,000 outstanding options to purchase shares of Class B common stock which were granted prior to the fiscal year ended December 31, 2009 and remain exercisable as of December 31, 2009.

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- (4) Dr. Knight served as a director during the fiscal year ended December 31, 2009. Dr. Knight resigned from our board of directors at the time of this offering.
- (5) In February 2009, Mr. Walsh received 10,000 options to purchase shares of our Class B common stock for his service as chair of our Pharmaceutical Advisory Committee that vested in full on the date of grant and was outstanding as of December 31, 2009. The option grant has an ASC 718 grant date fair value of \$29,528. For a discussion of the assumptions used in the valuations, see Note 15 to our consolidated financial statements for the nine months ended September 15, 2009 included elsewhere in this prospectus. As of December 31, 2009, Mr. Walsh has 93,000 outstanding options to purchase shares of Class B common stock which were granted prior to the fiscal year ended December 31, 2009 and remain exercisable as of December 31, 2009.
- (6) Represents compensation for service during the year ended December 31, 2009 as chair of our Pharmaceutical Advisory Committee.

In July 2009, our compensation committee recommended a new director compensation program. In accordance with our new director compensation program, during the year ended December 31, 2009, each non-employee member of our board of directors received restricted stock awards as compensation for serving on our board. No retainer, committee, chair or meeting fees were paid to directors in 2009, other than options to purchase 5,000 shares of our Class B common stock that were granted to Mr. Cook for his service as chairman of our board. For 2009 service, we issued 25,000 shares of restricted stock to each board member not currently affiliated with a venture capital firm (each of Mr. Cook, Ms. Bornino Miller, Mr. Shaw and Dr. Walsh). Mr. Ebersman and Ms. Fanucci received pro-rated portions of the 25,000 shares based upon the date on which they became active board members in 2009. In addition, each board member received a restricted stock grant in the amount of 40,000 shares for future service to Ironwood during years 2010 through 2013. The forfeiture rights: (a) with respect to each of the awards for 40,000 shares, lapse in quarterly increments of 2,500 shares over the period starting March 31, 2010 and ending December 31, 2013, provided that the recipient is still one of our board members on such date, and (b) with respect to each of the awards for 25,000 shares, lapse for all 25,000 shares on December 31, 2009 provided that the recipient is still one of our board members on such date. Subject to certain limited exceptions, no director may transfer any of the shares of restricted stock while such person is a director of Ironwood.

Beginning in 2010, the chairperson of our board and each of the committee chairs will receive an additional \$10,000 annually, payable quarterly in unrestricted stock or cash at the individual director's election. Directors currently are, and will continue to be reimbursed for reasonable travel and other expenses incurred in connection with attending meetings of the board of directors and its committees. Non-employee directors are also eligible to participate in our existing incentive plans, and we anticipate that they will be eligible to participate in our future incentive plans.

We do not anticipate providing any additional compensation to our current directors, aside from the annual chair fees described above, until 2013, at which time the four-year restricted stock grants will be fully vested in recognition of service during that period. The board will consider compensation arrangements for any new directors who join the board in future periods.

Table of Contents**CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS**

Since January 1, 2007, there has not been, nor is there currently proposed, any transaction or series of similar transactions to which we were or are a party in which the amount involved exceeded or exceeds \$120,000 and in which any of our directors, executive officers, holders of more than 5% of any class of our voting securities, or any member of the immediate family of any of the foregoing persons, had or will have a direct or indirect material interest, other than compensation arrangements with directors and executive officers, which are described where required under the captions "Management" and "Executive Compensation" appearing elsewhere in this prospectus, and the transactions described below.

**Stock Issuances and Related Matters*****Series F Convertible Preferred Stock***

On February 1, 2007 and April 2, 2007, we issued an aggregate of 8,000,000 shares of our Series F convertible preferred stock at a price of \$6.25 per share to investors for an aggregate cash purchase price of \$50,000,000. Upon the completion of this offering, these shares will automatically convert into 8,000,000 shares of our Class B common stock. The table below sets forth the number of shares of our Series F convertible preferred stock sold to our directors, executive officers and 5% stockholders and their affiliates in connection with the Series F convertible preferred stock financings:

| Name  | Shares of Series F<br>Convertible Preferred Stock | Purchase Price       |
|---|---|----------------------|
| Peter M. Hecht  | 151,120   | \$ 944,500           |
| Joseph C. Cook, Jr. <sup>(1)</sup>                                  | 16,000  | 100,000              |
| George H. Conrades <sup>(2)</sup>                                   | 480,000   | 3,000,000            |
| Christopher T. Walsh  | 8,000   | 50,000               |
| Black Point Group LP <sup>(3)</sup>                                 | 80,000  | 500,000              |
| Entities associated with<br>Venrock <sup>(4)</sup>                  | 80,000  | 500,000              |
| Entities associated with<br>Fidelity Biosciences <sup>(5)</sup>     | 32,000  | 200,000              |
| Entities associated with<br>Polaris Venture Partners <sup>(6)</sup> | 16,000  | 100,000              |
| Ridgeback Capital<br>Investments L.P.                               | 1,840,000   | 11,500,000           |
| Entities associated with<br>Morgan Stanley <sup>(7)</sup>           | 1,760,000   | 11,000,000           |
| <b>TOTAL</b>  | <b>4,463,120</b>                                  | <b>\$ 27,894,500</b> |

(1) All 16,000 shares held by Mr. Cook, the chairman of our board of directors, and his wife, Judith E. Cook.

(2) In December 2009, all shares were transferred from Mr. Conrades to the Longwood GRAT.

(3) Mr. Shaw, a member of our board of directors, is a managing partner of Black Point Group LP.

(4) Includes 32,800 shares purchased by Venrock Associates and 47,200 shares purchased by Venrock Associates II, L.P. Dr. Roberts, a member of our board of directors, is a general partner of Venrock Associates and Venrock Associates II, L.P.

(5) All 32,000 shares were purchased by Beacon Bioventures L.P. In November 2008, 215 shares were transferred from Beacon Bioventures L.P. to Beacon Bioventures Principals L.P. Dr. Knight, a former member of our board of directors, is a representative of

the general partner of both of these entities.

(6)

Includes 436 shares held by Polaris Venture Partners Founders' Fund II, L.P. and 15,564 shares held by Polaris Venture Partners II, L.P. Mr. McGuire, a member of our board of directors, is a general partner of the Polaris funds.

(7)

Includes 1,212,976 shares purchased by Morgan Stanley Institutional Fund, Inc. Small Company Growth Portfolio, 93,487 shares purchased by Gartmore Variable Insurance Trust GVIT Small Company Fund that were transferred to Nationwide Variable Insurance Trust NVIT Multi-Manager

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Small Company Fund in February 2009, 36,808 shares purchased by The Universal Institutional Funds, Inc. Small Company Growth Portfolio, 139,527 shares purchased by Morgan Stanley Investment Management Small Company Growth Trust, 69,988 shares purchased by Morgan Stanley Special Growth Fund, 110,857 shares purchased by Pactiv Corporation General Employees Benefit Trust, and 96,357 shares purchased by Transamerica Funds Van Kampen Small Company Growth.

**Series H Convertible Preferred Stock**

On September 12, 2008, September 16, 2008 and August 17, 2009, we issued an aggregate of 4,162,419 shares of our Series H convertible preferred stock at a price of \$12.00 per share to investors for an aggregate cash purchase price of \$49,949,028. Upon the completion of this offering, these shares will automatically convert into 4,162,419 shares of our Class B common stock. The table below sets forth the number of shares of our Series H convertible preferred stock sold to our directors, executive officers and 5% stockholders and their affiliates in connection with the Series H convertible preferred stock financings:

| <b>Name</b>   | <b>Shares of Series H<br/>Convertible Preferred Stock</b> | <b>Purchase Price</b> |
|---|---|-----------------------|
| Peter M. Hecht  | 192,500   | \$ 2,310,000          |
| Joseph C. Cook, Jr. <sup>(1)</sup>                                  | 2,083   | 24,996                |
| George H. Conrades <sup>(2)</sup>                                   | 250,000   | 3,000,000             |
| David Ebersman  | 20,833  | 249,996               |
| Millbor Family Trust<br>U/T/D October 16, 2002 <sup>(3)</sup>       | 2,084   | 25,008                |
| David E. Shaw   | 2,000   | 24,000                |
| Christopher T. Walsh  | 2,084   | 25,008                |
| Entities associated with<br>Venrock <sup>(4)</sup>                  | 41,666  | 499,992               |
| Entities associated with<br>Fidelity Biosciences <sup>(5)</sup>     | 2,083   | 24,996                |
| Entities associated with<br>Polaris Venture Partners <sup>(6)</sup> | 2,083   | 24,996                |
| Ridgeback Capital<br>Investments L.P.                               | 20,833  | 249,996               |
| Entities associated with<br>Morgan Stanley <sup>(7)</sup>           | 3,583,335   | 43,000,020            |
| <b>TOTAL</b>  | <b>4,121,584</b>  | <b>\$ 49,459,008</b>  |

- (1) All 2,083 shares held by Mr. Cook, the chairman of our board of directors, and his wife, Judith E. Cook.
- (2) In December 2009, 20,000 shares were transferred from Mr. Conrades to the Longwood GRAT.
- (3) All 2,084 shares held by Millbor Family Trust U/T/D October 16, 2002, of which Ms. Bornino Miller, a member of our board of directors, is a co-trustee and a beneficiary.
- (4) Includes 17,083 shares purchased by Venrock Associates and 24,583 shares purchased by Venrock Associates II, L.P. Dr. Roberts, a member of our board of directors, is a general partner of Venrock Associates and Venrock Associates II, L.P.
- (5) Includes 2,069 shares purchased by Beacon Bioventures L.P. and 14 shares purchased by Beacon Bioventures Principals L.P. Dr. Knight, a former member of our board of directors, is a representative of the general partner of both of these entities.
- (6) Includes 57 shares held by Polaris Venture Partners Founders' Fund II, L.P. and 2,026 shares held by Polaris Venture Partners II, L.P. Mr. McGuire, a member of our board of directors, is a general partner of the Polaris funds.

(7)

Includes 198,702 shares purchased by Transamerica Series Trust Transamerica Van Kampen Mid-Cap Growth VP, 59,853 shares purchased by VALIC Company I Mid Cap Strategic Growth Fund, 162,545 shares purchased by Allianz Variable Insurance Products Trust AZL Van Kampen Mid Cap Growth Fund, 185,024 shares purchased by EQ Advisors Trust EQ/Van Kampen Mid Cap Growth Portfolio, 44,752 shares purchased by Met Investors Series Trust Van Kampen Mid Cap Growth Portfolio, 10,071 shares purchased by Lawrencium Atoll Investments Limited, 1,331,207

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shares purchased by Morgan Stanley Institutional Fund Trust Mid Cap Growth Portfolio, 138,620 shares purchased by Morgan Stanley Mid Cap Growth Fund, 14,664 shares purchased by Morgan Stanley Select Dimensions Investment Series The Mid Cap Growth Portfolio, 11,028 shares purchased by Pacific Life Funds PL Mid-Cap Growth Fund, 367,342 shares purchased by Pacific Select Fund Mid-Cap Growth Portfolio, 54,887 shares purchased by Transamerica Funds Transamerica Van Kampen Mid-Cap Growth, 96,207 shares purchased by The Universal Institutional Funds, Inc. Mid Cap Growth Portfolio, 13,999 shares purchased by Van Kampen Life Investment Trust Mid Cap Growth Portfolio, and 894,434 shares purchased by Van Kampen Mid Cap Growth Fund.

**Registration Rights**

Each of our directors and executive officers (and certain of their family members), as well as Ridgeback Capital Investments L.P., Venrock, Polaris Venture Partners and Morgan Stanley, have registration rights with respect to the shares of capital stock that they hold beginning 180 days after completion of this offering. For a description of these registration rights, see "Description of Capital Stock Registration Rights."

**Conversion of Preferred Stock**

Effective upon the completion of this offering, each outstanding share of our preferred stock of all classes, with the exception of our Series C convertible preferred stock, will automatically convert into one share of our Class B common stock. Each outstanding share of our Series C convertible preferred stock will automatically convert into 1.076 shares of our Class B common stock.

**Indemnification Agreements**

We have entered into indemnification agreements with each of our current directors and certain of our officers. These agreements require us to indemnify these individuals to the fullest extent permitted under Delaware law against liabilities that may arise by reason of their service to us, and to advance expenses incurred as a result of any proceeding against them as to which they could be indemnified. We intend to enter into indemnification agreements with our future directors and executive officers.

**Procedures for Related Party Transactions**

Under our code of business conduct and ethics, our employees, officers and directors are discouraged from entering into any transaction that may cause a conflict of interest for us. In addition, they must report any potential conflict of interest, including related party transactions, to the governance and nominating committee or the general counsel. Pursuant to its charter, our audit committee must approve any related party transactions, including those transactions involving our directors. In approving or rejecting such proposed transactions, the audit committee considers the relevant facts and circumstances available and deemed relevant to the audit committee, including the material terms of the transactions, risks, benefits, costs, availability of other comparable services or products and, if applicable, the impact on a director's independence. Our audit committee will approve only those transactions that, in light of known circumstances, are in, or are not inconsistent with, our best interests, as our audit committee determines in the good faith exercise of its discretion. A copy of our code of business conduct and ethics and our governance and nominating committee charter and audit committee charter may be found at our corporate website <http://www.ironwoodpharma.com> upon the completion of this offering. The content on our website is not incorporated by reference into this prospectus.

Table of Contents**PRINCIPAL STOCKHOLDERS**

The following table sets forth certain information with respect to the beneficial ownership of our common stock at December 31, 2009 for:

each person whom we know beneficially owns more than five percent of our common stock;

each of our directors;

each of our named executive officers; and

all of our directors and executive officers as a group.

The number of shares beneficially owned by each stockholder is determined under rules issued by the SEC and includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

The percentage of common stock beneficially owned by each person before the offering is based on no shares of Class A common stock and 78,246,222 shares of Class B common stock outstanding on December 31, 2009, assuming the conversion of 69,904,843 shares of our convertible preferred stock outstanding into 70,391,620 shares of our Class B common stock. Each share of Class B common stock is convertible at any time into one share of Class A common stock. See "Description of Capital Stock." Shares of common stock that may be acquired within 60 days following December 31, 2009 pursuant to the exercise of options are deemed to be outstanding for the purpose of computing the percentage ownership of such holder but are not deemed to be outstanding for computing the percentage ownership of any other person shown in the table. Beneficial ownership representing less than one percent is denoted with an "\*".

Each of our directors has either personally or through an affiliate participated in substantially all of the convertible preferred financing rounds (other than those made available exclusively to Forest and Almirall) following the date on which such director joined our board. Dr. Hecht's participation in each round is described in more detail in note 2 to the following table.

Unless otherwise indicated, the address for each of the stockholders in the table below is c/o Ironwood Pharmaceuticals, Inc., 320 Bent Street, Cambridge, Massachusetts 02141.

| <b>Name of Beneficial Owner</b>      | <b>Class B Common<br/>Stock Owned</b> | <b>% Total Voting<br/>Power Before<br/>Offering</b> | <b>% Total Voting<br/>Power After<br/>Offering<sup>(1)</sup></b> |
|--------------------------------------|---------------------------------------|---|--|
| <b>Officers and Directors</b>        |                                       |   |  |
| Peter M. Hecht <sup>(2)</sup>        | 4,338,665                             | 5.49  | 4.53   |
| Michael J. Higgins <sup>(3)</sup>    | 682,956                               | *   | *  |
| Thomas A. McCourt                    | 0                                     | *   | *  |
| Mark G. Currie <sup>(4)</sup>        | 814,625                               | 1.03  | *  |
| Joseph C. Cook, Jr. <sup>(5)</sup>   | 607,172                               | *   | *  |
| George H. Conrades <sup>(6)</sup>    | 1,429,687                             | 1.83  | 1.51   |
| David Ebersman                       | 71,519                                | *   | *  |
| Marsha H. Fanucci                    | 44,863                                | *   | *  |
| Stephen C. Knight <sup>(7)</sup>     | 3,752,038                             | 4.80  | 3.95   |
| Terrance G. McGuire <sup>(8)</sup>   | 6,303,980                             | 8.06  | 6.64   |
| Gina Bornino Miller <sup>(9)</sup>   | 770,952                               | *   | *  |
| Bryan E. Roberts <sup>(10)</sup>     | 8,746,321                             | 11.18   | 9.22   |
| David E. Shaw <sup>(11)</sup>        | 457,085                               | *   | *  |
| Christopher T. Walsh <sup>(12)</sup> | 358,026                               | *   | *  |



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|  |            |       |       |
|--|------------|-------|-------|
| All executive officers and directors as a group <sup>(13)</sup> (14 persons) | 28,377,889 | 37.95 | 29.24 |
|--|------------|-------|-------|

**5% Security Holders**

|  |            |       |       |
|--|------------|-------|-------|
| Ridgeback Capital Investments L.P. <sup>(14)</sup>               | 10,389,262 | 13.28 | 10.95 |
| Entities associated with Venrock <sup>(10)</sup>                 | 8,731,321  | 11.16 | 9.20  |
| Entities associated with Polaris Venture Partners <sup>(8)</sup> | 6,303,980  | 8.06  | 6.64  |
| Entities associated with Morgan Stanley <sup>(15)</sup>          | 5,343,335  | 6.83  | 11.60 |

(1)

This table reflects voting power on matters in which holders of our Class B common stock are entitled to one vote per share. See "Description of Capital" stock for circumstances in which holders of our Class B common stock are entitled to ten votes per share.

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- (2) Includes 838,914 shares issuable to Dr. Hecht upon the exercise of options that are exercisable within 60 days following November 1, 2009. Also includes 2,569,307 shares of our convertible preferred stock (which will convert into 2,589,751 shares of our Class B common stock upon completion of this offering), which Dr. Hecht acquired through participation in each of our convertible preferred financing rounds (other than those made available exclusively to Forest and Almirall). These 2,569,307 shares of convertible preferred stock consist of 749,544 shares of our Series A convertible preferred stock, 362,900 of our Series B convertible preferred stock, 268,857 of our Series C convertible preferred stock, 246,349 of our Series D convertible preferred stock, 598,037 shares of our Series E convertible preferred stock, 151,120 shares of our Series F convertible preferred stock and 192,500 shares of our Series H convertible preferred stock.
- (3) Includes 532,956 shares issuable to Mr. Higgins upon the exercise of options that are exercisable within 60 days following November 1, 2009.
- (4) Includes 604,625 shares issuable to Dr. Currie upon the exercise of options that are exercisable within 60 days following November 1, 2009.
- (5) Includes 86,025 shares held by Farview Management Company, L.P. Also includes 411,147 shares held by Mr. Cook and his wife, Judith E. Cook. Mr. Cook has shared voting and investment authority over these shares. Also includes 45,000 shares issuable to Mr. Cook upon the exercise of options that are exercisable within 60 days following November 1, 2009.
- (6) Includes 254,152 shares held by the Conrades Family, LLC, of which Mr. Conrades is a managing member. Also includes 261,780 shares held by Pelmea L.P., of which Mr. Conrades is a manager of the general partner.
- (7) Although Dr. Knight resigned from our board of directors at the time of this offering, he was a member of our board of directors as of December 31, 2009. Includes 40,000 shares held by Fidelity Biosciences Corp., 3,687,051 shares held by Beacon Bioventures L.P. and 24,987 shares held by Beacon Bioventures Principals L.P., and Dr. Knight has shared voting and investment authority over these shares and is a representative of the general partner of Beacon Bioventures L.P. and Beacon Bioventures Principals L.P.
- (8) Includes 40,000 shares held by Bartlett Partners, LLC, 163,302 shares held by Polaris Venture Partners Founders' Fund II, L.P. and 6,100,678 shares held by Polaris Venture Partners II, L.P. Mr. McGuire is a manager of Bartlett Partners, LLC and a general partner of the Polaris funds, and has shared voting and investment authority over these shares.
- (9) Includes 720,952 shares held by Millbor Family Trust U/T/D October 16, 2002, of which Ms. Bornino Miller is a co-trustee and a beneficiary. As co-trustee, Ms. Bornino Miller exercises shared voting and investment authority over these shares. Does not include 176,781 shares of common stock of Microbia, Inc., our majority-owned subsidiary, issuable to Ms. Bornino Miller upon the exercise of options that are exercisable within 60 days following November 1, 2009.
- (10) Includes 2,559,605 shares held by Venrock Associates, 3,683,329 shares held by Venrock Associates II, L.P., 48,387 shares held by Venrock Entrepreneurs Fund, L.P., 2,017,021 shares held by Venrock Healthcare Capital Partners, LP, 382,979 shares held by VHCP Co-Investment Holdings, LLC and 40,000 shares held by VR Management, LLC. Dr. Roberts is a general partner of Venrock Associates and Venrock Associates II, L.P. and a member of the general partners of Venrock Entrepreneurs Fund, L.P. and Venrock Healthcare Capital Partners, LP, and a member of the manager of VHCP Co-Investment Holdings, LLC and VR Management, LLC, and as such, he may be deemed to have voting and investment power with respect to these shares. Dr. Roberts disclaims beneficial ownership with respect to these shares except to the extent of his indirect pecuniary interest therein.
- (11) Includes 80,000 shares held by Black Point Group LP. Mr. Shaw is a managing partner of Black Point Group LP and has shared voting and investment authority over these shares.
- (12) Includes 103,000 shares issuable to Dr. Walsh upon the exercise of options that are exercisable within 60 days following November 1, 2009.

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- (13) Includes 2,124,495 shares issuable upon the exercise of options that are exercisable within 60 days following November 1, 2009. Also includes 22,000 shares of Class A common stock purchased by Ms. Fanucci in this offering.
- (14) The address for this entity is c/o Ridgeback Capital Management LLC, 430 Park Avenue, 12th Floor, New York, NY, 10022.
- (15) Includes 198,702 shares held by Transamerica Series Trust Transamerica Van Kampen Mid-Cap Growth VP, 59,853 shares held by VALIC Company I Mid Cap Strategic Growth Fund, 162,545 shares held by Allianz Variable Insurance Products Trust AZL Van Kampen Mid Cap Growth Fund, 1,212,976 shares held by Morgan Stanley Institutional Fund, Inc. Small Company Growth Portfolio, 93,487 shares held by Nationwide Variable Insurance Trust NVIT Multi-Manager Small Company Fund, 36,808 shares held by The Universal Institutional Funds, Inc. Small Company Growth Portfolio, 185,024 shares held by EQ Advisors Trust EQ/Van Kampen Mid Cap Growth Portfolio, 44,752 shares held by Met Investors Series Trust Van Kampen Mid Cap Growth Portfolio, 10,071 shares held by Lawrencium Atoll Investments Limited, 1,331,207 shares held by Morgan Stanley Institutional Fund Trust Mid Cap Growth Portfolio, 139,527 shares held by Morgan Stanley Investment Management Small Company Growth Trust, 138,620 shares held by Morgan Stanley Mid Cap Growth Fund, 14,664 shares held by Morgan Stanley Select Dimensions Investment Series The Mid Cap Growth Portfolio, 69,988 shares held by Morgan Stanley Special Growth Fund, 11,028 shares held by Pacific Life Funds PL Mid-Cap Growth Fund, 367,342 shares held by Pacific Select Fund Mid-Cap Growth Portfolio, 110,857 shares held by Pactiv Corporation General Employees Benefit Trust, 54,887 shares held by Transamerica Funds Transamerica Van Kampen Mid-Cap Growth, 96,357 shares held by Transamerica Funds Van Kampen Small Company Growth, 96,207 shares held by The Universal Institutional Funds, Inc. Mid Cap Growth Portfolio, 13,999 shares held by Van Kampen Life Investment Trust Mid Cap Growth Portfolio, and 894,434 shares held by Van Kampen Mid Cap Growth Fund. Total voting power after the offering also includes 5,666,551 shares purchased by entities associated with Morgan Stanley Investment Management in this offering. The address for each of these entities except for Morgan Stanley Special Growth Fund is c/o Morgan Stanley Investment Management, Inc., 522 Fifth Avenue, New York, NY, 10036. The address for Morgan Stanley Special Growth Fund is c/o Morgan Stanley Investment Management, Inc. 1221 Avenue of the Americas, New York, NY, 10020.

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**DESCRIPTION OF CAPITAL STOCK**

**General**

The following is a summary of the material rights of our capital stock and related provisions of our certificate of incorporation and bylaws. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our eleventh amended and restated certificate of incorporation and fifth amended and restated bylaws, both of which will be effective upon the closing of this offering and the forms of which we have included as exhibits to the registration statement of which this prospectus is a part, as well as our eighth amended and restated investors' rights agreement that is currently in effect and which we have included as an exhibit to the registration statement of which this prospectus is a part.

Our tenth amended and restated certificate of incorporation provides that we have two classes of common stock: Series A common stock and Series B common stock. Throughout this prospectus, we refer to our Series A common stock as our Class A common stock and our Series B common stock as our Class B common stock. Our eleventh amended and restated certificate of incorporation, which will be effective upon the closing of this offering, changes the name of our Series A common stock to Class A common stock and of our Series B common stock to Class B common stock, among other things.

Our Class B common stockholders encompass all of our stockholders prior to this offering including our investors, employees, founders and collaboration partners and total more than 300 individuals and entities. Assuming the conversion of all shares of our convertible preferred stock outstanding prior to this offering, our largest Class B common stockholder would hold approximately 13% of the outstanding shares of Class B common stock. Our stockholders voted to put the dual class common stock structure in place in 2008, with the intent to maximize stockholder value by pursuing the strategy described in this prospectus rather than seeking to be acquired into a larger pharmaceutical company. As described below and in our eleventh amended and restated certificate of incorporation, the dual class common stock structure will remain in place at least until 2018 (and potentially until 2038), during the critical period when we expect to be building our commercial capabilities, launching linaclotide, and investing in our development pipeline.

This dual class structure is a fundamental element of our overall strategy to seek to maximize shareholder value over the long-term. Holders of our Class A and Class B common stock have identical rights, except that, in certain circumstances, holders of our Class A common stock are entitled to one vote per share and holders of our Class B common stock are entitled to ten votes per share. The breadth of our Class B stockholder group should ensure that significant decisions about our independence are made within a context of diverse opinions and interests.

Any holder of Class B common stock may convert his or her shares at any time into shares of Class A common stock on a share-for-share basis. Shares of Class B common stock can be sold at any time and, subject to limited exceptions, irrevocably convert to shares of Class A common upon sale or transfer. Therefore, we expect that over time, the Class B stockholder class will diminish as a percentage of our total shares outstanding, and that the remaining Class B shares will be concentrated in the hands of our longest term stockholders.

Immediately following the completion of this offering, our authorized capital stock will consist of 675,000,000 shares, each with a par value of \$0.001 per share, of which:

500,000,000 shares are designated as Class A common stock.

100,000,000 shares are designated as Class B common stock.

75,000,000 shares are designated as preferred stock.

At December 31, 2009, we had outstanding no shares of Class A common stock and 78,246,222 shares of Class B common stock, held of record by 316 stockholders. These amounts assume the conversion of all

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outstanding shares of our preferred stock as of December 31, 2009, totaling 69,904,843 shares, into 70,391,620 shares of Class B common stock, which will occur at the completion of this offering. In addition, as of December 31, 2009, 13,691,579 shares of our Class B common stock were subject to outstanding awards under our equity plans.

Upon the completion of this offering, there will be 16,666,667 shares of Class A common stock outstanding, which represents 17.6% of the total number of shares of common stock outstanding as of December 31, 2009, and 78,246,222 shares of Class B common stock outstanding, which represents 82.4% of the total number of shares of common stock outstanding as of December 31, 2009.

**Common Stock**

***Voting Rights***

Each share of Class A common stock and each share of Class B common stock has one vote per share, except on the following matters (in which each share of Class A common stock has one vote per share and each share of Class B common stock has ten votes per share), if submitted to a vote of stockholders:

adoption of a merger or consolidation agreement involving Ironwood;

a sale of all or substantially all of Ironwood's assets;

a dissolution or liquidation of Ironwood; or

every matter, if and when any individual, entity or "group" (as such term is used in Regulation 13D of the Exchange Act) has, or has publicly disclosed (through a press release or a filing with the SEC) an intent to have, beneficial ownership of 30% or more of the number of outstanding shares of Class A common stock and Class B common stock, combined.

Holders of shares of Class A common stock and Class B common stock will vote together as a single class on all matters (including the election of directors) submitted to a vote of stockholders, unless otherwise required by our certificate of incorporation or by law. Our certificate of incorporation provides that any increase in the number of authorized shares of either our Class A common stock or our common stock may be approved by a majority of our Class A common stock and Class B common stock, voting together as a single class. Our certificate of incorporation requires that a majority of the Class B common stock approve further issuances of shares of Class B common stock, subject to certain exceptions, or any amendment to our certificate of incorporation. Delaware law could require either our Class A common stock or Class B common stock to vote separately as a single class in the following circumstances:

If we amended our certificate of incorporation to increase or decrease the par value of a class of stock, then that class would be required to vote separately to approve the proposed amendment.

If we amended our certificate of incorporation in a manner that altered or changed the powers, preferences or special rights of a class of stock in a manner that affects them adversely then that class would be required to vote separately to approve the proposed amendment.

We have not provided for cumulative voting for the election of directors in our certificate of incorporation. Because our certificate of incorporation does provide for plurality voting for the election of directors, a director may be elected even if less than a majority of the votes cast are in favor of such election.

***Dividends***

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Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of Class A common stock and Class B common stock will be entitled to share equally in any dividends that our board of directors may determine to issue from time to time. In the event a dividend is paid in the form of shares of common stock or rights to acquire shares of common stock, the holders of

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Class A common stock will receive Class A common stock, or rights to acquire Class A common stock, as the case may be, and the holders of Class B common stock will receive Class B common stock, or rights to acquire Class B common stock, as the case may be.

We have never declared or paid any cash dividends on our capital stock and we do not currently anticipate declaring or paying cash dividends on our capital stock in the foreseeable future. We currently intend to retain all of our future earnings, if any, to finance operations. Any future determination relating to our dividend policy will be made at the discretion of our board of directors and will depend on a number of factors, including future earnings, capital requirements, financial conditions, future prospects, contractual restrictions and covenants and other factors that our board of directors may deem relevant.

***Liquidation Rights***

Upon our liquidation, dissolution or winding-up, the holders of Class A common stock and Class B common stock will be entitled to share equally all assets remaining after the payment of any liabilities and the liquidation preferences on any outstanding preferred stock.

***Conversion***

Our Class A common stock is not convertible into any other shares of our capital stock.

Each share of Class B common stock is convertible at any time at the option of the holder into one share of Class A common stock.

In addition, each share of Class B common stock will convert automatically into one share of Class A common stock upon any transfer, whether or not for value, except for certain transfers described in our certificate of incorporation, including the following:

transfers for tax and estate planning purposes, including to trusts, corporations, partnerships or other legal entities in which the holder of Class B common stock retains the voting control over such shares;

transfers to a family member or to another legal entity for the benefit of the family member;

transfers to any person directly or indirectly controlling, controlled by or under common control with the holder of Class B common stock; and

if the holder of Class B common stock is a partnership, transfers to any general partner of the partnership who also is a director of Ironwood at that time.

The death of any holder of Class B common stock who is a natural person will result in the conversion of his or her shares of Class B common stock into Class A common stock unless, as a result of the death of such holder, the shares of Class B common stock transfer to one or more of the entities described in the preceding bulleted list.

Furthermore, each share of Class B common stock will convert automatically into one share of Class A common stock upon the earliest of the following:

the later of (1) the first date on which the number of shares of Class B Common Stock then outstanding represents less than 25% of the number of shares of Class B Common Stock outstanding at the completion of this offering (after giving effect to the automatic conversion of our preferred stock into shares of Class B common stock), or (2) December 31, 2018;

December 31, 2038; or

a date agreed to in writing by the holders of at least a majority of then outstanding shares of Class B common stock.



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Once converted into Class A common stock, the Class B common stock will be retired and will not be reissued.

**Preferred Stock**

Upon the completion of this offering, shares of our outstanding preferred stock will convert into shares of Class B common stock.

Following the completion of this offering, our board of directors will have the authority, without approval by the stockholders, to issue up to a total of 75,000,000 shares of preferred stock in one or more series. Our board of directors may establish the number of shares to be included in each such series and may fix the designations, preferences, powers and other rights of the shares of a series of preferred stock. Our board could authorize the issuance of preferred stock with voting or conversion rights that could dilute the voting power or rights of the holders of common stock. However, such shares of preferred stock would not convert into shares of Class B common stock without prior consent of our board. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in control of Ironwood and might harm the market price of our common stock. We have no current plans to issue any shares of preferred stock.

**Registration Rights**

The holders of approximately 70,170,477 shares of our Class B common stock, which includes the shares of Class B common stock issuable upon the automatic conversion of our currently outstanding preferred stock, are entitled to rights with respect to the registration under the Securities Act of shares of Class A common stock into which their shares of Class B common stock converts. These registration rights are contained in our eighth amended and restated investors' rights agreement and are described below. The registration rights under the investors' rights agreement will expire five years following the completion of this offering, or, with respect to an individual holder, when such holder holds less than 1% of the number of outstanding shares of Class B common stock and is able to sell all of its shares pursuant to Rule 144 under the Securities Act in any 90 day period.

***Demand Registration Rights***

At any time following 180 days after the completion of this offering, the holders of shares of common stock having demand registration rights under the investors' rights agreement have the right to require that we register their shares of Class A common stock into which their shares of Class B common stock converts, provided such registration relates to not less than 20% in aggregate of our then outstanding shares of Class B common stock having demand registration rights and the anticipated aggregate offering price to the public is at least \$5,000,000. In response to these demand registration rights, we are only obligated to effect two registrations for each series of our outstanding preferred stock that were converted into Class B common stock upon the completion of this offering. We may postpone the filing of a registration statement for up to 90 days once in any 12-month period if our board of directors determines in good faith that the filing would be seriously detrimental to our stockholders or us. The underwriters of any underwritten offering have the right to limit the number of shares to be included in a registration statement filed in response to the exercise of these demand registration rights. We must pay all expenses, except for underwriters' discounts and commissions, incurred in connection with the exercise of these demand registration rights.

***Piggyback Registration Rights***

If we register any securities for public sale, the stockholders with piggyback registration rights under the investors' rights agreement have the right to include their shares in the registration, subject to specified

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exceptions. In accordance with the terms of the investors' rights agreement, we have received a waiver of these piggyback registration rights with respect to the registration for this offering. The underwriters of any underwritten offering have the right to limit the number of shares registered by these stockholders due to marketing reasons. We must pay all expenses, except for underwriters' discounts and commissions, incurred in connection with the exercise of these piggyback registration rights.

***S-3 Registration Rights***

If we are eligible to file a registration statement on Form S-3, the stockholders with S-3 registration rights under the investors' rights agreement can request that we register their shares, provided that the total price of the shares of common stock offered to the public is at least \$500,000. These S-3 registration rights are wholly distinct from the demand registration rights and piggyback registration rights described above. A holder of S-3 registration rights may not require us to file a registration statement on Form S-3 if we have already effected two registrations on Form S-3 at the request of such holder in the last 12-month period. We may postpone the filing of a Form S-3 registration statement for up to 90 days once in any 12-month period if our board of directors determines in good faith that the filing would be seriously detrimental to our stockholders or us. The holders of S-3 registration rights must pay all expenses associated with any registrations on Form S-3 after the first six registrations on Form S-3.

**Anti-Takeover Effects of our Certificate of Incorporation and Bylaws and Delaware Law**

Certain provisions of Delaware law, our certificate of incorporation and our bylaws could have the effect of delaying, deferring or discouraging another party from acquiring control of us. In particular, our dual class common stock structure will concentrate ownership of our voting stock in the hands of our founders, board members and employees and current holders of our preferred stock. These provisions, which are summarized below, encourage persons seeking to acquire control of us to first negotiate with our board of directors and the holders of our capital stock prior to this offering.

***Dual Class Common Stock Structure***

As discussed above, our Class B common stock has ten votes per share in change of control transactions, while our Class A common stock, which is the class of stock we are selling in this offering and which will be the only class of stock which is publicly traded, has one vote per share. Because of our dual class common stock structure, our founders, directors, executives, employees and current holders of our preferred stock (and their affiliates) will continue to be able to control all matters submitted to our stockholders for approval even if they come to own significantly less than 50% of the shares of our outstanding common stock. This concentrated control could discourage others from initiating any potential merger, takeover or other change of control transaction that other stockholders may view as beneficial.

***Undesignated Preferred Stock***

The ability to authorize undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

***Limits on Ability of Stockholders to Act by Written Consent***

We have provided in our certificate of incorporation that our stockholders may not act by written consent other than in matters that require a separate series vote of the Class B common stock. In addition, our certificate of incorporation also requires that special meetings of stockholders be called only by our board of directors, our chairman, our chief executive officer or our president if there is no chief executive officer. This limit on the ability of our stockholders to act by written consent or to call a special meeting

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may lengthen the amount of time required to take stockholder actions. As a result, a holder controlling a majority of our capital stock would not be able to amend our bylaws or remove directors without holding a stockholders meeting.

***Requirements for Advance Notification of Stockholder Nominations and Proposals***

Our bylaws, as amended and restated upon completion of this offering, establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors. The bylaws do not give the board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding business to be conducted at a special or annual meeting of the stockholders. However, our bylaws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

***Staggered Board of Directors***

Upon the closing of the offering, our board of directors will consist of ten directors, which are divided into three classes. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the directors of the same class whose terms are then expiring. As a result, a portion of our board of directors will be elected each year. Our certificate of incorporation authorizes our board of directors to fix the number of directors from time to time by a resolution of the majority of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class shall consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control. Between stockholder meetings, directors may be removed by our stockholders only for cause and the board of directors may appoint new directors to fill the vacancies. These provisions may deter a stockholder from removing incumbent directors and from simultaneously gaining control of the board of directors by filling the resulting vacancies with its own nominees. Consequently, the existence of these provisions may have the effect of deterring hostile takeovers, which could depress the market price of our Class A common stock.

***Delaware Anti-Takeover Statute***

We are subject to Section 203 of the Delaware General Corporation Law. This statute regulating corporate takeovers prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for three years following the date that the stockholder became an interested stockholder, unless:

prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

upon completion of the transaction that resulted in the interested stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers, and (b) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

on or subsequent to the date of the transaction, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written

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consent, by the affirmative vote of at least 66<sup>2</sup>/<sub>3</sub>% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is any person who, together with such person's affiliates and associates (i) owns 15% or more of a corporation's voting securities or (ii) is an affiliate or associate of a corporation and was the owner of 15% or more of the corporation's voting securities at any time within the three year period immediately preceding a business combination of the corporation governed by Section 203. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may discourage takeover attempts that might result in a premium over the market price for the shares of Class A common stock held by our stockholders.

**Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is Computershare Trust Company N.A.

**Listing**

Our Class A common stock has been approved for listing on The NASDAQ Global Market under the symbol "IRWD."

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**SHARES ELIGIBLE FOR FUTURE SALE**

Before this offering, there has not been a public market for our common stock. As described below, only a limited number of shares currently outstanding will be available for sale immediately after this offering due to contractual and legal restrictions on resale. Nevertheless, future sales of substantial amounts of our Class A common stock, including shares issued upon exercise of outstanding options, in the public market after the restrictions lapse, or the possibility of such sales, could cause the prevailing market price of our Class A common stock to fall or impair our ability to raise equity capital in the future.

Upon completion of this offering, we will have outstanding 16,666,667 shares of our Class A common stock and 78,246,222 shares of our Class B common stock, after giving effect to the conversion of all 69,904,843 outstanding shares of our preferred stock into shares of Class B common stock. This also assumes that there are no exercises of outstanding options after December 31, 2009. Of these shares, all 16,666,667 shares of our Class A common stock sold in this offering will be freely tradable in the public market without restriction or further registration under the Securities Act, unless these shares are held by our affiliates, as that term is defined in Rule 144 under the Securities Act. Shares purchased by our affiliates may not be resold except pursuant to an effective registration statement or an exemption from registration, including the safe harbor under Rule 144 of the Securities Act described below.

After this offering, and assuming no exercise of the underwriters' over-allotment option, 78,246,222 shares of our common stock held by existing stockholders will be "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities may be sold in the public market only pursuant to an effective registration statement or an exemption from registration under Rule 144 or 701 under the Securities Act. These rules are summarized below. Subject to the lock-up agreements described below and the provisions of Rule 144 and Rule 701, these restricted securities will be available for sale in the public market as follows:

| <b>Number of Shares</b> | <b>Date of Availability for Sale</b>                                    |
|-------------------------|---|
| 2,026,862               | 90 days after the date of this prospectus and various times thereafter  |
| 76,230,943              | 180 days after the date of this prospectus and various times thereafter |

**Investors' Rights Agreement**

Under our eighth amended and restated investors' rights agreement, the holders of our capital stock that are party to that agreement have agreed to not sell any common stock (Class A or Class B) owned by them for a period of 180 days after the date of effectiveness of the registration statement to which this prospectus is a part, and in specific circumstances, up to an additional 34 days. Such "market stand-off" rights are contingent upon all directors, officers and holders of at least 1% of our voting capital stock entering into a similar agreement.

**Lock-Up Agreements**

In connection with this offering, officers, directors, employees and stockholders, who together hold an aggregate of 76,230,943 shares of our common stock, after giving effect to the conversion of the outstanding shares of our preferred stock into shares of Class B common stock at the completion of this offering, have agreed, subject to limited exceptions, not to directly or indirectly sell or dispose of any shares of common stock (Class A or Class B) or any securities convertible into or exchangeable or exercisable for shares of common stock for a period of 180 days after the date of this prospectus, and in specific circumstances, up to an additional 34 days, without the prior written consent of J.P. Morgan Securities Inc. and Morgan Stanley & Co. Incorporated. For additional information, see "Underwriting."

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**Rule 144**

In general, under Rule 144, beginning ninety days after the date of this prospectus, a person who is not our affiliate and has not been our affiliate at any time during the preceding three months will be entitled to sell any shares of our common stock that such person has held for at least six months, including the holding period of any prior owner other than one of our affiliates, without regard to volume limitations. Sales of our common stock by any such person would be subject to the availability of current public information about us if the shares to be sold were held by such person for less than one year.

In addition, under Rule 144, a person may sell shares of our common stock acquired from us immediately upon the completion of this offering, without regard to volume limitations or the availability of public information about us, if:

the person is not our affiliate and has not been our affiliate at any time during the preceding three months; and

the person has beneficially owned the shares to be sold for at least one year, including the holding period of any prior owner other than one of our affiliates.

Beginning ninety days after the date of this prospectus, our affiliates who have beneficially owned shares of our common stock for at least six months, including the holding period of any prior owner other than another of our affiliates, would be entitled to sell within any three-month period those shares and any other shares they have acquired that are not restricted securities, provided that the aggregate number of shares sold does not exceed the greater of:

1% of the number of shares of our common stock then outstanding, which will equal approximately 949,129 shares immediately after this offering; and

the average weekly trading volume in our common stock on The NASDAQ Global Market during the four calendar weeks preceding the date of filing of a Notice of Proposed Sale of Securities Pursuant to Rule 144 with respect to the sale.

Sales under Rule 144 by our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us.

**Rule 701**

Any employee, officer or director of our company, or consultant to our company who purchased shares under a written compensatory plan or contract may be entitled to sell them in reliance on Rule 701. Rule 701 permits affiliates to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. Rule 701 further provides that non-affiliates may sell these shares in reliance on Rule 144 without complying with the holding period, public information, volume limitation or notice provisions of Rule 144. All holders of Rule 701 shares are required to wait until ninety days after the date of this prospectus before selling those shares. However, substantially all shares issued under Rule 701 are subject to lock-up agreements described above and will only become eligible for sale when the 180-day lock-up agreements expire.

**Stock Plans**

We plan on filing registration statements on Form S-8 under the Securities Act covering 13,691,579 shares of our Class A common stock (into which our Class B common stock converts) issuable upon exercise of outstanding options and 2,255,516 shares of our Class A common stock reserved for issuance under our 1998 Stock Option Plan, 2002 Stock Incentive Plan and 2005 Stock Incentive Plan, and any future incentive plans or employee stock purchase plans which we adopt. We expect to file these registration statements as soon as practicable after this offering, but no resale of these registered shares

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that are subject to lock-up agreements shall occur until after the expiration of the lock-up periods in such agreements.

**Registration Rights**

At any time after 180 days following this offering, certain holders of our Class B common stock may demand that we register their shares under the Securities Act or, if we file another registration statement under the Securities Act other than a Form S-8 covering securities issuable under our stock plans, may elect to include their shares of Class B common stock in such registration. If these shares are registered, they will be freely tradable without restriction under the Securities Act. For additional information, see "Description of Capital Stock Registration Rights."

We have agreed not to file any registration statements during the 180-day period after the date of this prospectus with respect to the registration of any shares of common stock or any securities convertible into or exercisable or exchangeable into common stock, other than one or more registration statements on Form S-8 covering securities issuable under our stock plans, without the prior written consent of J.P. Morgan Securities Inc. and Morgan Stanley & Co. Incorporated.

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**MATERIAL U.S. FEDERAL TAX CONSIDERATIONS FOR  
NON-U.S. HOLDERS OF COMMON STOCK**

The following is a summary of certain material U.S. federal income and estate tax considerations relating to the purchase, ownership and disposition of our common stock by Non-U.S. Holders (defined below), but does not purport to be a complete analysis of all the potential tax considerations. This summary is based upon the Code, the Treasury regulations promulgated or proposed thereunder and administrative and judicial interpretations thereof, all as of the date hereof and all of which are subject to change at any time, possibly on a retroactive basis. This summary is limited to the tax consequences to those persons who hold our common stock as capital assets within the meaning of Section 1221 of the Code.

This summary does not purport to deal with all aspects of U.S. federal income and estate taxation that might be relevant to particular Non-U.S. Holders in light of their particular investment circumstances or status, nor does it address specific tax considerations that may be relevant to particular persons (including, for example, financial institutions, broker-dealers, insurance companies, partnerships or other pass-through entities, certain U.S. expatriates, tax-exempt organizations, "controlled foreign corporations," "passive foreign investment companies," corporations that accumulate earnings to avoid U.S. federal income tax, or persons in special situations, such as those who have elected to mark securities to market or those who hold common stock as part of a straddle, hedge, conversion transaction or other integrated investment). In addition, this summary does not address U.S. federal alternative minimum, certain estate and gift tax considerations or considerations under the tax laws of any state, local or non-U.S. jurisdiction.

**This summary is for general information only. Non-U.S. Holders are urged to consult their tax advisors concerning the U.S. federal income and estate taxation, state, local and non-U.S. taxation and other tax consequences to them of the purchase, ownership and disposition of our common stock, as well as the application of state, local and non-U.S. income and other tax laws.**

For purposes of this summary, a "Non-U.S. Holder" means a beneficial owner of common stock that for U.S. federal income tax purposes is not:

an individual who is a citizen or resident of the U.S.,

a corporation (or other entity taxable as a corporation) created or organized under the laws of the U.S., any state thereof, or the District of Columbia,

an estate the income of which is subject to U.S. federal income tax regardless of its source, or

a trust if (a) a court within the U.S. is able to exercise primary supervision over the administration of the trust, and one or more U.S. persons have the authority to control all substantial decisions of the trust, or (b) a valid election to be treated as a U.S. person is in effect with respect to such trust.

If a Non-U.S. Holder is a partner in a partnership, or an entity or arrangement treated as a partnership, for U.S. federal income tax purposes that holds common stock, the Non-U.S. Holder's tax treatment generally will depend upon the Non-U.S. Holder's tax status and upon the activities of the partnership. Accordingly, partnerships that hold our common stock and partners in such partnerships should consult their tax advisors.

**Distributions on Our Common Stock**

As discussed under "Dividend Policy" above, we do not currently expect to pay dividends. In the event that we do make a distribution of cash or property with respect to our common stock, any such distributions will be treated as a dividend for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Any distribution not treated as a dividend will be treated first as a tax-free return of capital to the extent of the





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Non-U.S. Holder's tax basis in our common stock and thereafter as capital gain from the sale or exchange of such stock. Dividends paid to a Non-U.S. Holder generally will be subject to a 30% U.S. federal withholding tax unless such Non-U.S. Holder provides us or our agent, as the case may be, with a properly executed:

1. IRS Form W-8BEN (or successor form) claiming, under penalties of perjury, a reduction in withholding under an applicable income tax treaty, or
2. IRS Form W-8ECI (or successor form) stating that a dividend paid on common stock is not subject to withholding tax because it is effectively connected with a U.S. trade or business of the Non-U.S. Holder (in which case such dividend generally will be subject to regular graduated U.S. tax rates as described below).

The certification requirement described above also may require a Non-U.S. Holder that provides an IRS form or that claims treaty benefits to provide its U.S. taxpayer identification number.

Each Non-U.S. Holder is urged to consult its own tax advisor about the specific methods for satisfying these requirements. A claim for exemption will not be valid if the person receiving the applicable form has actual knowledge or reason to know that the statements on the form are false.

If dividends are effectively connected with a U.S. trade or business of the Non-U.S. Holder (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment), the Non-U.S. Holder, although exempt from the withholding tax described above (provided that the certifications described above are satisfied), will be subject to U.S. federal income tax on such dividends on a net income basis in the same manner as if it were a resident of the United States. In addition, if such Non-U.S. Holder is a non-U.S. corporation and dividends are effectively connected with its U.S. trade or business (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment), such Non-U.S. Holder may be subject to an additional "branch profits tax" equal to 30% (unless reduced by an applicable income treaty) in respect of such effectively-connected income.

If a Non-U.S. Holder is eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty, such holder may obtain a refund or credit of any excess amount withheld by timely filing an appropriate claim for refund with the IRS.

**Disposition of Our Common Stock**

A Non-U.S. Holder generally will not be subject to U.S. federal income tax on gain recognized on a sale, exchange or other taxable disposition of a share of our common stock, unless:

- the gain is effectively connected with a trade or business of the Non-U.S. Holder in the United States (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment);
- the Non-U.S. Holder is a nonresident alien who is present in the United States for 183 days or more in the taxable year of the disposition and meets certain other conditions; or
- we are or have been a "United States real property holding corporation," as defined in the Code (a "USRPHC"), at any time within the shorter of the five-year period preceding the disposition and the Non-U.S. Holder's holding period the share our common stock.

We believe that we are not, and do not anticipate becoming, a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property relative to the fair market value of other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we become a USRPHC, a Non-U.S. Holder would not be subject to U.S. federal income tax on a sale, exchange or other taxable disposition of our common stock so long as our common stock continues to be regularly traded on an established securities market and such Non-U.S.

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Holder does not own and is not deemed to own (directly, indirectly or constructively) more than 5% of our common stock at any time during the shorter of the five year period ending on the date of disposition and the holder's holding period.

If a Non-U.S. Holder is engaged in a trade or business in the U.S. and gain recognized by the Non-U.S. Holder on a sale or other disposition of our common stock is effectively connected with the conduct of such trade or business, the Non-U.S. Holder will generally be subject to regular U.S. income tax as if the Non-U.S. Holder were a U.S. person, subject to an applicable income tax treaty providing otherwise. Additionally, a non-U.S. corporation may also, under certain circumstances, be subject to an additional "branch profits tax" imposed at a rate of 30% (or, if applicable, a lower income tax treaty rate). Non-U.S. Holders whose gain from dispositions of our common stock may be effectively connected with the conduct of a trade or business in the United States are urged to consult their own tax advisors with respect to the U.S. tax consequences of the purchase, ownership and disposition of our common stock.

A nonresident alien who is subject to U.S. federal income tax because such individual was present in the United States for 183 days or more in the taxable year of the taxable disposition of our common stock will be subject to a flat 30% tax on the gain derived from such disposition, which may be offset by U.S. source capital loss.

**Backup Withholding and Information Reporting**

Generally, we must report annually to the IRS and to each Non-U.S. Holder certain information including the Non-U.S. Holder's name, address and taxpayer identification number, the aggregate amount of distributions on our common stock paid to that Non-U.S. Holder during the calendar year and the amount of tax withheld, if any.

Backup withholding tax is imposed on dividends and certain other types of payments to certain U.S. persons (currently at a rate of 28%). Backup withholding tax will not apply to payments of dividends on common stock or proceeds from the sale of common stock payable to a Non-U.S. Holder if the certification described above in "Distributions on Our Common Stock" is duly provided by such Non-U.S. Holder or the Non-U.S. Holder otherwise establishes an exemption, provided that the payor does not have actual knowledge or reason to know that the Holder is a U.S. person or that the conditions of any claimed exemption are not satisfied. Certain information reporting may still apply to distributions even if an exemption from backup withholding is established. Copies of any information returns reporting the distributions to a Non-U.S. Holder and any withholding also may be made available to the tax authorities in the country in which a Non-U.S. Holder resides under the provisions of an applicable income tax treaty.

Backup withholding is not an additional tax and any amounts withheld under the backup withholding tax rules from a payment to a Non-U.S. Holder will be allowed as a refund or a credit against such Non-U.S. Holder's U.S. federal income tax liability, provided that the requisite procedures are followed.

Non-U.S. Holders are urged to consult their own tax advisors regarding their particular circumstances and the availability of and procedure for obtaining an exemption from backup withholding.

**U.S. Federal Estate Tax**

Common stock owned or treated as owned by an individual who is a Non-U.S. Holder at the time of death generally will be included in the individual's gross estate for U.S. federal estate tax purposes and may be subject to U.S. federal estate tax unless an applicable estate tax treaty provides otherwise.

Table of Contents**UNDERWRITING**

We are offering the shares of Class A common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities Inc., Morgan Stanley & Co. Incorporated and Credit Suisse Securities (USA) LLC are acting as joint book-running managers of the offering and as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of Class A common stock listed next to its name in the following table:

| <b>Name</b>   | <b>Number of Shares</b> |
|---|-------------------------|
| J.P. Morgan Securities Inc.                           | 5,833,333               |
| Morgan Stanley & Co. Incorporated                     | 5,833,333               |
| Credit Suisse Securities (USA) LLC                    | 2,500,000               |
| Merrill Lynch, Pierce, Fenner & Smith<br>Incorporated | 1,666,667               |
| Wedbush Morgan Securities Inc.                        | 833,334                 |
| <b>Total</b>  | <b>16,666,667</b>       |

The underwriters are committed to purchase all the shares of Class A common stock offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

We have directed the underwriters to reserve 6,577,440 of the shares of our Class A common stock to be issued in this offering for sale to certain of our existing stockholders and certain specified affiliated entities, as designated by us, through a directed share program. The number of shares of Class A common stock available for sale to the general public in the public offering will be reduced to the extent these stockholders and their affiliates purchase any reserved shares. Any shares not so purchased will be offered by the underwriters to the general public on the same basis as other shares offered hereby.

The underwriters propose to offer the shares of Class A common stock directly to the public and to our existing stockholders and their affiliated entities at the public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$0.4725 per share. After the initial public offering of the shares, the offering price and other selling terms may be changed by the underwriters. Sales of shares made outside of the U.S. may be made by affiliates of the underwriters. The representatives have advised us that the underwriters do not intend to confirm discretionary sales in excess of 5% of the shares of Class A common stock offered in this offering.

The underwriters have an option to purchase up to 2,500,000 additional shares of Class A common stock from us to cover sales of shares by the underwriters that exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this over-allotment option to purchase additional shares. If any shares are purchased with this over-allotment option, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of Class A common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting discounts and commissions are equal to the public offering price per share of Class A common stock less the amount paid by the underwriters to us per share of Class A common stock. The underwriting discounts and commissions are \$0.7875 per share; however, the underwriters will receive an underwriting discount and commission of 3.4525% on the sale of 6,577,440 shares of our Class A common stock to certain of our existing stockholders and certain specified affiliated entities through the directed share program. The following table shows the per share and total underwriting discounts and

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commissions to be paid to the underwriters (other than in connection with the sale of shares to our existing stockholders and certain specified affiliated entities through the directed share program), assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

|           | No Exercise   | Full Exercise |
|-----------|---------------|---------------|
| Per share | \$ 0.7875     | \$ 0.6311     |
| Total     | \$ 10,500,000 | \$ 10,500,000 |

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately \$2.5 million. The underwriters have agreed to reimburse us for \$310,000 of certain of our expenses, which may include legal and other advisors' fees.

A prospectus in electronic format may be made available on the websites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We have agreed that we will not, subject to limited exceptions, (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any shares of our Class A common stock or securities convertible into or exchangeable or exercisable for any shares of our Class A common stock, or publicly disclose the intention to make any offer, sale pledge, disposition or filing, or (2) enter into any swap or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of any shares of Class A common stock or any such other securities (regardless of whether any of these transactions are to be settled by the delivery of shares of Class A common stock, or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities Inc. and Morgan Stanley & Co. Incorporated for a period of 180 days after the date of this prospectus. Notwithstanding the foregoing, if (1) during the last 17 days of the 180-day restricted period, we issue an earnings release or material news or a material event relating to our company occurs, or (2) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 180-day period, the restrictions described above will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

All of our directors and executive officers, and substantially all of our stockholders and optionees, have entered into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each of these persons or entities, with limited exceptions, for a period of 180 days after the date of this prospectus, may not, without the prior written consent of J.P. Morgan Securities Inc. and Morgan Stanley & Co. Incorporated, (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of our Class A common stock or securities convertible into or exchangeable or exercisable for any shares of our Class A common stock (including, without limitation, (i) Class A common stock or such other securities which may be deemed to be beneficially owned by such directors, executive officers, managers and members in accordance with the rules and regulations of the SEC, (ii) securities which may be issued upon exercise of a stock option or warrant and (iii) shares of our Class B common stock), (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of our Class A common stock or such other securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Class A common stock or such other securities, in cash or otherwise or (3) make any demand for, or exercise any right with respect to, the registration of any shares of our Class A common

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stock or any security convertible into or exercisable or exchangeable for our Class A common stock. Notwithstanding the foregoing, if (1) during the last 17 days of the 180-day restricted period, we issue an earnings release or material news or a material event relating to our company occurs; or (2) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 180-day period, the restrictions described above will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the occurrence of the material news or material event.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

Our Class A common stock has been approved for listing on The NASDAQ Global Market under the symbol "IRWD."

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, or purchasing and selling shares of, Class A common stock in the open market for the purpose of preventing or retarding a decline in the market price of the Class A common stock while this offering is in progress. These stabilizing transactions may include making short sales of the Class A common stock, which involves the sale by the underwriters of a greater number of shares of Class A common stock than they are required to purchase in this offering, and purchasing shares of Class A common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' over-allotment option referred to above, or may be "naked" shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising their over-allotment option, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the over-allotment option. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the Class A common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the Class A common stock, including the imposition of penalty bids. This means that, if the representatives of the underwriters purchase Class A common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the Class A common stock or preventing or retarding a decline in the market price of the Class A common stock, and, as a result, the price of the Class A common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on The NASDAQ Global Market, in the over-the-counter market or otherwise.

Prior to this offering, there has been no public market for our Class A common stock. The initial public offering price was determined by negotiations between us and the representatives of the underwriters. In determining the initial public offering price, we and the representatives of the underwriters considered a number of factors including:

the information set forth in this prospectus and otherwise available to the representatives;

our prospects and the history and prospects for the industry in which we compete;

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an assessment of our management;

our prospects for future earnings;

the general condition of the securities markets at the time of this offering;

the recent market prices of, and demand for, publicly-traded common stock of generally comparable companies; and

other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for our Class A common stock, or that the shares of Class A common stock will trade in the public market at or above the initial public offering price. Participation in this offering by our existing stockholders and certain specified affiliated entities may negatively impact liquidity for shares of our Class A common stock.

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the shares of Class A common stock offered by this prospectus in any jurisdiction where action for that purpose is required. The shares of Class A common stock offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such shares of Class A common stock be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any shares of Class A common stock offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

This document is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) to investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). The shares of Class A common stock are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such shares of Class A common stock will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), from and including the date on which the European Union Prospectus Directive (the "EU Prospectus Directive") is implemented in that Relevant Member State (the "Relevant Implementation Date") an offer of shares of Class A common stock described in this prospectus may not be made to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the EU Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of shares to the public in that Relevant Member State at any time:

to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year, (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;

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to fewer than 100 natural or legal persons (other than qualified investors as defined in the EU Prospectus Directive) subject to obtaining the prior consent of the book-running managers for any such offer; or

in any other circumstances which do not require the publication by the Issuer of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of securities to the public" in relation to any shares of Class A common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Class A common stock to be offered so as to enable an investor to decide to purchase or subscribe for the shares of Class A common stock, as the same may be varied in that Member State by any measure implementing the EU Prospectus Directive in that Member State and the expression EU Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

Certain of the underwriters and their affiliates may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business for which they have received and may continue to receive customary fees and commissions. Wedbush Morgan Securities Inc. has in the past performed investment banking services for our majority-owned subsidiary, Microbia, for which they received customary fees. The underwriters and their affiliates may from time to time in the future engage in transactions with us in the ordinary course of their business. Upon completion of this offering and the purchase by entities associated with Morgan Stanley Investment Management of 5,666,551 shares of our Class A common stock in this offering, affiliates of Morgan Stanley & Co. Incorporated will hold approximately 11.60% of our Class A common stock and our Class B common stock, combined. See "Principal Stockholders." In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or for the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans.



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**LEGAL MATTERS**

Our counsel, Ropes & Gray LLP, Boston, Massachusetts, will pass on the validity of the shares of Class A common stock offered by this prospectus. Davis Polk & Wardwell LLP, New York, New York has acted as counsel to the underwriters in connection with certain legal matters related to this offering.

**EXPERTS**

The consolidated financial statements of Ironwood Pharmaceuticals, Inc. at December 31, 2007 and 2008, and for each of the three years in the period ended December 31, 2008, appearing in this prospectus and registration statement have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

**WHERE YOU CAN FIND ADDITIONAL INFORMATION**

We have filed with the SEC a registration statement on Form S-1 under the Securities Act that registers the shares of our Class A common stock to be sold in this offering. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules filed as part of the registration statement. For further information with respect to us and our Class A common stock, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, we refer you to the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The reports and other information we file with the SEC can be read and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington D.C. 20549. Copies of these materials can be obtained at prescribed rates from the SEC's Public Reference Room at such address. You may obtain information regarding the operation of the public reference room by calling 1-800-SEC-0330. The SEC also maintains a web site (<http://www.sec.gov>) that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Upon completion of this offering, we will become subject to the reporting and information requirements of the Exchange Act and, as a result, will file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available for inspection and copying at the SEC's public reference room and the web site of the SEC referred to above.

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Ironwood Pharmaceuticals, Inc.**

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| <u>Consolidated Balance Sheets as of December 31, 2007 and 2008 and September 30, 2009 (unaudited) and Pro Forma Consolidated Balance Sheet as of September 30, 2009 (unaudited)</u>   | <u>F-3</u>  |
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| <u>Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit) for the Years Ended December 31, 2006, 2007 and 2008, the Nine Months Ended September 30, 2009 (unaudited) and Pro Forma Nine Months Ended September 30, 2009 (unaudited)</u> | <u>F-5</u>  |
| <u>Consolidated Statements of Cash Flows for the Years Ended December 31, 2006, 2007 and 2008 and the Nine Months Ended September 30, 2008 (unaudited) and 2009 (unaudited)</u>  | <u>F-7</u>  |
| <u>Notes to Consolidated Financial Statements</u>  | <u>F-8</u>  |

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders of  
Ironwood Pharmaceuticals, Inc.

We have audited the accompanying consolidated balance sheets of Ironwood Pharmaceuticals, Inc. as of December 31, 2007 and 2008, and the related consolidated statements of operations, convertible preferred stock and stockholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. We were not engaged to perform an audit of the Company's internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Ironwood Pharmaceuticals, Inc. at December 31, 2007 and 2008, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2008, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financial statements, effective January 1, 2009, the Company adopted ASC 810-10-65, *Transition Related to FASB Statement No. 160, Noncontrolling Interests in Consolidated Financial Statements* an amendment of ARB No. 51, and on January 1, 2007, the Company adopted ASC 710-10-25, *Sabbatical Leave Benefits*.

/s/ Ernst & Young LLP

Boston, Massachusetts  
November 20, 2009,  
except for Note 21, as to which the date is  
January 19, 2010

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**Ironwood Pharmaceuticals, Inc.**  
**Consolidated Balance Sheets**

(In thousands, except share and per share amounts)

|  | December 31,      |                   | September 30, 2009    |                          |
|--|-------------------|-------------------|-----------------------|--------------------------|
|  | 2007              | 2008              | Actual<br>(unaudited) | Pro forma<br>(unaudited) |
| <b>Assets</b>  |                   |                   |                       |                          |
| Current assets:  |                   |                   |                       |                          |
| Cash and cash equivalents  | \$ 62,427         | \$ 67,722         | \$ 81,269             | \$ 96,269                |
| Available-for-sale securities  | 29,509            | 22,045            | 17,659                | 17,659                   |
| Accounts receivable  | 148               | 4                 | 167                   | 167                      |
| Related party accounts receivable  | 25,360            | 7,117             | 9,752                 | 9,752                    |
| Prepaid expenses and other assets  | 1,730             | 2,498             | 3,149                 | 3,149                    |
| Forward purchase contract  |                   | 8,700             | 5,800                 |                          |
| <b>Total current assets</b>  | <b>119,174</b>    | <b>108,086</b>    | <b>117,796</b>        | <b>126,996</b>           |
| Restricted cash  | 2,960             | 7,968             | 8,414                 | 8,414                    |
| Property and equipment, net  | 4,146             | 24,596            | 23,403                | 23,403                   |
| Forward purchase contract  | 9,600             |                   |                       |                          |
| Other assets   | 28                | 73                | 34                    | 34                       |
| <b>Total assets</b>  | <b>\$ 135,908</b> | <b>\$ 140,723</b> | <b>\$ 149,647</b>     | <b>\$ 158,847</b>        |
| <b>Liabilities and stockholders' equity (deficit)</b>  |                   |                   |                       |                          |
| Current liabilities:   |                   |                   |                       |                          |
| Accounts payable   | \$ 5,585          | \$ 6,086          | \$ 6,434              | \$ 6,434                 |
| Accrued research and development costs   | 5,038             | 9,653             | 6,099                 | 6,099                    |
| Accrued expenses   | 2,485             | 4,341             | 4,142                 | 4,142                    |
| Current portion of long-term debt  | 1,006             | 943               | 1,426                 | 1,426                    |
| Current portion of capital lease obligations   |                   | 117               | 128                   | 128                      |
| Current portion of deferred rent   | 17                | 166               | 155                   | 155                      |
| Current portion of deferred revenue  | 15,800            | 17,846            | 32,755                | 32,755                   |
| <b>Total current liabilities</b>   | <b>29,931</b>     | <b>39,152</b>     | <b>51,139</b>         | <b>51,139</b>            |
| Long-term debt, net of current portion   | 1,957             | 872               | 1,980                 | 1,980                    |
| Capital lease obligations, net of current portion  |                   | 189               | 92                    | 92                       |
| Deferred rent, net of current portion  |                   | 9,313             | 10,697                | 10,697                   |
| Deferred revenue, net of current portion   | 58,592            | 48,208            | 71,732                | 71,732                   |
| Commitments and contingencies (Note 11 and Note 12)  |                   |                   |                       |                          |
| Convertible preferred stock, \$0.001 par value, 74,942,226 shares authorized, 62,977,272, 67,118,858, 69,223,024 and 0 shares issued and outstanding at December 31, 2007, 2008, September 30, 2009 and pro forma September 30, 2009, respectively; liquidation value of \$255,181, \$352,255, \$393,973 and \$0 at December 31, 2007, 2008, September 30, 2009 and pro forma September 30, 2009, respectively (Note 13) | 223,802           | 273,400           | 289,849               |                          |
| Stockholders' equity (deficit):  |                   |                   |                       |                          |
| Class A common stock, \$0.001 par value, 98,530,700 shares authorized, no shares issued and outstanding at December 31, 2007 and 2008 and September 30, 2009 (actual and pro forma)  |                   |                   |                       |                          |
| Class B common stock, \$0.001 par value, 98,530,700 shares authorized, 6,948,730, 7,083,178, and 7,713,407 shares issued and outstanding at December 31, 2007 and 2008 and September 30, 2009 (actual), respectively, and 78,105,027 shares at September 30, 2009 (pro forma)  | 7                 | 7                 | 8                     | 78                       |
| Additional paid-in capital   | 4,621             | 7,594             | 10,921                | 309,307                  |
| Accumulated deficit  | (189,500)         | (243,374)         | (290,629)             | (290,036)                |
| Accumulated other comprehensive income   | 3                 | 23                | 2                     | 2                        |

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|   |            |            |            |            |
|---|------------|------------|------------|------------|
| Total Ironwood Pharmaceuticals, Inc. stockholders' equity (deficit) | (184,869)  | (235,750)  | (279,698)  | 19,351     |
| Noncontrolling interest   | 6,495      | 5,339      | 3,856      | 3,856      |
| Total stockholders' equity (deficit)                                | (178,374)  | (230,411)  | (275,842)  | 23,207     |
| Total liabilities and stockholders' equity (deficit)                | \$ 135,908 | \$ 140,723 | \$ 149,647 | \$ 158,847 |

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

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**Ironwood Pharmaceuticals, Inc.**  
**Consolidated Statements of Operations**  
(In thousands, except share and per share amounts)

|  | Years Ended December 31, |             |             | Nine Months Ended<br>September 30, |                     |
|--|--------------------------|-------------|-------------|------------------------------------|---------------------|
|  | 2006                     | 2007        | 2008        | 2008<br>(unaudited)                | 2009<br>(unaudited) |
| <b>Revenue:</b>  |                          |             |             |                                    |                     |
| Collaborative arrangements   | \$                       | \$ 4,608    | \$ 18,383   | \$ 13,933                          | \$ 25,917           |
| Services   | 3,140                    | 5,856       | 3,833       | 3,309                              | 1,581               |
| Total revenue  | 3,140                    | 10,464      | 22,216      | 17,242                             | 27,498              |
| <b>Operating expenses:</b>   |                          |             |             |                                    |                     |
| Research and development   | 35,543                   | 57,246      | 59,809      | 43,309                             | 58,824              |
| General and administrative   | 7,192                    | 10,833      | 18,328      | 13,054                             | 17,309              |
| Total operating expenses   | 42,735                   | 68,079      | 78,137      | 56,363                             | 76,133              |
| Loss from operations   | (39,595)                 | (57,615)    | (55,921)    | (39,121)                           | (48,635)            |
| <b>Other income (expense):</b>   |                          |             |             |                                    |                     |
| Interest expense   | (217)                    | (263)       | (334)       | (253)                              | (370)               |
| Interest and investment income   | 2,533                    | 4,118       | 2,124       | 1,901                              | 214                 |
| Remeasurement of forward purchase contracts  |                          | 600         | (900)       | (5,900)                            | (100)               |
| Other income (expense), net  | 2,316                    | 4,455       | 890         | (4,252)                            | (256)               |
| Loss before income tax benefit   | (37,279)                 | (53,160)    | (55,031)    | (43,373)                           | (48,891)            |
| Income tax benefit   |                          |             |             |                                    | (153)               |
| Net loss   | (37,279)                 | (53,160)    | (55,031)    | (43,373)                           | (48,738)            |
| Net loss attributable to noncontrolling interest   | 99                       | 408         | 1,157       | 726                                | 1,483               |
| Net loss attributable to Ironwood Pharmaceuticals, Inc.  | \$ (37,180)              | \$ (52,752) | \$ (53,874) | \$ (42,647)                        | \$ (47,255)         |
| Net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted  | \$ (5.79)                | \$ (7.91)   | \$ (7.82)   | \$ (6.22)                          | \$ (6.70)           |
| Weighted average number of common shares used in net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted | 6,417,499                | 6,666,601   | 6,889,817   | 6,859,285                          | 7,054,291           |
| Pro forma net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted (unaudited)                            |                          |             | \$ (0.72)   |                                    | \$ (0.62)           |

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|  |            |            |
|--|------------|------------|
| Pro forma weighted average number of common shares used in net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted (unaudited) | 74,495,452 | 75,574,117 |
|--|------------|------------|

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

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**Ironwood Pharmaceuticals, Inc.**  
**Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)**  
(In thousands, except share amounts)

|  | Convertible preferred stock<br>(Note 13) |           | Class B common stock |        | Additional paid-in capital | Accumulated deficit | Deferred compensation | Accumulated other comprehensive income (loss) | Noncontrolling interest | Total stockholders' equity (deficit) |
|--|--|-----------|----------------------|--------|----------------------------|---------------------|-----------------------|---|-------------------------|--------------------------------------|
|  | Shares                                   | Amount    | Shares               | Amount |                            |                     |                       |   |                         |                                      |
| Balance at December 31, 2005   | 35,343,741                               | \$ 98,924 | 6,597,474            | \$ 7   | \$ 2,603                   | \$ (99,382)         | \$ (232)              | \$  | \$                      | \$ (97,004)                          |
| Issuance of shares upon exercise of stock options                                      |  |           | 182,043              |        | 100                        |                     |                       |   |                         | 100                                  |
| Issuance of restricted common shares   |  |           | 100,000              |        | 156                        |                     |                       |   |                         | 156                                  |
| Issuance of Series E Convertible preferred stock                                       | 19,633,531                               | 74,927    |                      |        |                            |                     |                       |   |                         |                                      |
| Proceeds from sale of noncontrolling interest in subsidiary                            |  |           |                      |        |                            |                     |                       |   | 7,002                   | 7,002                                |
| Share-based compensation expense related to issuance of stock options to non-employees |  |           |                      |        | 176                        |                     |                       |   |                         | 176                                  |
| Share-based compensation expense related to issuance of stock options to employees     |  |           |                      |        | 385                        |                     |                       |   |                         | 385                                  |
| Amortization of deferred compensation  |  |           |                      |        |                            |                     | 232                   |   |                         | 232                                  |
| Comprehensive income (loss):   |  |           |                      |        |                            |                     |                       |   |                         |                                      |
| Unrealized gain on short-term investments  |  |           |                      |        |                            |                     |                       | 1   |                         | 1                                    |
| Net loss   |  |           |                      |        |                            |                     | (37,180)              |   | (99)                    | (37,279)                             |
| Total comprehensive loss   |  |           |                      |        |                            |                     |                       |   |                         | (37,278)                             |
| Balance at December 31, 2006   | 54,977,272                               | 173,851   | 6,879,517            | 7      | 3,420                      | (136,562)           |                       | 1   | 6,903                   | (126,231)                            |
| Cumulative effect of accounting change (Note 2)  |  |           |                      |        |                            | (186)               |                       |   |                         | (186)                                |
| Issuance of shares upon exercise of stock options                                      |  |           | 69,213               |        | 47                         |                     |                       |   |                         | 47                                   |
| Issuance of Series F Convertible preferred stock                                       | 8,000,000                                | 49,951    |                      |        |                            |                     |                       |   |                         |                                      |
| Share-based compensation expense related to issuance of stock options to non-employees |  |           |                      |        | 59                         |                     |                       |   |                         | 59                                   |
| Share-based compensation expense related to issuance of stock options to employees     |  |           |                      |        | 1,095                      |                     |                       |   |                         | 1,095                                |
| Comprehensive income (loss):   |  |           |                      |        |                            |                     |                       |   |                         |                                      |
| Unrealized gain on short-term investments  |  |           |                      |        |                            |                     |                       | 2   |                         | 2                                    |



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|  |            |         |           |   |          |           |         |          |           |
|--|------------|---------|-----------|---|----------|-----------|---------|----------|-----------|
| Net loss   |            |         |           |   | (52,752) |           | (408)   | (53,160) |           |
| Total comprehensive loss   |            |         |           |   |          |           |         | (53,158) |           |
| Balance at December 31, 2007   | 62,977,272 | 223,802 | 6,948,730 | 7 | 4,621    | (189,500) | 3       | 6,495    | (178,374) |
| Issuance of shares upon exercise of stock options                                      |            |         | 129,448   |   | 179      |           |         |          | 179       |
| Proceeds from sale of noncontrolling interest in subsidiary                            |            |         |           |   |          |           |         | 1        | 1         |
| Issuance of Series H Convertible preferred stock                                       | 4,141,586  | 49,598  |           |   |          |           |         |          |           |
| Share-based compensation expense related to issuance of stock options to non-employees |            |         |           |   | 305      |           |         |          | 305       |
| Issuance of stock award  |            |         | 5,000     |   | 25       |           |         |          | 25        |
| Share-based compensation expense related to issuance of stock options to employees     |            |         |           |   | 2,464    |           |         |          | 2,464     |
| Comprehensive income (loss):   |            |         |           |   |          |           |         |          |           |
| Unrealized gain on short-term investments  |            |         |           |   |          |           | 20      |          | 20        |
| Net loss   |            |         |           |   | (53,874) |           | (1,157) | (55,031) |           |

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**Ironwood Pharmaceuticals, Inc.**  
**Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit) (Continued)**  
(In thousands, except share amounts)

|   | Convertible preferred stock<br>(Note 13) |            | Class B common stock |        | Additional paid-in capital | Accumulated deficit | Deferred compensation | Accumulated other comprehensive income (loss) | Noncontrolling interest | Total stockholders' equity (deficit) |
|---|--|------------|----------------------|--------|----------------------------|---------------------|-----------------------|---|-------------------------|--------------------------------------|
|   | Shares                                   | Amount     | Shares               | Amount |                            |                     |                       |   |                         |                                      |
| Total comprehensive loss  |  |            |                      |        |                            |                     |                       |   |                         | (55,011)                             |
| Balance at December 31, 2008  | 67,118,858                               | 273,400    | 7,083,178            | 7      | 7,594                      | (243,374)           |                       | 23  | 5,339                   | (230,411)                            |
| Issuance of shares upon exercise of stock options (unaudited)   |  |            | 159,543              |        | 76                         |                     |                       |   |                         | 76                                   |
| Issuance of restricted stock awards (unaudited)   |  |            | 470,686              | 1      |                            |                     |                       |   |                         | 1                                    |
| Issuance of Series G Convertible preferred stock (unaudited)  | 2,083,333                                | 25,000     |                      |        |                            |                     |                       |   |                         |                                      |
| Settlement of forward purchase contract in connection with issuance of Series G Convertible preferred stock (unaudited) |  | (8,800)    |                      |        |                            |                     |                       |   |                         |                                      |
| Issuance of Series H Convertible preferred stock (unaudited)  | 20,833                                   | 249        |                      |        |                            |                     |                       |   |                         |                                      |
| Share-based compensation expense related to issuance of stock options to non-employees (unaudited)                      |  |            |                      |        | 168                        |                     |                       |   |                         | 168                                  |
| Share-based compensation expense related to issuance of stock options to employees (unaudited)                          |  |            |                      |        | 3,083                      |                     |                       |   |                         | 3,083                                |
| Comprehensive income (loss):  |  |            |                      |        |                            |                     |                       |   |                         |                                      |
| Unrealized loss on short-term investments (unaudited)   |  |            |                      |        |                            |                     |                       | (21)  |                         | (21)                                 |
| Net loss (unaudited)  |  |            |                      |        |                            | (47,255)            |                       |   | (1,483)                 | (48,738)                             |
| Total comprehensive loss (unaudited)  |  |            |                      |        |                            |                     |                       |   |                         | (48,759)                             |
| Balance at September 30, 2009 (unaudited)   | 69,223,024                               | \$ 289,849 | 7,713,407            | \$ 8   | \$ 10,921                  | \$ (290,629)        | \$                    | \$ 2  | \$ 3,856                | \$ (275,842)                         |
| Share-based compensation expense related to acceleration of vesting of time-accelerated stock options (unaudited)       |  |            |                      |        | 107                        |                     |                       |   |                         | 107                                  |
| Issuance of Series I Convertible preferred stock (unaudited)  | 681,819                                  | 15,000     |                      |        |                            |                     |                       |   |                         |                                      |
| Settlement of forward purchase contract in connection with issuance of Series I Convertible preferred stock (unaudited) |  | (6,500)    |                      |        |                            |                     |                       |   |                         |                                      |
|   | (69,904,843)                             | (298,349)  | 70,391,620           | 70     | 298,279                    |                     |                       |   |                         | 298,349                              |

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Conversion of convertible  
preferred stock into common  
stock (unaudited)

|                        |  |  |  |  |  |     |  |  |  |     |
|------------------------|--|--|--|--|--|-----|--|--|--|-----|
| Net income (unaudited) |  |  |  |  |  | 593 |  |  |  | 593 |
|------------------------|--|--|--|--|--|-----|--|--|--|-----|

Pro forma, September 30, 2009  
(unaudited)

|    |            |    |    |    |         |    |           |    |   |    |       |    |        |
|----|------------|----|----|----|---------|----|-----------|----|---|----|-------|----|--------|
| \$ | 78,105,027 | \$ | 78 | \$ | 309,307 | \$ | (290,036) | \$ | 2 | \$ | 3,856 | \$ | 23,207 |
|----|------------|----|----|----|---------|----|-----------|----|---|----|-------|----|--------|

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

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**Ironwood Pharmaceuticals, Inc.**  
**Consolidated Statements of Cash Flows**  
(In thousands)

|   | Years Ended December 31, |             |             | Nine Months Ended<br>September 30, |                     |
|---|--------------------------|-------------|-------------|------------------------------------|---------------------|
|   | 2006                     | 2007        | 2008        | 2008<br>(unaudited)                | 2009<br>(unaudited) |
| <b>Cash flows from operating activities:</b>                                |                          |             |             |                                    |                     |
| Net loss  | \$ (37,279)              | \$ (53,160) | \$ (55,031) | \$ (43,373)                        | \$ (48,738)         |
| Adjustments to reconcile net loss to net cash used in operating activities: |                          |             |             |                                    |                     |
| Depreciation and amortization   | 1,259                    | 1,731       | 2,849       | 1,649                              | 3,878               |
| Loss (gain) on disposal of property and equipment                           | 28                       | (1)         | (1)         |                                    | 70                  |
| Remeasurement of forward purchase contracts                                 |                          | (600)       | 900         | 5,900                              | 100                 |
| Share-based compensation expense  | 949                      | 1,154       | 2,794       | 1,843                              | 3,251               |
| Accretion of discount/premium on investment securities                      | (629)                    | (1,124)     | (368)       | (361)                              | 181                 |
| Changes in assets and liabilities:  |                          |             |             |                                    |                     |
| Accounts receivable   | (697)                    | (24,277)    | 18,387      | 11,096                             | (2,798)             |
| Restricted cash   | (98)                     |             | (5,008)     | (282)                              | (446)               |
| Prepaid expenses and other current assets                                   | (300)                    | (1,163)     | (768)       | (529)                              | (651)               |
| Other assets  | (35)                     | 7           | (45)        | (47)                               | 39                  |
| Accounts payable and accrued expenses                                       | (178)                    | 4,588       | 2,357       | 1,093                              | 613                 |
| Accrued research and development costs                                      | 3,061                    | 1,607       | 4,615       | 1,635                              | (3,554)             |
| Deferred revenue  | 387                      | 64,462      | (8,338)     | (3,934)                            | 32,433              |
| Deferred rent   |                          | 17          | 9,462       | 8,844                              | 1,373               |
| Net cash used in operating activities                                       | (33,532)                 | (6,759)     | (28,195)    | (16,466)                           | (14,249)            |
| <b>Cash flows from investing activities:</b>                                |                          |             |             |                                    |                     |
| Purchases of available-for-sale securities                                  | (36,994)                 | (87,839)    | (82,613)    | (62,560)                           | (26,673)            |
| Sales and maturities of available-for-sale securities                       | 34,200                   | 62,880      | 90,465      | 67,215                             | 30,857              |
| Purchases of property and equipment   | (2,822)                  | (2,651)     | (22,934)    | (16,682)                           | (3,237)             |
| Proceeds from the sale of property and equipment                            | 1                        | 1           | 9           | 1                                  | 18                  |
| Net cash (used in) provided by investing activities                         | (5,615)                  | (27,609)    | (15,073)    | (12,026)                           | 965                 |
| <b>Cash flows from financing activities:</b>                                |                          |             |             |                                    |                     |
| Proceeds from issuance of preferred stock, net of issuance costs            | 74,927                   | 49,951      | 49,598      | 49,658                             | 25,249              |
| Proceeds from exercise of stock options and issuance of restricted stock    | 100                      | 47          | 179         | 173                                | 77                  |
| Proceeds from sale of noncontrolling interest in subsidiary                 | 7,002                    |             | 1           | 1                                  |                     |
| Proceeds from borrowings  | 1,953                    | 1,640       | 465         | 465                                | 2,597               |
| Payments on borrowings  | (3,892)                  | (920)       | (1,680)     | (832)                              | (1,092)             |
| Net cash provided by financing activities                                   | 80,090                   | 50,718      | 48,563      | 49,465                             | 26,831              |
| Net increase in cash and cash equivalents                                   | 40,943                   | 16,350      | 5,295       | 20,973                             | 13,547              |
| Cash and cash equivalents, beginning of period                              | 5,134                    | 46,077      | 62,427      | 62,427                             | 67,722              |
| Cash and cash equivalents, end of period                                    | \$ 46,077                | \$ 62,427   | \$ 67,722   | \$ 83,400                          | \$ 81,269           |
| <b>Supplemental disclosure for cash flows:</b>                              |                          |             |             |                                    |                     |
| Cash paid for interest  | \$ 217                   | \$ 263      | \$ 333      | \$ 252                             | \$ 335              |
| Cumulative effect of accounting change                                      | \$                       | \$ 186      | \$          | \$                                 | \$                  |
| Fair value of forward purchase contract                                     | \$                       | \$ 9,000    | \$          | \$                                 | \$ 6,000            |

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|   |    |    |    |     |    |         |
|---|----|----|----|-----|----|---------|
| Settlement of forward purchase contract related to Forest agreement | \$ | \$ | \$ |     | \$ | (8,800) |
| Purchases under capital leases                                      | \$ | \$ | \$ | 373 | \$ | 373     |

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

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**1. Nature of Business**

Ironwood Pharmaceuticals, Inc. (the "Company") is an entrepreneurial pharmaceutical company that discovers, develops and commercializes innovative medicines targeting important therapeutic needs. The Company is focused on a portfolio of internally discovered drug candidates that currently includes one Phase 3 drug candidate (linaclotide), one Phase 1 pain drug candidate, and multiple preclinical candidates.

The Company holds a majority ownership interest in Microbia, Inc. (formerly known as Microbia Precision Engineering), a subsidiary formed in September 2006. Microbia, Inc. ("Microbia") focuses on building a specialty biochemicals business based on a proprietary strain-development platform.

The Company was incorporated in Delaware on January 5, 1998. On April 7, 2008, the Company changed its name from Microbia, Inc. to Ironwood Pharmaceuticals, Inc. The Company operates in two reportable business segments: human therapeutics and biomanufacturing (Note 19).

The Company has generated an accumulated deficit as of September 30, 2009 of approximately \$290.6 million since inception, and will require substantial additional capital for research and product development. At September 30, 2009, the Company believes that its unrestricted cash and cash equivalents and available-for-sale securities totaling approximately \$98.9 million is sufficient to fund operations through at least the next 12 months.

The Company has evaluated subsequent events after the balance sheet date of September 30, 2009 through November 20, 2009, the date of filing of the interim consolidated financial statements.

**2. Summary of Significant Accounting Policies**

**Basis of Presentation**

In June 2009, the Financial Accounting Standards Board ("FASB") issued the FASB Accounting Standards Codification ("Codification"). The Codification became the single source for all authoritative generally accepted accounting principles ("GAAP") recognized by the FASB and is required to be applied to financial statements issued for interim and annual periods ending after September 15, 2009. The Codification does not change GAAP and did not impact on the Company's financial position or results of operations.

**Principles of Consolidation**

During 2006, the Company formed Microbia as a 100% wholly owned subsidiary of the Company. In September 2006, Microbia sold additional equity interests to a third party, which reduced the Company's ownership interest in Microbia to 85% (Note 20). The accompanying consolidated financial statements of Ironwood Pharmaceuticals, Inc. include the assets, liabilities, revenue, and expenses of Microbia, over which the Company exercises control. The Company records noncontrolling interest in its consolidated statements of operations for the ownership interest of the minority owners of Microbia. All intercompany transactions and balances are eliminated in consolidation.

**Unaudited Pro Forma Information**

The unaudited pro forma balance sheet as of September 30, 2009 reflects the conversion of all outstanding shares of convertible preferred stock as of that date into shares of common stock and the



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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**2. Summary of Significant Accounting Policies (Continued)**

conversion of 681,819 shares of the Company's convertible preferred stock sold in November 2009 into shares of common stock, each event to occur upon the closing of the Company's proposed public offering. Unaudited pro forma net loss per share is computed using the weighted average number of common shares outstanding after giving effect to: (a) the pro forma effect of the conversion of all convertible preferred stock during the year ended December 31, 2008 and the nine months ended September 30, 2009 into shares of the Company's common stock as if such conversion had occurred at the date of original issuance, (b) the pro forma effect of the conversion of the convertible preferred stock issued in November 2009 including a \$0.7 million gain on the final remeasurement of the forward purchase contract at the time of settlement, and (c) share-based compensation expense of approximately \$56,000 and \$107,000 related to 30,000 and 45,000 time-accelerated stock options at December 31, 2008 and September 30, 2009, respectively, which will fully vest upon the closing of the Company's proposed public offering.

**Unaudited Interim Financial Statements**

The accompanying unaudited September 30, 2009 consolidated balance sheet, the consolidated statements of operations and cash flows for the nine months ended September 30, 2008 and 2009, and the consolidated statements of convertible preferred stock and stockholders' equity (deficit) for the nine months ended September 30, 2009 and the related interim information contained within the notes to the consolidated financial statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission ("SEC") for interim financial information. Accordingly, they do not include all of the information and the notes required by accounting principles generally accepted in the United States of America for complete financial statements. In the opinion of management, the unaudited interim consolidated financial statements reflect all adjustments, consisting of normal and recurring adjustments, necessary for the fair presentation of the Company's financial position at September 30, 2009 and results of its operations and its cash flows for the nine months ended September 30, 2008 and 2009. The results for the nine months ended September 30, 2009 are not necessarily indicative of future results.

**Use of Estimates**

The preparation of consolidated financial statements in accordance with generally accepted accounting principles in the United States requires the Company's management to make estimates and judgments that may affect the reported amounts of assets, liabilities, revenues and 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, impairment of long-lived assets, income taxes including the valuation allowance for deferred tax assets, valuation of forward purchase contracts, research and development, 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.



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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**2. Summary of Significant Accounting Policies (Continued)**

**Cash and Cash Equivalents**

The Company considers all highly liquid investment instruments with an original maturity when purchased of three months or less to be cash equivalents. Investments qualifying as cash equivalents primarily consist of money market funds. The carrying amount of cash equivalents approximates fair value. The amount of cash equivalents included in cash and cash equivalents was approximately \$60.0 million, \$63.0 million and \$77.9 million at December 31, 2007 and 2008 and September 30, 2009, respectively.

**Restricted Cash**

The Company is contingently liable under unused letters of credit in the amount of approximately \$3.0 million, \$8.0 million and \$8.4 million as of December 31, 2007 and 2008 and September 30, 2009, respectively. These amounts are held on deposit with a bank to collateralize standby letters of credit related to the Company's facility lease agreements and credit card arrangements. As the Company occupies additional space under one of its facility leases (Note 11), it will have to collateralize additional standby letters of credit with restricted cash up to an additional total of approximately \$2.3 million. The cash will be restricted until the termination of the leases and credit card arrangements.

**Accounts Receivable and Related Valuation Account**

Accounts receivable are presented net of allowance for doubtful accounts. The Company makes judgments as to its ability to collect outstanding receivables and provides allowance for receivables when collection becomes doubtful. Provisions are made based upon a specific review of all significant outstanding invoices and the overall quality and age of those invoices not specifically reviewed. The Company's receivables primarily relate to amounts reimbursed under collaboration agreements and the Company believes that credit risks associated with these collaborators are not significant. To date, the Company has not had any write-offs of bad debt, and as such, the Company does not have an allowance for doubtful accounts as of December 31, 2007 and 2008 and September 30, 2009.

**Available-for-Sale Securities**

The Company classifies all short-term investments with an original maturity when purchased of greater than three months as available-for-sale. Available-for-sale securities are carried at fair value, with the unrealized gains and losses reported in other comprehensive income (loss). The amortized cost of debt securities in this category is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization is included in interest and investment income. Realized gains and losses, and declines in value judged to be other than temporary on available-for-sale securities, are included in interest and investment income.

The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in interest and investment income. To determine whether an other-than-temporary impairment exists, the Company considers whether it has the ability and intent to hold the investment until a market price recovery, and whether evidence indicating the recoverability of the cost of the investment outweighs evidence to the contrary. There were no

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**2. Summary of Significant Accounting Policies (Continued)**

other-than-temporary impairments for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2009.

**Concentrations of Credit Risk**

Financial instruments that subject the Company to credit risk primarily consist of cash and cash equivalents, restricted cash, available-for-sale securities, and accounts receivable. The Company maintains its cash and cash equivalent balances with high-quality financial institutions and, consequently, the Company believes that such funds are subject to minimal credit risk. The Company's available-for-sale investments potentially subject the Company to concentrations of credit risk. The Company has adopted an investment policy which limits the amounts the Company may invest in any one type of investment, and requires all investments held by the Company to be A+ rated, thereby reducing credit risk concentration.

Accounts receivable primarily consist of amounts due under the collaboration agreement with Forest Laboratories, Inc. ("Forest") (Note 4) and from Tate & Lyle Investments, Ltd. ("T&L") (Note 20) for which the Company does not obtain collateral. Effective September 1, 2009, Forest became a related party when the Company sold to Forest 2,083,333 shares of the Company's Series G convertible preferred stock. As a result, certain prior period accounts receivable balances for Forest have been reclassified to related party accounts receivable to conform to the current period financial statement presentation. These reclassifications have no effect on previous years' financial position or results of operations.

Forest accounted for approximately 0%, 44%, 83%, 81% and 78% of the Company's revenue for the years ended December 31, 2006, 2007 and 2008 and for the nine months ended September 30, 2008 and 2009, respectively. T&L accounted for approximately 7%, 29%, 10%, 10% and 6% of the Company's revenue for the years ended December 31, 2006, 2007 and 2008 and for the nine months ended September 30, 2008 and 2009, respectively. Almirall, S.A. ("Almirall") (Note 4) accounted for approximately 16% of the Company's revenue for the nine months ended September 30, 2009. For the year ended December 31, 2006, two additional customers accounted for 27% and 46%, respectively, of the Company's revenue. For the year ended December 31, 2007, one additional customer accounted for 17% of the Company's revenue. For the year ended December 31, 2008 and for the nine months ended September 30, 2008 and 2009, no additional customers accounted for more than 10% of the Company's revenue.

At December 31, 2007, 2008 and September 30, 2009, Forest accounted for approximately 98%, 97% and 94%, respectively, of the Company's accounts receivable. At December 31, 2007, 2008 and September 30, 2009, T&L accounted for approximately 2%, 3% and 4%, respectively, of the Company's accounts receivable.

**Revenue Recognition**

The Company's revenue is generated primarily through collaborative research and development and licensing agreements. The terms of these agreements typically include payment to the Company of one or more of the following: nonrefundable, up-front license fees; milestone payments; and royalties on product sales. In addition, the Company generates services revenue through agreements that generally provide for fees for research and development services rendered, and may include additional payments at the

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**2. Summary of Significant Accounting Policies (Continued)**

conclusion of the research period upon achieving specified events. These service agreements also contemplate royalty payments to the Company on future sales of its customers' products. To date the Company has earned no royalty revenue as a result of product sales.

The Company recognizes revenue when there is persuasive evidence that an arrangement exists, services have been rendered or delivery has occurred, the price is fixed and determinable, and collection is reasonably assured. The Company evaluates revenue from agreements that have multiple elements and accounts for the components as separate elements when the following criteria are met:

the delivered items have value to the customer on a stand-alone basis;

there is objective and reliable evidence of fair value of the undelivered items; and

if there is a general right of return relative to the delivered items, delivery or performance of the undelivered items is considered probable and within the Company's control.

**Collaborative Arrangements Revenue**

*Up-front License Fees*

The Company recognizes revenues from nonrefundable, up-front license fees for which the separation criteria were not met due to continuing involvement in the performance of research and development services on a straight-line basis over the contracted or estimated period of performance, which is typically the research or development term.

*Milestones*

At the inception of each agreement that includes milestone payments, the Company evaluates whether each milestone is substantive and at risk to both parties on the basis of the contingent nature of the milestone, specifically reviewing factors such as the scientific and other risks that must be overcome to achieve the milestone, as well as the level of effort and investment required. Milestones that are not considered substantive are accounted for as license payments and recognized on a straight-line basis over the remaining period of performance.

In those circumstances where a substantive milestone is achieved, collection of the related receivable is reasonably assured and the Company has remaining obligations to perform under the collaboration arrangement, the Company recognizes as revenue on the date the milestone is achieved an amount equal to the applicable percentage of the performance period that has elapsed as of the date the milestone is achieved, with the balance being deferred and recognized on a straight-line basis over the remaining period of performance.

Payments received or reasonably assured after performance obligations are fully satisfied are recognized as earned.

**Services Revenue**

The Company recognizes services revenue when there is persuasive evidence that an arrangement exists, services have been rendered or delivery has occurred, the price is fixed and determinable, and



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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**2. Summary of Significant Accounting Policies (Continued)**

collection is reasonably assured. Revenue from research and development services rendered is recognized as services are performed. Bonus payments are recognized as revenue when achieved and the bonus payments are due and collectible. Royalty revenue related to research and development services is recognized in the period the sales occur.

The Company receives research and development funding under the Forest collaboration agreement and considers the factors or indicators within this arrangement to determine whether reporting such funding on a gross or net basis is appropriate. The Company records revenue transactions gross in the consolidated statements of operations if it is deemed the principal in the transaction, which includes being the primary obligor and having the risks and rewards of ownership.

For certain of the Company's arrangements, particularly the Company's license agreement with Almirall, it is required that taxes be withheld on payments made to the Company. The Company has adopted a policy to recognize revenue net of these tax withholdings.

**Research and Development Costs**

The Company expenses research and development costs to operations as incurred. The Company defers and capitalizes nonrefundable advance payments made by the Company for research and development activities until the related goods are received or the related services are performed.

Research and development expenses comprise costs incurred in performing research and development activities, including salary and benefits; share-based compensation expense; laboratory supplies and other direct expenses; facilities expenses; overhead expenses; contractual services, including clinical trial and related clinical manufacturing expenses; and other outside expenses. Also included in research and development expenses are the costs of revenue related to the Microbia services contracts.

The Company has entered into a collaboration agreement in which it shares research and development expenses with a collaborator. The Company records the expenses for such work as research and development expense. Because the collaboration arrangement is a cost-sharing arrangement, the Company concluded that when there is a period during the collaboration arrangement during which the Company receives payments from the collaborator, the Company records the payments by the collaborator for their share of the development effort as a reduction of research and development expense.

**Share-Based Compensation**

Share-based compensation is recognized as an expense in the financial statements based on the grant date fair value. Compensation expense recognized relates to stock awards, restricted stock and stock options granted, modified, repurchased or cancelled on or after January 1, 2006. Stock options granted to employees prior to that time continue to be accounted for using the intrinsic value method. Under the intrinsic value method, compensation associated with share-based awards to employees was determined as the difference, if any, between the fair value of the underlying common stock on the date compensation is measured, generally the grant date, and the price an employee must pay to exercise the award. For awards that vest based on service conditions, the Company uses the straight-line method to allocate compensation expense to reporting periods. The grant date fair value of options granted is calculated using the Black-Scholes option pricing model, which requires the use of subjective assumptions including volatility, expected term and the fair value of the underlying common stock, among others.

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**2. Summary of Significant Accounting Policies (Continued)**

The Company records the expense for stock option grants subject to performance-based milestone vesting over the remaining service period when management determines that achievement of the milestone is probable. Management evaluates when the achievement of a performance-based milestone is probable based on the relative satisfaction of the performance conditions as of the reporting date.

The Company records the expense of services rendered by non-employees based on the estimated fair value of the stock option using the Black-Scholes option-pricing model. The fair value of non-employee awards are remeasured at each reporting period and expensed over the vesting term of the underlying stock options.

**Accounting for Sabbatical Leave**

The Company accrues an employee's right to a compensated absence under a sabbatical, or other similar benefit arrangement that requires the completion of a minimum service period and the benefit increases with additional years of service, accumulates, and for arrangements in which the individual continues to be a compensated employee and is not required to perform duties for the entity during the absence. Therefore, the compensation cost associated with a sabbatical or other similar benefit arrangement should be accrued over the requisite service period. The Company adopted this policy on January 1, 2007, and recorded the effect as a change in accounting principle through a cumulative-effect adjustment to accumulated deficit. The adoption in the year ended December 31, 2007 resulted in additional accrued expenses and an increase to accumulated deficit of approximately \$0.2 million. During the years ended December 31, 2007 and 2008 and the nine months ended September 30, 2009, the Company recorded expense for sabbatical costs of approximately \$0.1 million, \$0.2 million and \$0.1 million, respectively.

**Noncontrolling Interest**

Effective January 1, 2009, the Company adopted a newly issued accounting standard for noncontrolling interests. In accordance with the accounting standard, the Company changed the accounting and reporting for its noncontrolling interest (previously called minority interest) in its consolidated financial statements. Upon adoption, certain prior period amounts have been reclassified to conform to the current period financial statement presentation. These reclassifications have no effect on previous years' financial position or results of operations.

Noncontrolling interest represents the noncontrolling stockholder's proportionate share of equity and net income or net loss of the Company's consolidated subsidiary Microbia. The noncontrolling stockholder's proportionate share of the equity in Microbia, of approximately \$6.5 million, \$5.3 million and \$3.9 million as of December 31, 2007 and 2008 and September 30, 2009, respectively, is reflected as noncontrolling interest in the Company's consolidated balance sheets as a component of stockholders' equity (deficit).

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**2. Summary of Significant Accounting Policies (Continued)**

The proportionate share of the net loss attributable to noncontrolling interest is reflected in the accompanying consolidated statements of operations. The following table is a roll-forward of the noncontrolling interest (in thousands):

|  |          |
|--|----------|
| Proceeds from sale of noncontrolling interest in subsidiary  | \$ 7,002 |
| Net loss attributable to noncontrolling interest             | (99)     |
| Balance at December 31, 2006                                 | 6,903    |
| Net loss attributable to noncontrolling interest             | (408)    |
| Balance at December 31, 2007                                 | 6,495    |
| Proceeds from sale of noncontrolling interest in subsidiary  | 1        |
| Net loss attributable to noncontrolling interest             | (1,157)  |
| Balance at December 31, 2008                                 | 5,339    |
| Net loss attributable to noncontrolling interest (unaudited) | (1,483)  |
| Balance at September 30, 2009 (unaudited)                    | \$ 3,856 |

**Net Loss Per Share**

The Company calculates basic and diluted net loss per common share by dividing the net loss by the weighted average number of common shares outstanding during the period. The Company has excluded all shares that are subject to repurchase by the Company from the weighted average number of common shares outstanding. The Company's potentially dilutive shares, which include convertible preferred stock, outstanding common stock options and unvested shares of restricted stock, have not been included in the computation of diluted net loss per share for all periods as the result would be antidilutive.

**Property and Equipment**

Property and equipment, including leasehold improvements, are recorded at cost, and are depreciated when placed into service using the straight-line method based on their estimated useful lives as follows:

| Asset Description             | Estimated Useful Life<br>(In Years) |
|-------------------------------|-------------------------------------|
| Lab equipment                 | 5                                   |
| Computer and office equipment | 3                                   |
| Furniture and fixtures        | 7                                   |
| Software                      | 3                                   |

Included in property and equipment is the cost of internally developed software. The Company expenses all costs related to internally developed software, other than those incurred during the application development stage. Costs incurred during the application development stage are capitalized and amortized over the estimated useful life of the software. Leasehold improvements are amortized over the shorter of the estimated useful life of the asset or the lease term. Costs for capital assets not yet placed into service have been capitalized as construction in progress, and will be depreciated in accordance with the above guidelines once placed into service. Maintenance and repair costs are expensed as incurred.

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**2. Summary of Significant Accounting Policies (Continued)**

**Deferred Offering Costs**

Costs directly associated with the Company's proposed initial public offering (the "Offering") of common stock have been deferred and recorded in prepaid expenses and other assets in the consolidated balance sheets based upon the Company's belief that the Offering will be completed. Upon completion of the Offering, such costs will be recorded as a reduction of the proceeds received in arriving at the amount to be recorded in stockholders' equity. If a successful offering no longer appears probable, such costs will be expensed.

**Income Taxes**

The Company provides for income taxes under the liability method. Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates in effect when the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance to reflect the uncertainty associated with their ultimate realization.

The company accounts for uncertain tax positions recognized in the consolidated financial statements by prescribing a more-likely-than-not threshold for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return.

**Impairment of Long-Lived Assets**

The Company regularly reviews the carrying amount of its long-lived assets to determine whether indicators of impairment may exist which warrant adjustments to carrying values or estimated useful lives. If indications of impairment exist, projected future undiscounted cash flows associated with the asset are compared to the carrying amount to determine whether the asset's value is recoverable. If the carrying value of the asset exceeds such projected undiscounted cash flows, the asset will be written down to its estimated fair value. There have been no indicators of impairment at December 31, 2008 and September 30, 2009.

**Comprehensive Income (Loss)**

All components of comprehensive income (loss) are required to be disclosed in the consolidated financial statements. Comprehensive income (loss) is defined as the change in equity of a business enterprise during a period from transactions, and other events and circumstances from non-owner sources and currently consists of net loss and changes in unrealized gains and losses on available-for-sale securities.

**Segment Information**

Operating segments are components of an enterprise for which separate financial information is available and is evaluated regularly by the Company in deciding how to allocate resources and in assessing performance.

The Company has two reportable business segments: human therapeutics and biomanufacturing (Note 19). Revenue from the Company's human therapeutics segment is shown in the consolidated statements of operations as collaborative arrangements revenue. Revenue from the Company's biomanufacturing segment is shown as services revenue.



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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**2. Summary of Significant Accounting Policies (Continued)**

**New Accounting Pronouncements**

From time to time, new accounting pronouncements are issued by the FASB or other standard setting bodies that are adopted by the Company as of the specified effective date. Unless otherwise discussed, the Company believes that the impact of recently issued standards that are not yet effective will not have a material impact on its consolidated financial position or results of operations upon adoption.

***Recently Issued Accounting Standards***

In August 2009, the FASB issued Accounting Standards Update No. 2009-05, *Measuring Liabilities at Fair Value* ("ASU 2009-05"). ASU 2009-05 amends Accounting Standards Codification Topic 820, *Fair Value Measurements*. Specifically, ASU 2009-05 provides clarification that in circumstances in which a quoted price in an active market for the identical liability is not available, a reporting entity is required to measure fair value using one or more of the following methods: (1) a valuation technique that uses (a) the quoted price of the identical liability when traded as an asset or (b) quoted prices for similar liabilities or similar liabilities when traded as assets and/or (2) a valuation technique that is consistent with the principles of Topic 820 of the Codification (e.g. an income approach or market approach). ASU 2009-05 also clarifies that when estimating the fair value of a liability, a reporting entity is not required to adjust to include inputs relating to the existence of transfer restrictions on that liability. The adoption of this standard did not have an impact on the Company's financial position or results of operations.

In October 2009, the FASB issued ASU No. 2009-13, *Multiple-Deliverable Revenue Arrangements* ("ASU 2009-13"). ASU 2009-13, amends existing revenue recognition accounting pronouncements that are currently within the scope of Codification Subtopic 605-25 (previously included within EITF 00-21, *Revenue Arrangements with Multiple Deliverables* ("EITF 00-21")). The consensus to ASU 2009-13 provides accounting principles and application guidance on whether multiple deliverables exist, how the arrangement should be separated, and the consideration allocated. This guidance eliminates the requirement to establish the fair value of undelivered products and services and instead provides for separate revenue recognition based upon management's estimate of the selling price for an undelivered item when there is no other means to determine the fair value of that undelivered item. EITF 00-21 previously required that the fair value of the undelivered item be the price of the item either sold in a separate transaction between unrelated third parties or the price charged for each item when the item is sold separately by the vendor. Under EITF 00-21, if the fair value of all of the elements in the arrangement was not determinable, then revenue was deferred until all of the items were delivered or fair value was determined. This new approach is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010 and allows for retroactive application. The Company is currently evaluating the potential impact of this standard on its financial position and results of operations.

***Recently Adopted Accounting Standards***

Effective January 1, 2009, the Company adopted new accounting guidance related to accounting for uncertainty in income taxes. This accounting standard clarifies the recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This accounting standard also provides guidance on recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The Company has not identified any material uncertain tax positions for which reserves would be required and the adoption of this accounting standard did not have an effect on its consolidated financial statements.

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**2. Summary of Significant Accounting Policies (Continued)**

Effective January 1, 2009, the Company adopted a newly issued accounting standard for business combinations. This standard requires an acquiring company to measure all assets acquired and liabilities assumed, including contingent considerations and all contractual contingencies, at fair value as of the acquisition date. In addition, an acquiring company is required to capitalize in-process research and development and either amortize it over the life of the product, or write it off if the project is abandoned or impaired. This guidance is applicable to acquisitions completed after January 1, 2009 and as the Company did not have any business combinations in the first nine months of 2009, the adoption did not impact its financial position or results of operations. The standard also amended accounting for uncertainty in income taxes as required by the Income Tax Topic of the Codification. Previously, accounting standards generally required post-acquisition adjustments related to business combination deferred tax asset valuation allowances and liabilities for uncertain tax positions to be recorded as an increase or decrease to goodwill. This new standard does not permit this accounting and, generally, requires any such changes to be recorded in current period income tax expense. Thus, all changes to valuation allowances and liabilities for uncertain tax positions established in acquisition accounting, whether the business combination was accounted for under this guidance, will be recognized in current period income tax expense.

Effective January 1, 2009, the Company adopted new guidance for the accounting, reporting and disclosure of noncontrolling interests which requires, among other things, that noncontrolling interests be recorded as equity in the consolidated financial statements. The adoption of this new guidance resulted in the reclassification of noncontrolling interests (previously referred to as minority interests) to a separate component of stockholders' equity (deficit) on the consolidated balance sheet. Additionally, net loss attributable to noncontrolling interests is now shown separately from parent net loss in the consolidated statement of operations. Prior periods have been restated to reflect the presentation and disclosure requirements of the new guidance. Refer to Note 2, *Summary of Significant Accounting Policies* of this Form S-1 for additional information on the adoption of the new accounting standard for noncontrolling interests.

In April 2009, the FASB issued a new accounting standard providing guidance for the accounting of assets acquired and liabilities assumed in a business combination that arise from contingencies. This guidance amends and clarifies previous accounting standards to address application issues regarding the initial recognition and measurement, subsequent measurement and accounting, and disclosure of assets and liabilities arising from contingencies in a business combination. This guidance is applicable to acquisitions completed after January 1, 2009. As the Company did not have any business combinations in the first nine months of 2009, the adoption did not impact its financial position or results of operations.

In May 2009, the FASB established general standards of accounting for and disclosures of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. It requires the disclosure of the date through which an entity has evaluated subsequent events and the basis for selecting that date, that is, whether that date represents the date the financial statements were issued or were available to be issued. The Company's adoption of these standards had no material impact on its financial position, results of operations and cash flows.

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)

**3. Net Loss Per Share**

Basic and diluted loss per share is calculated as follows (in thousands, except share and per share amounts):

|  | Years Ended December 31, |             |             | Nine Months Ended<br>September 30, |                     |
|--|--------------------------|-------------|-------------|------------------------------------|---------------------|
|  | 2006                     | 2007        | 2008        | 2008<br>(unaudited)                | 2009<br>(unaudited) |
| <b>Numerator:</b>  |                          |             |             |                                    |                     |
| Net loss attributable to Ironwood Pharmaceuticals, Inc.  | \$ (37,180)              | \$ (52,752) | \$ (53,874) | \$ (42,647)                        | \$ (47,255)         |
| <b>Denominator:</b>  |                          |             |             |                                    |                     |
| Weighted-average number of common shares used in net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted | 6,417,499                | 6,666,601   | 6,889,817   | 6,859,285                          | 7,054,291           |
| Net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted  | \$ (5.79)                | \$ (7.91)   | \$ (7.82)   | \$ (6.22)                          | \$ (6.70)           |

The following potentially dilutive securities have been excluded from the computation of diluted weighted average shares outstanding as of December 31, 2006, 2007 and 2008 and September 30, 2008 and 2009, as they would be anti-dilutive:

|   | Years Ended December 31, |            |            | Nine Months Ended<br>September 30, |                     |
|---|--------------------------|------------|------------|------------------------------------|---------------------|
|   | 2006                     | 2007       | 2008       | 2008<br>(unaudited)                | 2009<br>(unaudited) |
| Convertible preferred stock             | 54,977,272               | 62,977,272 | 67,118,858 | 67,118,858                         | 69,223,024          |
| Options to purchase common stock        | 8,284,495                | 9,621,549  | 11,505,866 | 11,380,973                         | 14,094,470          |
| Restricted shares subject to repurchase | 303,788                  | 167,826    | 65,990     | 103,389                            | 505,839             |
|   | 63,565,555               | 72,766,647 | 78,690,714 | 78,603,220                         | 83,823,333          |

As disclosed previously, pro forma net loss per share assuming the conversion of all convertible preferred stock at the beginning of the period (or at the original date of issuance, if later), the conversion of 681,819 shares of convertible preferred stock sold in November 2009, including the related gain on final remeasurement, and compensation expense related to 30,000 and 45,000 time-accelerated stock options at

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**3. Net Loss Per Share (Continued)**

December 31, 2008 and September 30, 2009, respectively, that will fully vest upon the closing of the Company's proposed public offering is as follows (in thousands, except share and per share amounts):

|  | Year Ended<br>December 31,<br>2008<br>(unaudited) | Nine Months Ended<br>September 30,<br>2009<br>(unaudited) |
|--|---|---|
| Numerator:   |   |   |
| Net loss attributable to Ironwood Pharmaceuticals, Inc. as reported  | \$ (53,874)                                       | \$ (47,255)   |
| Add: Remeasurement of forward purchase contract  |   | 700   |
| Less: Share-based compensation due to the initial public offering  | (56)  | (107)   |
| Pro forma net loss attributable to Ironwood Pharmaceuticals, Inc.  | \$ (53,930)                                       | \$ (46,662)   |
| Denominator:   |   |   |
| Weighted-average number of common shares used in net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted   | 6,889,817   | 7,054,291   |
| Weighted-average number of common shares assuming conversion of all convertible preferred stock at the beginning of the period (or at the original date of issuance, if later) | 67,605,635  | 68,519,826  |
| Weighted-average common shares used in computing pro forma net loss per share attributable to Ironwood Pharmaceuticals, Inc.   | 74,495,452  | 75,574,117  |
| Pro forma net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted  | \$ (0.72)   | \$ (0.62)   |

**4. Collaboration and License Agreements****Forest Laboratories, Inc.**

In September 2007, the Company entered into a collaboration agreement with Forest to jointly develop and commercialize linaclotide, a drug candidate for the treatment of IBS-C, CC and other lower gastrointestinal conditions, in North America. Under the terms of this collaboration agreement, the Company shares equally with Forest all development costs, as well as potential future profits and losses from the development and sale of linaclotide in the United States. The Company will receive royalties from Forest for sales in Canada and Mexico. The Company retained the rights to commercialize linaclotide outside of North America. Forest made non-refundable, up-front payments totaling \$70.0 million to the Company in order to obtain rights to linaclotide in North America. These payments were made in two tranches, one of \$50.0 million paid in September 2007, and the second of \$20.0 million, which was paid in January 2008. Because of the Company's continuing involvement in the development program, the

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**4. Collaboration and License Agreements (Continued)**

Company is recognizing the up-front license fee as revenue on a straight-line basis over five years, which is the Company's estimate of the period over which linaclotide will be 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 clinical and commercial milestones. These payments, including the up-front license fee, could total up to \$330.0 million, if certain development and sales milestones are achieved for linaclotide. In September 2008, the Company achieved a clinical milestone which triggered a \$10.0 million milestone payment from Forest. The Company recognized revenue of approximately \$2.1 million upon achievement of the milestone. This amount represents the portion of the milestone payment equal to the applicable percentage of the performance period that had elapsed as of the date the milestone was achieved. The remainder of the balance was deferred, and is being recognized on a straight-line basis over the remaining development period.

The collaboration agreement includes a contingent equity investment, in the form of a forward purchase contract, which requires Forest to purchase 2,083,333 shares of the Company's convertible preferred stock, if a specific clinical milestone is met, at a price of \$12.00 per share. The Company evaluated this financial instrument and determined that because the Company may be required to settle the instrument by transferring assets to Forest due to "deemed liquidation" provisions of the preferred stock, it should be considered an asset or liability. The contingent equity investment was valued at inception at its estimated fair value. A significant input in the valuation of the forward purchase contract is the fair value of the Company's convertible preferred shares which are estimated using the probability-weighted expected return method under the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held Company Equity Securities Issued as Compensation* (the "Practice Aid"). Under the probability-weighted expected return method, the value of the Company's convertible preferred shares is estimated based on an analysis of potential future values of the Company assuming various future liquidity events, the timing and amount of which is based on estimates from the Company. The resulting share value is based on the probability-weighted present value of the expected future returns, considering each of the possible outcomes as well as the rights of each share class. The calculated discount or premium from the pre-determined price paid by Forest for their shares in excess of the estimated fair value of the Company's convertible preferred stock at the expected time of meeting the milestone is discounted to arrive at the present value of the forward purchase contract.

After applying the methodology discussed above, the Company valued the contingent equity investment at September 12, 2007 at \$9.0 million, which represented the value of the premium that Forest will pay for shares of the Company's stock should the milestone be achieved. The \$9.0 million was recorded as an asset and incremental deferred revenue at the inception of the arrangement. The \$9.0 million of incremental deferred revenue, together with the \$70.0 million non-refundable up-front payments, are being recognized as revenue on a straight-line basis over the period of the Company's continuing involvement, which was estimated to be five years from the inception of the arrangement. During the years ended December 31, 2007 and 2008 and the nine months ended September 30, 2008 and 2009, the Company recognized approximately \$4.6 million, \$18.4 million, \$13.9 million and \$21.5 million, respectively, in revenue from the Forest collaboration agreement.

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**4. Collaboration and License Agreements (Continued)**

In addition, the Company is required to remeasure the fair value of the contingent equity investment at each reporting period using valuation methodologies consistent with the Practice Aid and using current assumptions. The resulting changes in value are then recorded as other income or expense. At December 31, 2007, the Company remeasured the fair value of the contingent equity investment using current assumptions and as a result, the contingent equity investment was valued at December 31, 2007 at \$9.6 million. At September 30, 2008, the Company again remeasured the fair value of the contingent equity investment using current assumptions and as a result, valued the contingent equity investment at September 30, 2008 at \$3.7 million. At December 31, 2008, the Company again remeasured the fair value of the contingent equity investment using current assumptions and as a result, the contingent equity investment was valued at December 31, 2008 at \$8.7 million. For the years ended December 31, 2007 and 2008 and for the nine months ended September 30, 2008, the Company recorded an increase of approximately \$0.6 million, a decrease of approximately \$0.9 million and a decrease of approximately \$5.9 million, respectively, in the fair value of the forward purchase contract related to these remeasurements.

On July 22, 2009, the Company achieved the clinical milestone in the Forest collaboration agreement, thus triggering the equity investment. As a result, the Company remeasured the fair value of the contingent equity investment as of July 22, 2009 using assumptions as of that date. The resulting final fair value of the contingent equity investment was \$8.8 million. The increase of approximately \$0.1 million in the fair value of the contingent equity investment from December 31, 2008 was recorded to other income (expense) at that time and the Company reclassified the forward purchase contract as a reduction to convertible preferred stock. The Company issued the 2,083,333 shares to Forest on September 1, 2009. Additionally, the achievement of the clinical milestone triggered a \$20.0 million milestone payment from Forest that was received on August 20, 2009, of which approximately \$8.2 million was recognized as revenue in the nine months ended September 30, 2009.

Further, because the Company shares development costs equally with Forest, payments from Forest with respect to research and development costs incurred by the Company are recorded as a reduction to expense, and not as revenue. During the years ended December 31, 2007 and 2008 and the nine months ended September 30, 2008 and 2009, the Company offset approximately \$5.0 million, \$18.3 million, \$11.4 million and \$22.3 million, respectively, against research and development expense that was reimbursed from Forest for sharing of costs that the Company incurred for research and development under the collaboration.

**Almirall, S.A.**

In April 2009, the Company entered into a license agreement with Almirall for European rights to develop and commercialize linaclotide for the treatment of IBS-C, CC and other lower gastrointestinal 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. The license agreement requires the Company to participate on a joint development committee over linaclotide's development period. The Company will receive escalating royalties from the sales of linaclotide in the European territory. 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

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**4. Collaboration and License Agreements (Continued)**

Company elected to record the non-refundable up-front payment on a net basis. Because of the Company's continuing involvement in the development program, the Company is recognizing the up-front license fee as revenue on a straight-line basis over fifty months, which is the Company's estimate of the period over which linaclotide will be developed under the license agreement for the European territory. The license agreement also includes contingent milestone payments, as well as a contingent equity investment based on the achievement of specific clinical and sales milestones. These payments could total up to \$55.0 million, including the contingent equity investment discussed below, if certain development and sales milestones are achieved for linaclotide.

The license agreement includes a contingent equity investment, in the form of a forward purchase contract, which requires Almirall to purchase 681,819 shares of the Company's convertible preferred stock (or common stock if the Company is public), if a specific clinical milestone is met, at a price of \$22.00 per share. The Company evaluated this financial instrument and determined that because the Company may be required to settle the instrument by transferring assets to Almirall, it should be considered an asset or liability. The contingent equity investment was valued at inception at its fair value. The valuation was prepared using the same methodology that the Company used to value the Forest contingent equity investment. After applying this methodology, the Company valued the contingent equity investment at April 30, 2009 at \$6.0 million, which represents the value of the premium that Almirall will pay for shares of the Company's stock should the milestone be achieved. The \$6.0 million was recorded as an asset and incremental deferred revenue at the inception of the arrangement. The \$6.0 million of incremental deferred revenue, together with the \$38.0 million non-refundable up-front payment, are being recognized as revenue on a straight-line basis over the period of the Company's continuing involvement, which is estimated to be fifty months. During the nine months ended September 30, 2009, the Company recognized approximately \$4.4 million in revenue from the license agreement.

The Company remeasures the fair value of the contingent equity investment at each reporting period. The resulting changes in value are then recorded as other income or expense. At September 30, 2009 the Company remeasured the fair value of the contingent equity investment using current assumptions and as a result, the contingent equity investment was valued at September 30, 2009 at \$5.8 million. For the nine months ended September 30, 2009, the Company recorded a decrease of approximately \$0.2 million in the fair value of the forward purchase contract related to this remeasurement.

On November 2, 2009, the Company achieved the clinical milestone in the Almirall license agreement, thus triggering the equity investment. As a result, the Company remeasured the fair value of the contingent equity investment as of November 2, 2009 using assumptions as of that date. The resulting final fair value of the contingent equity investment was \$6.5 million. In November 2009, the Company will record the increase from September 30, 2009 of approximately \$0.7 million in the fair value of the contingent equity investment and an equal amount of other income and reclassify 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 681,819 shares of convertible preferred stock.

**Astellas Pharma Inc.**

On November 9, 2009, the Company entered into a license agreement with Astellas Pharma Inc. ("Astellas"). Astellas will have the right to develop and commercialize linaclotide for the treatment of

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**4. Collaboration and License Agreements (Continued)**

IBS-C and other gastrointestinal conditions in Japan, South Korea, Taiwan, Thailand, Philippines, and Indonesia. Under the terms of the agreement, Astellas paid the Company an up-front licensing fee of \$30.0 million on November 16, 2009. The agreement includes additional development milestone payments could total up to \$45.0 million. In addition, the Company will receive escalating royalties on linaclotide sales should Astellas receive approval to market and sell linaclotide in the Asian market. Astellas will be responsible for activities relating to regulatory approval and commercialization.

**5. Fair Value of Financial Instruments**

Effective January 1, 2009, the Company adopted a newly issued accounting standard for fair value measurements of all nonfinancial assets and nonfinancial liabilities not recognized or disclosed at fair value in the financial statements on a recurring basis. The adoption of the accounting standard for these assets and liabilities did not have a material impact on the Company's financial position or results of operations; however, this standard may impact it in subsequent periods and require additional disclosures.

In 2009, the Company implemented newly issued accounting standards which provide guidance for determining fair value when the volume and level of activity for the asset or liability have significantly decreased and identifying circumstances that indicate that a transaction is not orderly. Specifically, the new standards provide additional guidelines for making fair value measurements more consistent with the principles presented and provide authoritative guidance in determining whether a market is active or inactive, and whether a transaction is distressed. This guidance is applicable to all assets and liabilities (i.e. financial and nonfinancial) and requires enhanced disclosures, including interim and annual disclosure of the input and valuation techniques (or changes in techniques) used to measure fair value and the defining of the major security types comprising debt and equity securities held based upon the nature and risk of the security. The adoption of the new standards did not impact the Company's financial position or results of operations.

On January 1, 2008, the Company adopted an accounting standard for its financial assets and other items that are recognized or disclosed at fair value on a recurring basis. This accounting standard, among other things, defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements.

The tables below present information about the Company's assets that are measured at fair value on a recurring basis as of September 30, 2009 and December 31, 2008 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 applied other available information as applicable through processes such as benchmark yields, benchmarking of like securities, sector groupings and matrix pricing to prepare evaluations. In addition, model processes were used to assess



Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

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**5. Fair Value of Financial Instruments (Continued)**

interest rate impact and develop prepayment scenarios. These models take into consideration relevant credit information, perceived market movements, sector news and economic events. The inputs into these models may include benchmark yields, reported trades, broker-dealer quotes, issuer spreads and other relevant data.

The Company has classified assets measured at fair value on a recurring basis as follows (in thousands):

| Description  | December 31,<br>2008 | Fair Value Measurements at Reporting Date Using                         |  |  |
|--|----------------------|---|--|--|
|  |                      | Quoted Prices in<br>Active Markets for<br>Identical Assets<br>(Level 1) | Significant Other<br>Observable<br>Inputs<br>(Level 2) | Significant<br>Unobservable<br>Inputs<br>(Level 3) |
| Money market funds (included in cash and cash equivalents) | \$ 62,975            | \$ 62,975   | \$   | \$   |
| U.S. Treasury securities                                   | 9,159                | 9,159   |  |  |
| U.S. government-sponsored entities                         | 12,886               |   | 12,886   |  |
| Forward purchase contract                                  | 8,700                |   |  | 8,700  |
| <b>Total</b>   | <b>\$ 93,720</b>     | <b>\$ 72,134</b>  | <b>\$ 12,886</b>                                       | <b>\$ 8,700</b>                                    |

| Description  | September 30,<br>2009<br>(unaudited) | Fair Value Measurements at Reporting Date Using                         |  |  |
|--|--------------------------------------|---|--|--|
|  |                                      | Quoted Prices in<br>Active Markets for<br>Identical Assets<br>(Level 1) | Significant Other<br>Observable<br>Inputs<br>(Level 2) | Significant<br>Unobservable<br>Inputs<br>(Level 3) |
| Money market funds (included in cash and cash equivalents)                 | \$ 72,086                            | \$ 72,086   | \$   | \$   |
| U.S. government-sponsored entities (included in cash and cash equivalents) | 5,845                                |   | 5,845  |  |
| U.S. government-sponsored entities   | 17,659                               |   | 17,659   |  |
| Forward purchase contracts   | 5,800                                |   |  | 5,800  |
| <b>Total</b>   | <b>\$ 101,390</b>                    | <b>\$ 72,086</b>  | <b>\$ 23,504</b>                                       | <b>\$ 5,800</b>                                    |

The forward purchase contracts shown above are associated with the Company's collaboration agreement with Forest and license agreement with Almirall, as described in Note 4. The agreements require Forest and Almirall to purchase shares of the Company's convertible preferred stock (or common stock if the Company is public) at a pre-determined price upon meeting specific development milestones. The values of the forward purchase contracts represent the estimated probability weighted value of the premium above fair value that Forest and Almirall will pay for the convertible preferred shares should the milestones be achieved. The Company estimates the fair value of the convertible preferred stock using methods consistent with the Practice Aid as discussed in Note 4. The Company remeasures the fair value of the forward purchase contracts at each reporting period using current assumptions, with changes in value recorded as other income or expense.

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**5. Fair Value of Financial Instruments (Continued)**

The following table is a roll-forward of the fair value the forward purchase contracts, where fair value is determined by Level 3 inputs (in thousands):

|  |          |
|--|----------|
| Balance at December 31, 2007   | \$ 9,600 |
| Decrease in fair value of forward purchase contract upon remeasurement included in other income (expense)              | (900)    |
| Balance at December 31, 2008   | 8,700    |
| Issuance of Almirall forward purchase contract (unaudited)   | 6,000    |
| Decrease in fair value of forward purchase contracts upon remeasurement included in other income (expense) (unaudited) | (100)    |
| Settlement of forward purchase contract in connection with sale of Series G Convertible Preferred Stock (unaudited)    | (8,800)  |
| Balance at September 30, 2009 (unaudited)  | \$ 5,800 |

Cash, cash equivalents, accounts receivable, prepaid expenses and other current assets, restricted cash, accounts payable, accrued expenses, current portion of capital lease obligations and the current portion of long-term debt are carried at amounts that approximate fair value at December 31, 2007 and 2008 and September 30, 2009 due to their short-term maturities.

Capital lease obligations and long-term debt approximate fair value at December 31, 2007 and 2008 and September 30, 2009, as they bear interest at a rate approximating a market interest rate.

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**6. Available-for-Sale Investments**

The following is a summary of available-for-sale securities at December 31, 2007 and 2008 and September 30, 2009 (in thousands):

|  | Amortized<br>Cost | Gross<br>Unrealized<br>Gains | Gross<br>Unrealized<br>Losses | Fair Value       |
|--|-------------------|------------------------------|-------------------------------|------------------|
| <b>December 31, 2007:</b>              |                   |                              |                               |                  |
| U.S. government-sponsored entities     | \$ 29,506         | \$ 3                         | \$                            | \$ 29,509        |
| <b>Total</b>                           | <b>\$ 29,506</b>  | <b>\$ 3</b>                  | <b>\$</b>                     | <b>\$ 29,509</b> |
| <b>December 31, 2008:</b>              |                   |                              |                               |                  |
| U.S. government-sponsored entities     | \$ 12,873         | \$ 13                        | \$                            | \$ 12,886        |
| U.S. Treasury securities               | 9,149             | 10                           |                               | 9,159            |
| <b>Total</b>                           | <b>\$ 22,022</b>  | <b>\$ 23</b>                 | <b>\$</b>                     | <b>\$ 22,045</b> |
| <b>September 30, 2009 (unaudited):</b> |                   |                              |                               |                  |
| U.S. government-sponsored entities     | \$ 17,657         | \$ 2                         | \$                            | \$ 17,659        |
| <b>Total</b>                           | <b>\$ 17,657</b>  | <b>\$ 2</b>                  | <b>\$</b>                     | <b>\$ 17,659</b> |

The contractual maturities of all securities held at December 31, 2007 and 2008 and September 30, 2009 are one year or less. 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 cost of securities sold is determined based on the specific identification method for purposes of recording realized gains and losses. Gross realized gains and losses on the sales of investments have not been material to the Company's consolidated results of operations.

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)

**7. Property and Equipment**

Property and equipment consisted of the following (in thousands):

|  | December 31, |           | September 30, |
|--|--------------|-----------|---------------|
|  | 2007         | 2008      | 2009          |
|  |              |           | (unaudited)   |
| Lab equipment                                  | \$ 6,478     | \$ 11,115 | \$ 12,168     |
| Computer and office equipment                  | 1,623        | 2,599     | 2,897         |
| Furniture and fixtures                         | 574          | 1,556     | 1,118         |
| Software                                       | 1,317        | 1,913     | 1,842         |
| Construction in process                        | 332          | 685       | 1,308         |
| Leasehold improvements                         | 1,589        | 17,124    | 17,237        |
|  | 11,913       | 34,992    | 36,570        |
| Less accumulated depreciation and amortization | (7,767)      | (10,396)  | (13,167)      |
|  | \$ 4,146     | \$ 24,596 | \$ 23,403     |

Property and equipment additions during the year ended December 31, 2008 primarily related to the construction of leasehold improvements related to approximately 75,000 square feet of laboratory and office space at the Company's new research and development facility at 301 Binney Street in Cambridge, Massachusetts, as well as costs related to building out additional leased space for Microbia at 60 Westview Avenue in Lexington, Massachusetts. In 2008, the Company entered into capital leases for certain computer equipment. As of December 31, 2008 and September 30, 2009, the Company had \$0.4 million of assets under capital lease with accumulated amortization balances of approximately \$0.1 million and \$0.2 million, respectively.

Depreciation and amortization expense of property and equipment, including equipment recorded under capital leases, was approximately \$1.3 million, \$1.7 million, \$2.8 million, \$1.6 million and \$3.9 million for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2008 and 2009, respectively.

**8. Accrued Expenses**

Accrued expenses consisted of the following (in thousands):

|                       | December 31, |          | September 30, |
|-----------------------|--------------|----------|---------------|
|                       | 2007         | 2008     | 2009          |
|                       |              |          | (unaudited)   |
| Salaries and benefits | \$ 989       | \$ 2,021 | \$ 2,260      |
| Professional fees     | 770          | 544      | 630           |
| Other                 | 726          | 1,776    | 1,252         |
|                       | \$ 2,485     | \$ 4,341 | \$ 4,142      |

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)****(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)****9. Patent Costs**

The Company incurred and charged to operations legal and other fees related to patents of approximately \$1.0 million, \$1.6 million, \$1.5 million, \$1.2 million and \$1.4 million for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2008 and 2009, respectively. These costs were charged to general and administrative expenses as incurred.

**10. Debt**

The Company has a master loan and security agreement (the "Loan Agreement") with a financing company to finance the purchase of laboratory and other equipment. At December 31, 2008, the outstanding borrowings under the Loan Agreement were approximately \$1.8 million, which are being repaid with interest over periods of either 36 or 48 months. The Loan Agreement requires interest and principal payable in monthly installments ranging from \$1,000 to \$27,000 through December 2011. Borrowings under the Loan Agreement bear interest at a fixed rate between 9.99% and 12.18% for the duration of the term, and are collateralized by laboratory and other equipment. At December 31, 2008, there were no funds available under the agreement to finance future equipment purchases.

Scheduled principal repayments on long-term debt as of December 31, 2008 are as follows (in thousands):

|      |    |     |
|------|----|-----|
| 2009 | \$ | 943 |
| 2010 |    | 681 |
| 2011 |    | 191 |

\$ 1,815

In January 2009, the Company entered into a new master loan and security agreement (the "2009 Loan Agreement", together with the Loan Agreement the "Loan Agreements") with the same financing company to finance the purchase of laboratory, computer, and other equipment. The 2009 Loan Agreement provides the Company up to \$6.0 million of available funding through December 2009. At September 30, 2009, approximately \$2.6 million of borrowings have been made under the 2009 Loan Agreement. Borrowings under the 2009 Loan Agreement are being repaid with interest over periods of either 36 or 48 months. The 2009 Loan Agreement requires interest and principal payable in monthly installments on the outstanding borrowings ranging from \$2,000 to \$27,000 through July 2013. Outstanding borrowings under the 2009 Loan Agreement bear interest at a fixed rate of 12.50% for the duration of the term, and are collateralized by laboratory and other equipment.

At December 31, 2006, 2007 and 2008 and September 30, 2009, the weighted average interest rate on the outstanding debt was 12.2%, 11.7%, 11.6% and 12.2%, respectively. At September 30, 2009, approximately \$3.4 million was outstanding under the Loan Agreements.

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**11. Commitments and Contingencies**

The Company leases various facilities and equipment under leases that expire at varying dates through 2016. Certain of these leases contain renewal options, and require the Company to pay operating costs, including property taxes, insurance, and maintenance.

In January 2007, the Company entered into a lease agreement to rent approximately 114,000 square feet of office and lab space in Cambridge, Massachusetts. The initial term of the lease is eight years from the first rent commencement date, and the Company has the right to extend for two additional terms of five years each. Occupancy of the space occurs in four distinct phases, and rent for each phase commences at the earlier of a contractually set date or the occupancy date. Rent escalates on the fourth anniversary of the first rent commencement date based upon a formula that is tied to the Consumer Price Index. The space was delivered to the Company in September 2007, and rent payments for the first phase of occupancy commenced in January 2008. Upon commencement of the lease, the Company is recording a deferred rent liability related to the free rent and escalating rent payments. The escalating rent payments and free rent period are recognized on a straight-line basis over the term of the lease. The landlord agreed to reimburse the Company for its tenant improvements at a set rate per rentable square foot. Approximately \$6.6 million was paid as of December 31, 2008, and is recorded as deferred rent on the consolidated balance sheet and is being amortized as a reduction to rent expense over the term of the lease.

In April and September 2008, the Company entered into capital leases totaling \$0.4 million for certain computer equipment. These leases expire in April and August 2011, respectively. These capital leases bear interest at a fixed rate of 11.83%.

At December 31, 2008, future minimum lease payments under all non-cancelable lease arrangements are as follows (in thousands):

|                                     | Operating<br>Leases | Capital<br>Leases | Total            |
|-------------------------------------|---------------------|-------------------|------------------|
| 2009                                | \$ 8,769            | \$ 147            | \$ 8,916         |
| 2010                                | 8,824               | 147               | 8,971            |
| 2011                                | 11,229              | 59                | 11,288           |
| 2012                                | 9,057               |                   | 9,057            |
| 2013                                | 7,634               |                   | 7,634            |
| Thereafter                          | 14,809              |                   | 14,809           |
|                                     | 60,322              | 353               | 60,675           |
| Less amounts representing interest  |                     | (47)              | (47)             |
| <b>Total minimum lease payments</b> | <b>\$ 60,322</b>    | <b>\$ 306</b>     | <b>\$ 60,628</b> |

Rent expense of approximately \$3.9 million, \$4.6 million, \$12.8 million, \$8.6 million and \$8.8 million was charged to operations for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2008 and 2009, respectively. The Company recorded sublease income of approximately \$0.4 million for the year ended December 31, 2008 and approximately \$0.2 million for the nine months ended September 30, 2008, respectively, as a reduction to rent expense. The sublease

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**11. Commitments and Contingencies (Continued)**

agreement was terminated in November 2008. The Company did not record any sublease income for the years ended December 31, 2006 and 2007 and the nine months ended September 30, 2009.

*Guarantees*

As permitted under Delaware law, the Company indemnifies its officers and directors for certain events or occurrences while the officer or director is, or was, serving at the Company's request in such capacity. The maximum potential amount of future payments the Company could be required to make is unlimited; however, the Company has directors and officers' insurance coverage that should limit its exposure and enable it to recover a portion of any future amounts paid.

The Company is a party to a number of agreements entered into in the ordinary course of business that contain typical provisions that obligate the Company to indemnify the other parties to such agreements upon the occurrence of certain events. Such indemnification obligations are usually in effect from the date of execution of the applicable agreement for a period equal to the applicable statute of limitations. The aggregate maximum potential future liability of the Company under such indemnification provisions is uncertain.

The Company leases office space under several non-cancelable operating leases. The Company has a standard indemnification arrangement under the leases that requires it to indemnify its landlords against all costs, expenses, fines, suits, claims, demands, liabilities, and actions directly resulting from any breach, violation or nonperformance of any covenant or condition of the Company's leases.

As of December 31, 2007 and 2008 and September 30, 2009, the Company had not experienced any material losses related to these indemnification obligations and no material claims with respect thereto were outstanding. The Company does not expect significant claims related to these indemnification obligations and, consequently, concluded that the fair value of these obligations is negligible. As a result, the Company has not established any related reserves.

**12. Litigation**

In February 2008, Microbia and Teva Pharmaceutical Works, Rt., formerly known as Biogal Pharmaceutical Works, Rt. ("Teva"), entered into a Settlement Agreement (the "Settlement Agreement") related to a dispute under two of the Company's development agreements for Teva. Pursuant to the Settlement Agreement, Teva remitted a payment of approximately \$1.2 million to Microbia in March 2008, in settlement of all outstanding litigation. The settlement amount is recorded as services revenue in the consolidated statement of operations.

From time to time, the Company is involved in various legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these other claims cannot be predicted with certainty, management does not believe that the outcome of any of these other legal matters will have a material adverse effect on the Company's consolidated financial statements.

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**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**13. Convertible Preferred Stock**

The Company's Convertible Preferred Stock consisted of the following (in thousands, except share and per share amounts):

|  | <b>December 31,</b> |             | <b>September 30,</b> |
|--|---------------------|-------------|----------------------|
|  | <b>2007</b>         | <b>2008</b> | <b>2009</b>          |
|  |                     |             | <b>(unaudited)</b>   |
| Series A Convertible Preferred Stock, \$0.001 par value: 8,904,567 shares authorized, issued, and outstanding (liquidation value of approximately \$17.6 million and \$18.2 million at December 31, 2008 and September 30, 2009, respectively)                   | \$ 9,795            | \$ 9,795    | \$ 9,795             |
| Series B Convertible Preferred Stock, \$0.001 par value: 7,419,355 shares authorized, issued, and outstanding (liquidation value of approximately \$38.5 million and \$39.8 million at December 31, 2008 and September 30, 2009, respectively)                   | 23,000              | 23,000      | 23,000               |
| Series C Convertible Preferred Stock, \$0.001 par value: 6,401,523 shares authorized, issued, and outstanding (liquidation value of approximately \$40.6 million and \$42.1 million at December 31, 2008 and September 30, 2009, respectively)                   | 26,223              | 26,223      | 26,223               |
| Series D Convertible Preferred Stock, \$0.001 par value: 12,618,296 shares authorized, issued, and outstanding (liquidation value of approximately \$55.0 million and \$57.4 million at December 31, 2008 and September 30, 2009, respectively)                  | 39,906              | 39,906      | 39,906               |
| Series E Convertible Preferred Stock, \$0.001 par value: 20,500,000 shares authorized, 19,633,531 shares issued and outstanding (liquidation value of approximately \$92.2 million and \$96.6 million at December 31, 2008 and September 30, 2009, respectively) | 74,927              | 74,927      | 74,927               |
| Series F Convertible Preferred Stock, \$0.001 par value: 8,000,000 shares authorized, issued, and outstanding (liquidation value of approximately \$57.6 million and \$60.6 million at December 31, 2008 and September 30, 2009, respectively)                   | 49,951              | 49,951      | 49,951               |
| Series G Convertible Preferred Stock, \$0.001 par value: 2,083,333 shares authorized, issued and outstanding (liquidation value of approximately \$25.1 million at September 30, 2009)   |                     |             | 16,200               |
| Series H Convertible Preferred Stock, \$0.001 par value: 8,333,333 shares authorized, 4,162,419 issued and outstanding (liquidation value of approximately \$50.9 million and \$54.1 million at December 31, 2008 and September 30, 2009, respectively)          |                     | 49,598      | 49,847               |
| Series I Convertible Preferred Stock, \$0.001 par value: 681,819 shares authorized, no shares issued and outstanding   |                     |             |                      |
|  | \$ 223,802          | \$ 273,400  | \$ 289,849           |



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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**13. Convertible Preferred Stock (Continued)**

In February 2006, the Company issued 19,633,531 shares of Series E Convertible Preferred Stock at a price of \$3.82 per share for cash proceeds of approximately \$75.0 million, net of issuance costs of approximately \$0.1 million.

In February 2007, the Company issued 8,000,000 shares of Series F Convertible Preferred Stock at a price of \$6.25 per share for cash proceeds of approximately \$50.0 million, net of issuance costs of approximately \$0.1 million.

In September 2008, the Company issued 4,141,586 shares of Series H Convertible Preferred Stock at a price of \$12.00 per share for cash proceeds of approximately \$49.6 million, net of issuance costs of approximately \$0.1 million.

In August 2009, the Company issued 20,833 shares of Series H Convertible Preferred Stock at a price of \$12.00 per share for cash proceeds of approximately \$0.2 million.

In September 2009, the Company issued 2,083,333 shares of Series G Convertible Preferred Stock at a price of \$12.00 per share for cash proceeds of approximately \$25.0 million. In July 2009, upon the settlement of the Forest forward purchase contract, \$8.8 million was reclassified from the forward purchase contract asset to convertible preferred stock to offset the \$25.0 million of proceeds received.

In November 2009, the Company settled the Almirall forward purchase contract by selling Almirall 681,819 shares of Series I Convertible Preferred Stock at a price of \$22.00 per share for cash proceeds of approximately \$15.0 million. Upon the settlement of the Almirall forward purchase contract, \$6.5 million was reclassified from the forward purchase contract asset to convertible preferred stock to offset the \$15.0 million of proceeds received.

The rights, preferences, and privileges of the Series A Convertible Preferred Stock, the Series B Convertible Preferred Stock, the Series C Convertible Preferred Stock, the Series D Convertible Preferred Stock, the Series E Convertible Preferred Stock, the Series F Convertible Preferred Stock, the Series G Convertible Preferred Stock, the Series H Convertible Preferred Stock; and the Series I Convertible Preferred Stock (together, the "Convertible Preferred Stock") are as follows:

*Conversion*

At the option of the holder, each share of Convertible Preferred Stock is convertible into Class B Common Stock at the conversion price of \$1.10 for the Series A Convertible Preferred Stock, \$3.10 for the Series B Convertible Preferred Stock, \$3.82 for the Series C Convertible Preferred Stock, \$3.17 for the Series D Convertible Preferred Stock, \$3.82 for the Series E Convertible Preferred Stock, \$6.25 for the Series F Convertible Preferred Stock, \$12.00 for the Series G Convertible Preferred Stock, \$12.00 for the Series H Convertible Preferred Stock, and \$22.00 for the Series I Convertible Preferred Stock at September 30, 2009, or the equivalent price after adjustment for certain events defined in the Company's Certificate of Incorporation, such as stock splits.

Shares of the Convertible Preferred Stock automatically convert to Class B Common Stock upon the closing of a qualified public offering of the Company's common stock.

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**13. Convertible Preferred Stock (Continued)**

*Dividends*

The holders of the Convertible Preferred Stock are entitled to receive, when and if declared by the Board of Directors or upon a liquidation, dividends at the per annum rate of 8% of the original issue price of each outstanding share of the Convertible Preferred Stock. For purposes of involuntary liquidation of the Company, dividends accrue, whether or not declared or paid, and are cumulative. Such cumulative dividends in arrears on the Convertible Preferred Stock at December 31, 2008 and September 30, 2009 are approximately \$78.5 million and \$94.9 million, respectively, and are reflected in the liquidation preference amounts disclosed in the table listing the Company's Convertible Preferred Stock.

*Voting Rights*

The holders of the Convertible Preferred Stock are entitled to the number of votes equal to the number of common stock shares into which they are convertible. The preferred stockholders vote with the common stockholders as a single class.

As long as at least 1,000,000 shares of the Series A Convertible Preferred Stock, 750,000 shares of the Series B Convertible Preferred Stock, 500,000 shares of the Series C Convertible Preferred Stock, 1,250,000 shares of the Series D Convertible Preferred Stock, 2,000,000 shares of the Series E Convertible Preferred Stock, 800,000 shares of the Series F Convertible Preferred Stock, 210,000 shares of Series G Convertible Preferred Stock, 830,000 shares of Series H Convertible Preferred Stock; and 70,000 shares of Series I Convertible Preferred Stock remain outstanding, consent of the holders of the Convertible Preferred Stock, voting together as a single class, will be required for the approval of certain events, including events relating to the liquidation, dissolution, or winding-up of the Company, or the issuance of additional preferred stock.

*Liquidation, Dissolution, or Winding-Up*

In the event of a voluntary or involuntary liquidation, dissolution, or winding-up of the Company, holders of the Convertible Preferred Stock are entitled to be paid out of the assets available for distribution, the original issuance price of the respective shares, plus all accrued but unpaid dividends. If the assets of the Company are insufficient to pay the full preferential amounts to the holders of the Convertible Preferred Stock, the assets will be distributed ratably among the holders of the Convertible Preferred Stock in proportion to their aggregate liquidation preference amounts.

As the Convertible Preferred Stock may become redeemable upon an event that is outside of the control of the Company, the value of the Convertible Preferred Stock has been classified outside of permanent equity.

*Right of First Refusal*

Subject to certain exceptions, holders of the Convertible Preferred Stock have the right of first refusal to purchase any new securities offered by the Company. The Company has the right of first refusal to purchase any shares that a stockholder offers for sale.

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**14. Stockholders' Equity (Deficit)**

The Company is authorized to issue 260,255,231 shares of stock at December 31, 2008 of which 185,964,824 shares have been authorized for the issuance of common stock and 74,260,407 shares have been authorized for the issuance of preferred stock at December 31, 2008. On July 13, 2009, the Company amended its certificate of incorporation to authorize the issuance of 272,003,626 shares of stock of which 197,061,400 shares have been authorized for the issuance of common stock and 74,942,226 shares have been authorized for the issuance of preferred stock.

**Common Stock**

In August 2008, the Company amended its certificate of incorporation to designate two series of common stock, and increase the authorized number of shares of its common stock to 185,964,824. Each series (Series A Common Stock, which is referred to as "Class A Common Stock," and Series B Common Stock, which is referred to as "Class B Common Stock") consists of 92,982,412 authorized shares (\$0.001 par value per share). All shares of common stock that were outstanding immediately prior to the filing of the amendment were converted into shares of Class B Common Stock. The holders of Class A Common Stock and Class B Common Stock vote together as a single class. Class A Common Stock is entitled to one vote per share. Class B Common Stock is also entitled to one vote per share with the following exceptions: (1) after the completion of an initial public offering of the Company's stock, the holders of the Class B Common Stock are entitled to ten votes per share if the matter is an adoption of an agreement of merger or consolidation, an adoption of a resolution with respect to the sale, lease, or exchange of the Company's assets or an adoption of dissolution or liquidation of the Company, and (2) Class B common stockholders are entitled to ten votes per share on any matter if any individual, entity, or group seeks to obtain or has obtained beneficial ownership of 30% or more of the Company's outstanding shares of common stock. Class B Common Stock converts to Class A Common Stock if transferred or sold after the completion of a public offering. Class B Common Stock can be sold at any time and irrevocably converts to Class A Common Stock upon sale or transfer.

The Class B Common Stock will be entitled to a separate class vote for the issuance of additional shares of Class B Common Stock (except pursuant to dividends, splits or convertible securities), or any amendment, alteration or repeal of any provision of the Company's charter. All Class B Common Stock will automatically convert into Class A Common Stock upon the earliest of:

the later of (1) the first date on which the number of shares of Class B Common Stock then outstanding is less than 25% of the number of shares of Class B Common Stock outstanding immediately following the completion of an initial public offering or (2) December 31, 2018;

December 31, 2038; or

a date agreed to in writing by a majority of the holders of the Class B Common Stock.

In July 2009, the Company amended its certificate of incorporation to increase the authorized number of shares of common stock to 197,061,400 consisting of 98,530,700 shares each of Class A Common Stock and Class B Common Stock.

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**14. Stockholders' Equity (Deficit) (Continued)**

The Company has reserved such number of shares of Class A Common Stock as there are outstanding shares of Class B Common Stock solely for the purpose of effecting the conversion of the Class B Common Stock.

As of December 31, 2008 and September 30, 2009, the Company has reserved the following number of shares of common stock for the potential conversion of Convertible Preferred Stock and the exercise of stock options:

|                                      | December 31,<br>2008 | September 30,<br>2009<br>(unaudited) |
|--------------------------------------|----------------------|--------------------------------------|
| Series A Convertible Preferred Stock | 8,904,567            | 8,904,567                            |
| Series B Convertible Preferred Stock | 7,419,355            | 7,419,355                            |
| Series C Convertible Preferred Stock | 6,888,300            | 6,888,300                            |
| Series D Convertible Preferred Stock | 12,618,296           | 12,618,296                           |
| Series E Convertible Preferred Stock | 19,633,531           | 19,633,531                           |
| Series F Convertible Preferred Stock | 8,000,000            | 8,000,000                            |
| Series G Convertible Preferred Stock |                      | 2,083,333                            |
| Series H Convertible Preferred Stock | 4,141,586            | 4,162,419                            |
| Series I Convertible Preferred Stock |                      |                                      |
| Common stock options                 | 11,505,866           | 14,094,470                           |
|                                      | 79,111,501           | 83,804,271                           |

**Restricted Stock**

In 2005 and 2006, the Company sold an aggregate of 520,000 shares of common stock at par value (\$0.001 per share) to independent members of the Board of Directors under restricted stock agreements in accordance with the terms of the Company's 2002 Stock Incentive Plan ("2002 Plan"). The restricted stock vests ratably over four years from the grant date. In the event that a member of the Board of Directors ceases to serve for four years on the Company's Board of Directors for any reason, with or without cause, the Company has the right to repurchase some or all of the unvested shares at the fair values on the dates of issuance.

On September 18, 2009, the Company sold an aggregate of 470,686 shares of common stock to independent members of the Board of Directors under restricted stock agreements in accordance with the terms of the Company's 2005 Stock Incentive Plan ("2005 Plan") and the Company's director compensation program. 110,686 shares of restricted common stock will vest on December 31, 2009 and the remainder vest ratably over four years beginning in January 2010. In the event that a member of the Board of Directors ceases to serve on the Company's Board prior to December 31, 2013, the member shall forfeit all unvested shares in accordance with the terms of the restricted stock agreement.

On October 22, 2009, the Company sold an aggregate of 44,863 shares of common stock to an independent member of the Board of Directors under restricted stock agreements in accordance with the terms of the Company's 2005 Plan. 4,863 shares of restricted common stock will vest on December 31, 2009

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**14. Stockholders' Equity (Deficit) (Continued)**

and the remainder vest ratably over four years beginning in January 2010. In the event that the Board member ceases to serve on the Company's Board prior to December 31, 2013, the member shall forfeit all unvested shares in accordance with the terms of the restricted stock agreement.

A summary of the unvested shares of restricted stock as of December 31, 2008 and September 30, 2009 is presented below:

|   | Shares  | Weighted-Average<br>Grant Date<br>Fair Value |
|---|---------|--|
| Unvested at December 31, 2007                 | 155,000 | \$ 0.91                                      |
| Granted                                       |         | \$   |
| Vested  | 130,000 | \$ 0.78                                      |
| Forfeited                                     |         | \$   |
| Unvested at December 31, 2008                 | 25,000  | \$ 1.56                                      |
| Granted (unaudited)                           | 470,686 | \$ 5.48                                      |
| Vested (unaudited)                            | 18,750  | \$ 1.56                                      |
| Forfeited (unaudited)                         |         | \$   |
| Unvested at September 30, 2009<br>(unaudited) | 476,936 | \$ 5.43                                      |

**15. Stock Option Plans**

The Company has several share-based compensation plans. Under the 1998 Amended and Restated Stock Option Plan ("1998 Plan"), options to purchase 3,405,000 shares of common stock were available for grant to employees, directors, and consultants of the Company. The options were granted under the 1998 Plan at fair market value on the grant date, generally vest over a period of four years, and expire ten years from the grant date. There are no shares available for future grant under this plan, as it expired in accordance with its terms in 2008. At December 31, 2008 and September 30, 2009, options for 632,533 and 558,883 shares, respectively, were outstanding under the 1998 Plan.

Under the Company's 2002 Plan and 2005 Plan (together, the "Plans"), stock awards may be granted to employees, officers, directors, consultants, or advisors of the Company. The Plans provide for the granting of stock options, restricted stock, restricted stock units, and other share-based awards. There are 4,700,000 shares of common stock initially reserved for issuance under the 2002 Plan and 7,500,000 shares reserved under the 2005 Plan. In February 2009, the Company's Board of Directors approved an increase to the number of shares of common stock reserved for issuance under the 2005 Plan to 11,500,000 shares. The 2002 Plan allows for the transfer of unused shares from the 1998 Plan. Upon the expiration of the 1998 Plan on July 10, 2008, 382,438 unused shares were transferred to the 2002 Plan. At December 31, 2008 and September 30, 2009, there were 26,117 and 71,331 shares, respectively, available for future grant under the 2002 Plan and 486,536 and 1,222,489 shares, respectively, available for future grant under the 2005 Plan.

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

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**15. Stock Option Plans (Continued)**

Each plan provides for the granting of stock awards whereby the Company's Class B Common Stock is issuable upon exercise of outstanding options.

The option price at the date of grant is determined by the Board of Directors and, in the case of incentive stock options, may not be less than the fair market value of the common stock at the date of grant. Due to the absence of an active market for the Company's common stock, the Board of Directors was required to determine the fair value of the common stock for consideration in setting exercise prices for the options granted and in valuing the options granted. In determining the fair value, the Board of Directors considered both quantitative and qualitative factors including prices at which the Company sold shares of its convertible preferred stock, the rights, preferences and liquidity of the Company's convertible preferred and common stock, the Company's historical operating and financial performance and the status of its research and product development efforts, achievement of enterprise milestones, including the Company entering into collaboration agreements where third parties agree to purchase shares of the Company's convertible preferred stock at fixed prices sometime in the future, external market conditions affecting the biotechnology industry sector, and financial market conditions and, commencing in 2006, contemporaneous valuations provided by management. As the Company's common stock is not actively traded, the determination of fair value involves assumptions, judgments and estimates.

The option exercise period may not extend beyond ten years from the date of grant. The Plans provide that, subject to approval by the Board of Directors, option grantees may have the right to exercise an option prior to vesting. Shares purchased upon the exercise of unvested options will be subject to the same vesting schedule as the underlying options, and are subject to repurchase at the original exercise price by the Company should the employee be terminated or leave the Company prior to becoming fully vested in such shares. At December 31, 2007 and 2008 and September 30, 2009, there were 12,826, 40,990 and 28,903 shares, respectively, that had been issued pursuant to the exercise of unvested options that remain unvested and subject to repurchase by the Company. The Company does not currently hold any treasury shares. Upon stock option exercise, the Company issues new shares and delivers them to the participant. The exercise of these shares is not substantive and as a result, the cash paid for the exercise prices is considered a deposit or prepayment of the exercise price and is recorded as a liability and was not material to the consolidated financial statements at December 31, 2007 and 2008 and September 30, 2009.

During 2008, Microbia adopted the 2008 Stock Option and Restricted Stock Plan ("Microbia Stock Plan"). Separate disclosure of the Microbia Plan is provided in Note 20.

The Company, from time to time, issues certain time-accelerated stock options to certain employees under the Plans. The vesting of these time-accelerated stock options accelerates upon the achievement of certain performance-based milestones, such as the filing of a New Drug Application ("NDA") with the Food and Drug Administration ("FDA"), the first commercial sale of the Company's product, the successful completion of an initial public offering, or achieving a specified market capitalization target. If these criteria are not met, such options will vest between six and ten years after the date of grant, and expire at the end of ten years. At December 31, 2007 and 2008 and September 30, 2009, there were 2,492,500, 2,566,500 and 2,481,500 shares, respectively, issuable under outstanding and unvested time-accelerated options. When achievement of the milestone is not deemed probable, the Company recognizes compensation expense associated with time-accelerated stock options initially over the vesting

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**15. Stock Option Plans (Continued)**

period of the respective stock option. When deemed probable of achievement, the Company expenses the remaining unrecognized compensation for the respective stock option over the implicit service period.

During 2005, the Company granted to employees options to purchase 97,500 shares of common stock at an exercise price of \$0.60 per share, which represented the fair value of the stock at that time. These options are subject to performance-based milestone vesting and expire ten years from the date of grant. The options were deemed to be variable upon grant because the number of shares that will vest were not fixed on the date of grant. The options are therefore remeasured at each reporting period until settlement of the option. During the year ended December 31, 2006, 37,500 shares vested as a result of milestone achievements. In the year ended December 31, 2008, it became probable that the remaining 60,000 unvested options would vest and the Company then recorded the related share-based compensation of \$0.3 million.

In July and September 2009, the Company granted to employees options to purchase a total of 1,060,000 shares of common stock subject to performance-based milestone vesting. The vesting of these performance-based milestone stock options will occur upon the achievement of certain performance-based milestones, such as the filing of a second NDA with the FDA, the first commercial sale of the Company's product, or achieving a specified sales target. The Company has concluded that the performance-based milestones are not probable of achievement, as such, no compensation expense has been recorded related to these options. At September 30, 2009, the unrecognized share-based compensation related to these options was approximately \$3.6 million.

The Company also grants options to external consultants. During the year ended December 31, 2008 and the nine months ended September 30, 2009, the Company granted options for the purchase of 123,100 and 37,000 shares, respectively, to external consultants. No options were granted to external consultants in 2007. The weighted-average grant date fair value of options granted to external consultants during the years ended December 31, 2006 and 2008 and the nine months ended September 30, 2009 was \$1.59, \$2.60 and \$4.90, respectively. Most grants made to external consultants vest over a period of one year, and the expense related to these options is being charged to share-based compensation expense over the vesting period of the options. The amount of share-based compensation expense that may be recognized for outstanding, unvested options as of December 31, 2008 and September 30, 2009 was approximately \$0.1 million for both periods. The amount of share-based compensation expense that will ultimately be recorded will depend on the remeasurement of the outstanding awards through their vesting date. This remaining compensation expense will be recognized over a weighted-average amortization period of 2.2 and 2.5 years at December 31, 2008 and September 30, 2009, respectively.

In calculating share-based compensation costs, the Company estimated the fair value of stock options using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model was developed for use in estimating the fair value of short-lived, exchange-traded options that have no vesting restrictions and are fully transferable. The Company estimates the number of awards that will be forfeited in calculating compensation costs. Such costs are then recognized over the requisite service period of the awards on a straight-line basis.

Determining the fair value of share-based awards using the Black-Scholes option-pricing model requires the use of highly subjective assumptions, including the expected term of the award and expected

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**15. Stock Option Plans (Continued)**

stock price volatility. The assumptions used to estimate the fair value of the stock options using the Black-Scholes option pricing model were as follows for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2009:

|   | Years Ended<br>December 31, |         |         | Nine Months Ended<br>September 30, 2009<br>(unaudited) |
|---|-----------------------------|---------|---------|--|
|   | 2006                        | 2007    | 2008    |  |
| Weighted-average fair value of common stock | \$ 1.56                     | \$ 2.99 | \$ 3.94 | \$ 5.17  |
| Expected volatility                         | 69.0%                       | 65.0%   | 64.0%   | 62.4%  |
| Expected term (in years)                    | 7.0                         | 7.0     | 6.5     | 6.5  |
| Risk-free interest rate                     | 4.8%                        | 4.6%    | 3.1%    | 2.7%   |
| Expected dividend yield                     | %                           | %       | %       | %  |

*Expected Volatility*

Volatility measures the amount that a stock price has fluctuated or is expected to fluctuate during a period. As the Company is not publicly traded and therefore has no trading history, stock price volatility was estimated by based on an analysis of historical and implied volatility of comparable public companies.

*Expected Term*

The Company has limited historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior for its stock option grants. As a result, for stock option grants made during the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2009, the expected term was estimated using the "simplified method." The simplified method is based on the average of the vesting tranches and the contractual life of each grant.

*Risk-Free Interest Rate*

The risk-free interest rate used for each grant is based on a zero-coupon U.S. Treasury instrument with a remaining term similar to the expected term of the share-based award.

*Expected Dividend Yield*

The Company has not paid and does not anticipate paying cash dividends on its shares of common stock in the foreseeable future; therefore, the expected dividend yield is assumed to be zero.

*Forfeitures*

Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from the Company's estimates. Subsequent changes in estimated forfeitures are recognized through a cumulative adjustment in the period of change, and will also impact the amount of share-based compensation expense in future periods. The Company uses historical data to estimate forfeiture rates. The Company's forfeiture rates were 5.0%, 5.0% and 4.4% as of December 31, 2006, 2007 and 2008, respectively, and 4.4% and 4.0% as of September 30, 2008 and 2009, respectively.





Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)

**15. Stock Option Plans (Continued)**

The following table summarizes the expense recognized for these share-based compensation arrangements in the consolidated statements of operations (in thousands):

|                                      | Years Ended December 31, |          |          | Nine Months Ended<br>September 30, |                     |
|--------------------------------------|--------------------------|----------|----------|------------------------------------|---------------------|
|                                      | 2006                     | 2007     | 2008     | 2008<br>(unaudited)                | 2009<br>(unaudited) |
| <b>Ironwood:</b>                     |                          |          |          |                                    |                     |
| Employee stock options               | \$ 385                   | \$ 973   | \$ 2,293 | \$ 1,407                           | \$ 2,830            |
| Restricted stock awards              | 388                      |          |          |                                    | 84                  |
| Non-employee stock options           | 176                      | 59       | 300      | 307                                | 162                 |
| Stock award                          |                          |          | 25       |                                    |                     |
|                                      | 949                      | 1,032    | 2,618    | 1,714                              | 3,076               |
| <b>Microbia Stock Plan (Note 20)</b> |                          | 122      | 176      | 129                                | 175                 |
|                                      | \$ 949                   | \$ 1,154 | \$ 2,794 | \$ 1,843                           | \$ 3,251            |

Share-based compensation is reflected in the consolidated statement of operations as follows for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2008 and 2009 (in thousands):

|                            | Years Ended December 31, |        |          | Nine Months Ended<br>September 30, |                     |
|----------------------------|--------------------------|--------|----------|------------------------------------|---------------------|
|                            | 2006                     | 2007   | 2008     | 2008<br>(unaudited)                | 2009<br>(unaudited) |
| Research and development   | \$ 316                   | \$ 795 | \$ 1,708 | \$ 1,203                           | \$ 1,332            |
| General and administrative | 633                      | 359    | 1,086    | 640                                | 1,919               |

At December 31, 2008 and September 30, 2009, there were 512,653 and 1,298,820 shares, respectively, available for future grant under the Plans. Options are exercisable into Class B Common Stock.

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**15. Stock Option Plans (Continued)**

The following table summarizes stock option activity under the Plans, including performance-based options:

|  | Shares of<br>Common<br>Stock<br>Attributable<br>to Options | Weighted-<br>Average<br>Exercise<br>Price | Weighted-<br>Average<br>Contractual<br>Life<br>(in years) | Aggregate<br>Intrinsic<br>Value<br>(in thousands) |
|--|--|---|---|---|
| Outstanding at January 1,<br>2008                                  | 9,621,549  | \$ 1.27                                   |   |   |
| Granted  | 2,036,100  | \$ 3.94                                   |   |   |
| Exercised  | (129,448)  | \$ 1.39                                   |   |   |
| Forfeited/expired  | (22,335)   | \$ 3.22                                   |   |   |
| Outstanding at<br>December 31, 2008                                | 11,505,866   | \$ 1.74                                   | 6.69  | \$ 36,300   |
| Granted (unaudited)  | 2,878,000  | \$ 5.17                                   |   |   |
| Exercised (unaudited)  | (159,543)  | \$ 0.48                                   |   |   |
| Cancelled (unaudited)  | (129,853)  | \$ 1.88                                   |   |   |
| Outstanding at<br>September 30, 2009<br>(unaudited)                | 14,094,470   | \$ 2.45                                   | 6.67  | \$ 69,181   |
| Vested or expected to vest at<br>December 31, 2008                 | 10,617,106   | \$ 1.70                                   | 6.60  | \$ 33,900   |
| Vested or expected to vest at<br>September 30, 2009<br>(unaudited) | 12,793,877   | \$ 2.33                                   | 6.51  | \$ 64,390   |
| Exercisable at December 31,<br>2008 <sup>(1)</sup>                 | 5,864,432  | \$ 0.98                                   | 5.48  | \$ 22,900   |
| Exercisable at September 30,<br>2009 (unaudited) <sup>(1)</sup>    | 6,846,339  | \$ 1.30                                   | 5.12  | \$ 41,478   |

(1)

All stock options granted contain provisions allowing for the early exercise of such options into restricted stock. The exercisable shares disclosed above represent those that are vested as of December 31, 2008 and September 30, 2009.

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The weighted-average grant date fair value of options granted to employees during the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2009 was \$1.17, \$2.07, \$2.44 and \$3.03, respectively. The total intrinsic value of options exercised during the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2009 was approximately \$0.2 million, \$0.2 million, \$0.4 million and \$0.8 million, respectively. The intrinsic value was calculated as the difference between the estimated fair value of the Company's common stock and the exercise price of the option issued. The fair value of the Company's common stock was \$4.89 and \$7.36 per share at December 31, 2008 and September 30, 2009, respectively.

The grant-date fair value of the options granted to employees during the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2009 was approximately \$2.5 million, \$3.2 million, \$4.7 million and \$5.4 million, respectively.

As of December 31, 2008, there was approximately \$6.4 million of unrecognized share-based compensation, net of estimated forfeitures, related to unvested stock option grants which is expected to be

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**15. Stock Option Plans (Continued)**

recognized over a weighted average period of 3.96 years. At September 30, 2009, there was approximately \$2.3 million and \$8.9 million of unrecognized share-based compensation cost, net of estimated forfeitures, related to restricted stock awards and unvested stock option grants, respectively, which are expected to be recognized over a weighted average period of 6.06 years. The total unrecognized share-based compensation cost will be adjusted for future changes in estimated forfeitures.

**16. Income Taxes**

No provision for federal or state income taxes has been recorded, as the Company has incurred cumulative net operating losses since inception. As of December 31, 2007 and 2008, the Company has net operating loss carryforwards of approximately \$70.7 million and \$78.2 million, respectively, to offset future federal taxable income, which expire through 2028. As of December 31, 2007 and 2008, the Company has state net operating loss carryforwards of approximately \$61.9 million and \$60.0 million, respectively, to offset future state taxable income, which expire through 2013. The Company also has tax credit carryforwards of approximately \$8.8 million and \$10.1 million as of December 31, 2007 and 2008, respectively, to offset future federal and state income taxes, which expire at various times through 2028.

A reconciliation of income taxes computed using the U.S. federal statutory rate to that reflected in operations follows (in thousands):

|  | <b>Years Ended December 31,</b> |             |             |
|--|---------------------------------|-------------|-------------|
|  | <b>2006</b>                     | <b>2007</b> | <b>2008</b> |
| Income tax benefit using U.S. federal statutory rate | \$ (12,641)                     | \$ (17,936) | \$ (18,317) |
| State income taxes, net of federal benefit           | (2,102)                         | (3,449)     | (3,305)     |
| Stock compensation                                   | 186                             | 372         | 838         |
| Research and development tax credit                  | (1,040)                         | (2,227)     | (460)       |
| Change in the valuation allowance                    | 15,616                          | 23,347      | 21,639      |
| Other  | (19)                            | (107)       | (395)       |
|  | \$                              | \$          | \$          |

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**16. Income Taxes (Continued)**

Components of the Company's deferred tax assets and liabilities are as follows (in thousands):

|                                       | December 31,  |                |
|---------------------------------------|---------------|----------------|
|                                       | 2007          | 2008           |
| Deferred tax assets:                  |               |                |
| Net operating loss carryforwards      | \$ 27,917     | \$ 30,381      |
| Tax credit carryforwards              | 7,819         | 8,885          |
| Capitalized research and development  | 45,643        | 39,413         |
| Deferred revenue                      | (211)         | 23,595         |
| Other                                 | 1,134         | 1,667          |
| <b>Total deferred tax assets</b>      | <b>82,302</b> | <b>103,941</b> |
| Valuation allowance                   | (82,302)      | (103,941)      |
| <b>Net current deferred tax asset</b> | <b>\$</b>     | <b>\$</b>      |

Management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets. Management has considered the Company's history of operating losses and concluded, in accordance with the applicable accounting standards, that it is more likely than not that the Company may not realize the benefit of its deferred tax assets. Accordingly, the deferred tax assets have been fully reserved at December 31, 2007 and 2008. Management reevaluates the positive and negative evidence on a quarterly basis.

The valuation allowance increased approximately \$23.3 million and \$21.6 million during the years ended December 31, 2007 and 2008, respectively, due primarily to the increase in the net operating loss carryforwards and research and development tax credits.

Effective January 1, 2009, the Company adopted new accounting guidance related to accounting for uncertainty in income taxes. The Company's reserves related to taxes are based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is more likely than not to be realized following resolution of any potential contingencies present related to the tax benefit. As a result of the implementation of the new guidance, the Company recognized no material adjustment for unrecognized income tax benefits. At the adoption date of January 1, 2009, and also at September 30, 2009, the Company had no unrecognized tax benefits.

The Company will recognize interest and penalties related to uncertain tax positions in income tax expense. As of January 1, 2009 and September 30, 2009, the Company had no accrued interest or penalties related to uncertain tax positions and no amounts have been recognized in the Company's consolidated statements of operations.

The statute of limitations for assessment by the Internal Revenue Service ("IRS") and state tax authorities is open for tax years ending December 31, 2006, 2007 and 2008, although carryforward attributes that were generated prior to tax year 2006 may still be adjusted upon examination by the IRS or state tax authorities if they either have been or will be used in a future period. There are currently no federal or state audits in progress.

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**16. Income Taxes (Continued)**

Utilization of net operating loss carryforwards and research and development credit carryforwards may be subject to a substantial annual limitation due to ownership change limitations that have occurred previously or that could occur in the future in accordance with Section 382 of the Internal Revenue Code of 1986 ("IRC Section 382"), as well as similar state provisions. These ownership changes may limit the amount of net operating loss carryforwards and research and development credit carryforwards that can be utilized annually to offset future taxable income and taxes, respectively. In general, an ownership change, as defined by IRC Section 382, results from transactions increasing the ownership of certain shareholders or public groups in the stock of a corporation by more than 50 percentage points over a three-year period. The Company has completed several financings since its inception which may have resulted in a change in control as defined by IRC Section 382, or could result in a change in control in the future.

The Company has not, as yet, conducted a study of its research and development credit carryforwards. This study may result in an adjustment to the Company's research and development credit carryforwards; however, until a study is completed and any adjustment is known, no amounts are being presented as an uncertain tax position. A full valuation allowance has been provided against the Company's research and development credits and, if an adjustment is required, this adjustment would be offset by an adjustment to the valuation allowance. Thus, there would be no material impact to the consolidated balance sheet or statement of operations if an adjustment were required.

In the nine months ended September 30, 2009 the Company recognized an income tax benefit of approximately \$0.2 million related to a refundable research and development tax credit. The Company received the tax refund in October 2009.

**17. Defined Contribution Plan**

The Ironwood Pharmaceuticals, Inc. 401(k) Savings Plan is a defined contribution plan in the form of a qualified 401(k) plan in which substantially all employees are eligible to participate upon employment. Subject to certain IRC limits, eligible employees may elect to contribute from 1% to 100% of their compensation. Company contributions to the plan are at the sole discretion of the Company's Board of Directors. In 2008, the Company instituted a matching contribution of 50% of the employee's first \$6,000 of contributions. During the years ended December 31, 2007 and 2008 and the nine months ended September 30, 2009, the Company recorded none, approximately \$0.4 million and approximately \$0.4 million in expense associated with its 401(k) company match.

**18. Related Party Transactions**

The Company has and currently obtains legal services from a law firm that is an investor of the Company. The Company paid approximately \$0.3 million, \$0.1 million, \$0.1 million, \$0.1 million and \$0 in legal fees to this investor during the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2008 and 2009, 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 (Note 4). Additional related party disclosure related to Microbia and T&L is included in Note 20. 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 4).

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**19. Segment Reporting**

The Company has two reportable business segments: human therapeutics and biomanufacturing. The Company has no inter-segment revenues.

The following table reports revenue and loss from operations for the Company's reportable segments for the years ended December 31, 2006, 2007 and 2008 and the nine months ended September 30, 2008 and 2009 (in thousands):

|                              | Years Ended December 31, |             |             | Nine Months Ended<br>September 30, |                     |
|------------------------------|--------------------------|-------------|-------------|------------------------------------|---------------------|
|                              | 2006                     | 2007        | 2008        | 2008<br>(unaudited)                | 2009<br>(unaudited) |
| <b>Revenue:</b>              |                          |             |             |                                    |                     |
| Human therapeutics           | \$                       | \$ 4,608    | \$ 18,383   | \$ 13,933                          | \$ 25,917           |
| Biomanufacturing             | 3,140                    | 5,856       | 3,833       | 3,309                              | 1,581               |
| Total                        | \$ 3,140                 | \$ 10,464   | \$ 22,216   | \$ 17,242                          | \$ 27,498           |
| <b>Loss from operations:</b> |                          |             |             |                                    |                     |
| Human therapeutics           | \$ (34,373)              | \$ (54,688) | \$ (48,307) | \$ (34,317)                        | \$ (39,450)         |
| Biomanufacturing             | (5,222)                  | (2,927)     | (7,614)     | (4,804)                            | (9,185)             |
| Total                        | \$ (39,595)              | \$ (57,615) | \$ (55,921) | \$ (39,121)                        | \$ (48,635)         |
| <b>Total assets:</b>         |                          |             |             |                                    |                     |
| Human therapeutics           |                          | \$ 130,959  | \$ 136,906  |                                    | \$ 145,828          |
| Biomanufacturing             |                          | 4,949       | 3,817       |                                    | 3,819               |
| Total                        |                          | \$ 135,908  | \$ 140,723  |                                    | \$ 149,647          |

At December 31, 2007 and 2008 and at September 30, 2009, \$0.5 million, \$0.2 million and \$0.4 million, respectively, of the Company's accounts receivable related to the Company's biomanufacturing segment and \$25.0 million, \$6.9 million and \$9.5 million, respectively, of the Company's accounts receivable related to the human therapeutics segment.

**20. Microbia, Inc.****Sale of Securities in Microbia, Inc.**

In September 2006, the Company entered into a collaboration agreement with T&L. The collaboration agreement has a five-year term with a one-year notice of termination that is not effective until the third anniversary of the agreement. In connection with the execution of the collaboration agreement, the Company also issued T&L 1,823,529 shares of common stock of Microbia, the Company's wholly owned subsidiary, at the aggregate purchase price of approximately \$2,000, and issued 7,000,000 shares of convertible preferred stock of Microbia at the aggregate purchase price of \$7.0 million. After the sale of stock to T&L, the Company retained an 85% majority ownership interest and T&L had a 15% noncontrolling interest in Microbia. The Company's ownership interest in Microbia is comprised entirely of convertible preferred stock with the same preferences to that held by T&L. The ownership of the convertible preferred and common stock by T&L is recorded as noncontrolling interest in the consolidated financial statements.





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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**20. Microbia, Inc. (Continued)**

In evaluating whether or not T&L's investment in Microbia's convertible preferred stock should be classified as noncontrolling interest, the Company had to determine whether or not the convertible preferred stock was in fact in-substance common stock. In-substance common stock is an investment in an entity that has risk and reward characteristics that are substantially similar to that entity's common stock. After reviewing the criteria for treatment as in-substance common stock, the Company concluded that the liquidation preference of the convertible preferred stock is not substantive as Microbia has little subordinated equity, in the form of common stock, from a fair value perspective. As a result, in the event of liquidation, the convertible preferred stock will participate in substantially all of Microbia's losses. The Company also concluded that T&L's investment in Microbia's convertible preferred stock has the risks and rewards of ownership. T&L has the ability to convert the convertible preferred stock into Microbia common stock without any significant restrictions or contingencies that prohibit them from participating in the capital appreciation of Microbia in a manner that is substantially similar to Microbia's common stock. Therefore, this conversion feature is an indicator that the convertible preferred stock is substantially similar to common stock. Additionally, Microbia's preferred stock does not require Microbia to transfer substantive value to T&L in a manner in which the common shareholders do not participate similarly, for example, the preferred stock is not redeemable. As a result, the Company concluded that T&L's investment in Microbia's convertible preferred stock was in fact an investment in in-substance common stock and accordingly attributes Microbia's losses based on the relative ownership interests in Microbia, represented by T&L's common and preferred stock ownership. This results in attributing 15% of Microbia's losses to the noncontrolling interest in the Company's consolidated financial statements.

Prior to 2006, the Company entered into certain research agreements with T&L. Under these agreements, the Company used its technology to enhance the biological strains owned by T&L through process development work using its proprietary technology, which is intended to improve the biomanufacturing efficiency of existing pharmaceutical products and optimize the genetic potential of a bioprocess more rapidly than classical methods. Prior to September 2006, T&L did not have any ownership interest in the Company or its subsidiaries. Research fees earned from T&L totaled approximately \$0.2 million, \$3.0 million, \$2.2 million, \$1.7 million and \$1.6 million in 2006, 2007 and 2008 and the nine months ended September 30, 2008 and 2009, respectively. Accounts receivable from T&L was approximately \$0.4 million, \$0.2 million and \$0.4 million at December 31, 2007 and 2008 and September 30, 2009, respectively.

**Convertible Preferred Stock**

*Conversion*

At the option of the holder, each share of Microbia preferred stock is convertible into Microbia common stock at the conversion price of \$1.00, or the equivalent price after adjustment for certain events defined in the Microbia Certificate of Incorporation, such as stock splits. Shares of the Microbia preferred stock automatically convert to common stock upon the closing of a qualified public offering of Microbia's common stock with net proceeds exceeding \$30.0 million.

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**20. Microbia, Inc. (Continued)**

*Dividends*

The holders of the Microbia preferred stock are entitled to receive, when and if declared by the Board of Directors of Microbia or upon a liquidation, dividends at the per annum rate of 8% of the original issue price of each outstanding share of the Microbia preferred stock. For purposes of involuntary liquidation of Microbia, dividends accrue, whether or not declared or paid, and are cumulative. Such cumulative dividends in arrears on the Microbia preferred stock held by T&L are approximately \$1.3 million and \$1.7 million at December 31, 2008 and September 30, 2009, respectively, and are reflected in the liquidation preference and not the carrying value of the convertible preferred stock.

*Voting Rights*

The holders of the Microbia preferred stock are entitled to the number of votes equal to the number of common stock shares into which they are convertible. The Microbia preferred stockholders vote with the common stockholders as a single class.

*Liquidation, Dissolution, or Winding-Up*

In the event of a voluntary or involuntary liquidation, dissolution, or winding-up of Microbia, holders of the Microbia preferred stock are entitled to be paid out of the assets available for distribution, the original issuance price of the respective shares, plus all accrued but unpaid dividends. If the assets of Microbia are insufficient to pay the full preferential amounts to the Microbia preferred stockholders, the assets will be distributed ratably among the holders of the Microbia preferred stock in proportion to their aggregate liquidation preference amounts. T&L's liquidation preference, including dividend preference, is approximately \$8.3 million and \$8.7 million at December 31, 2008 and September 30, 2009, respectively.

**Stock Option Plan**

Under the Microbia Stock Plan, options may be granted to employees, officers, directors, consultants, or advisors of Microbia. The Microbia Stock Plan provides for the granting of non-statutory stock options, incentive stock options, stock bonuses, and rights to acquire restricted stock of Microbia, which are not exchangeable for either options or shares of the Company. There are 7,544,061 shares of common stock reserved for issuance under the Plan. At December 31, 2008 and September 30, 2009, there were 506,407 and 568,145 shares, respectively, available for grant under the Microbia Stock Plan.

The option price at the date of grant is determined by the Board of Directors and, in the case of incentive stock options, may not be less than the fair value of the common stock at the date of grant. Due to the absence of an active market for Microbia's common stock, the Board of Directors was required to determine the fair value of the common stock for consideration in setting exercise prices for the options granted and in valuing the options granted. In determining the fair value, the Board of Directors considered both quantitative and qualitative factors including prices at which Microbia sold shares of preferred stock, the rights, preferences and liquidity of Microbia's preferred and common stock, Microbia's historical operating and financial performance and the status of its research and product development efforts, achievement of enterprise milestones, external market conditions affecting similar companies, and financial market conditions and, commencing in 2006, contemporaneous valuations provided by management. As Microbia's common stock is not actively traded, the determination of fair value involves

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**20. Microbia, Inc. (Continued)**

assumptions, judgments and estimates. If different assumptions were made, share-based compensation expense, net loss and consolidated net loss per share could have been significantly different.

The provisions of the Microbia Stock Plan limits the exercise of incentive stock options, but in no case may the exercise period extend beyond ten years from the date of grant. The Microbia Stock Plan provides that, subject to approval by the Board of Directors, option grantees may have the right to exercise an option prior to vesting.

Shares purchased upon the exercise of unvested options will be subject to the same vesting schedule as the underlying options and are subject to repurchase at the original exercise price by Microbia should the employee be terminated or leave Microbia prior to becoming fully vested in such shares.

From time to time, Microbia issues certain time-accelerated stock options awards to certain employees under the Microbia Stock Plan. The vesting of these time-accelerated stock options granted accelerates upon the holder meeting certain performance-based milestones. If these criteria are not met, such options will expire at the end of ten years. At December 31, 2008 and September 30, 2009, 1,220,000 and 1,680,000 shares, respectively, meeting these criteria had been granted, and options for 250,000 shares have been cancelled. No time-accelerated stock options have vested as of September 30, 2009.

Typically, option grants, other than performance-based milestones, vest periodically over a period of one to four years and the expense related to these options is being charged to share-based compensation expense over the vesting period of the options on a straight-line basis. In connection with these grants, Microbia recognized approximately \$0.1 million, \$0.2 million, \$0.1 million and \$0.2 million of share-based compensation expense for option grants issued to employees for the years ended December 31, 2007 and 2008 and the nine months ended September 30, 2008 and 2009, respectively.

Microbia recognizes share-based compensation cost related to share-based transactions, including employee stock options, in its financial statements at fair value. In calculating share-based compensation costs, Microbia estimated the fair value of stock options using a Black-Scholes option-pricing model. The Black-Scholes option-pricing model was developed for use in estimating the fair value of short-lived, exchange-traded options that have no vesting restrictions and are fully transferable. Microbia estimates the number of awards that will be forfeited in calculating compensation costs. Such costs are then recognized over the requisite service period of the awards on a straight-line basis.

Determining the fair value of share-based awards using the Black-Scholes option-pricing model requires the use of highly subjective assumptions, including the expected term of the award and expected stock price volatility. The assumptions used to estimate the fair value of the stock options using the Black-Scholes option pricing model were as follows for the years ended December 31, 2007 and 2008 and the nine months ended September 30, 2009:

|   | Years Ended<br>December 31, |         | Nine Months Ended<br>September 30, 2009<br>(unaudited) |
|---|-----------------------------|---------|--|
|   | 2007                        | 2008    |  |
| Weighted-average fair value of common stock | \$ 0.22                     | \$ 0.22 | \$ 0.15  |
| Expected volatility                         | 61.0%                       | 60.0%   | 70.0%  |
| Expected term (in years)                    | 6.0                         | 6.4     | 6.0  |
| Risk-free interest rate                     | 4.1%                        | 2.9%    | 2.2%   |
| Expected dividend yield                     | %                           | %       | %  |



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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
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**20. Microbia, Inc. (Continued)**

*Expected Volatility*

Volatility measures the amount that a stock price has fluctuated or is expected to fluctuate during a period. As Microbia is not publicly traded and therefore has no trading history, stock price volatility was estimated by based on an analysis of historical and implied volatility of comparable public companies.

*Expected Term*

Microbia has limited historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior for its stock option grants. As a result, for stock option grants made during the years ended December 31, 2007 and 2008 and the nine months ended September 30, 2009, the expected term was estimated using the "simplified method." The simplified method is based on the average of vesting tranches and the contractual life of each grant.

*Risk-Free Interest Rate*

The risk-free interest rate used for each grant is based on a zero-coupon U.S. Treasury instrument with a remaining term similar to the expected term of the share-based award.

*Expected Dividend Yield*

Microbia has not paid and does not anticipate paying cash dividends on its shares of common stock in the foreseeable future; therefore, the expected dividend yield is assumed to be zero.

*Forfeitures*

Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from Microbia's estimates. Subsequent changes in estimated forfeitures are recognized through a cumulative adjustment in the period of change, and will also impact the amount of share-based compensation expense in future periods. Microbia uses historical data to estimate forfeiture rates. Microbia's forfeiture rates were 5.0%, 1.0% and 1.0% as of December 31, 2007 and 2008 and September 30, 2009, respectively.

Compensation cost of approximately \$0.1 million and \$0.2 million was recognized for share-based compensation for the years ended December 31, 2007 and 2008, respectively. Compensation cost of approximately \$0.1 million and \$0.2 million was recognized for the nine months ended September 30, 2008 and 2009, respectively.

At December 31, 2008 and September 30, 2009, there were 506,407 and 568,145 shares, respectively, available for future grant under the Microbia Stock Plan.

Table of Contents**Ironwood Pharmaceuticals, Inc.****Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**20. Microbia, Inc. (Continued)**

The following table summarizes stock option activity under the Microbia Stock Plan, including performance-based options:

|  | Shares of<br>Common<br>Stock<br>Attributable<br>to Options | Weighted-<br>Average<br>Exercise<br>Price | Weighted-<br>Average<br>Contractual<br>Life<br>(in years) | Aggregate<br>Intrinsic<br>Value<br>(in thousands) |
|--|--|---|---|---|
| Outstanding at January 1,<br>2008                                  | 4,883,000  | \$ 0.22                                   |   |   |
| Granted  | 1,469,500  | \$ 0.22                                   |   |   |
| Exercised  | (5,154)  | \$ 0.22                                   |   |   |
| Forfeited/expired  | (14,846)   | \$ 0.22                                   |   |   |
| Outstanding at December 31,<br>2008                                | 6,332,500  | \$ 0.22                                   | 8.50  | \$  |
| Granted (unaudited)  | 1,153,000  | \$ 0.15                                   |   |   |
| Exercised (unaudited)  |  | \$  |   |   |
| Cancelled (unaudited)  | (514,738)  | \$ 0.22                                   |   |   |
| Outstanding at<br>September 30, 2009<br>(unaudited)                | 6,970,762  | \$ 0.21                                   | 7.92  | \$  |
| Vested or expected to vest at<br>December 31, 2008                 | 6,253,588  | \$ 0.22                                   | 8.49  | \$  |
| Vested or expected to vest at<br>September 30, 2009<br>(unaudited) | 6,898,915  | \$ 0.21                                   | 7.91  | \$  |
| Exercisable at December 31,<br>2008 <sup>(1)</sup>                 | 3,656,432  | \$ 0.22                                   | 8.21  | \$  |
| Exercisable at September 30,<br>2009 (unaudited) <sup>(1)</sup>    | 3,025,388  | \$ 0.22                                   | 7.60  | \$  |

(1)

All stock options granted contain provisions allowing for the early exercise of such options into restricted stock. The exercisable shares disclosed above represent those that are vested as of December 31, 2008 and September 30, 2009.

The weighted-average grant date fair value of options granted to employees during 2007 and 2008 was \$0.13 and \$0.10 for the nine months ended September 30, 2009. The total intrinsic value of options exercised during the year ended December 31, 2008 was \$0. No options were exercised in the years ended December 31, 2006 and 2007 and the nine months ended September 30, 2009. At December 31, 2008 and September 30, 2009, all options outstanding had exercise prices in excess of the fair value of Microbia's common stock.

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The grant-date fair value of the options granted to employees during the years ended December 31, 2007 and 2008 and the nine months ended September 30, 2009 was approximately \$0.7 million, \$0.2 million and \$0.2 million, respectively.

As of December 31, 2008 and September 30, 2009, there was approximately \$0.5 million and \$0.4 million, respectively, of total unrecognized share-based compensation, net of estimated forfeitures, related to unvested option grants, including performance-based options, which are expected to be

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**Ironwood Pharmaceuticals, Inc.**

**Notes to Consolidated Financial Statements (Continued)**

**(Information as of September 30, 2009 and  
for the nine months ended September 30, 2008 and 2009 is unaudited)**

**20. Microbia, Inc. (Continued)**

recognized over a weighted-average period of 3.08 and 2.80 years, respectively. The total unrecognized share-based compensation cost will be adjusted for future changes in estimated forfeitures.

**21. Subsequent Events**

On November 3, 2009, Microbia amended its facility lease to include an early termination option. In consideration for an up-front payment of approximately \$0.3 million, the landlord has given Microbia an option, which expires January 31, 2010, to terminate the lease by January 31, 2011. Under the terms of the amended lease, Microbia is required to establish a new \$0.5 million secured letter of credit, which the landlord will draw against monthly beginning in November 2009 and ending in February 2010. The landlord has agreed to defer the monthly base rent for the seven months beginning March 2010 and ending September 2010. On January 18, 2010, Microbia exercised the early termination option and as a result, the lease will terminate on September 30, 2010. Additionally, Microbia may be required to issue a warrant to the landlord, which is exercisable into shares of Microbia common stock in such number and at a price per share to be determined, if certain contingent events take place.

On November 13, 2009, Microbia implemented a strategic restructuring plan that includes an immediate reduction of Microbia's workforce by approximately 39% of its existing workforce, and a reduced workweek for an additional 12% of its existing workforce. Microbia is taking this action to focus on its proprietary strain-development platform and existing service agreements. Microbia is currently evaluating whether or not the restructuring has led to an impairment of any property and equipment. At September 30, 2009, Microbia had net property and equipment of approximately \$1.9 million.

Microbia estimates that it will pay a total of approximately \$0.4 million of costs in connection with the restructuring plan, almost all of which are costs related to severance pay and continuation of benefits. Microbia expects to record a restructuring charge of approximately \$0.3 million in the fourth quarter of 2009 and expects to pay the restructuring liabilities by December 31, 2009. Microbia may incur approximately \$0.6 million of additional restructuring costs if, over the next year, certain contingent events take place.

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