IRONWOOD PHARMACEUTICALS INC
Form 10-K
February 29, 2012

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2011

OR

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

For the transition period from to
Commission File Number 001-34620

IRONWOOD PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**04-3404176**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
301 Binney Street Cambridge, Massachusetts	**02142**
(Address of Principal Executive Offices)	(Zip Code)

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

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

Title of each class	**Name of each exchange on which registered**
Class A common stock, $0.001 par value	The NASDAQ Stock Market LLC (NASDAQ Global Select Market)

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ý No o

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Exchange Act. Yes o No ý

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ý No o

Indicate by check mark whether the Registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files). Yes ý No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

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

Large accelerated filer ý	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company o

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

Aggregate market value of voting stock held by non-affiliates of the Registrant as of June 30, 2011: $1,375,964,667

As of February 15, 2012, there were 75,186,090 shares of Class A common stock outstanding and 31,770,641 shares of Class B common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the definitive proxy statement for our 2012 Annual Meeting of Stockholders are incorporated by reference into Part III of this report.

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PART I

Item 1. *Business*

Our Company

We are an entrepreneurial pharmaceutical company that discovers, develops and intends to commercialize differentiated medicines that improve patients' lives. 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 life-changing medicines to patients. To achieve our mission, we are building a team, a culture and processes centered on creating and marketing important new drugs. If we are successful getting medicines to patients and generating substantial returns for our stockholders, we plan to reinvest a portion of our future cash flows into our research and development efforts in order to accelerate and enhance our ability to bring new products to market. If we meet our goals, we hope to earn the right to continue building an enduring pharmaceutical company, an outstanding business that will thrive well beyond our lifetimes.

We are pioneers in the area of guanylate cyclase type-C, or GC-C, agonists and in the science and treatment of gastrointestinal diseases. Our development team has substantial expertise with the pharmacological profile associated with GC-C agonists, and they are complemented by our global operations and commercial teams that have significant experience in the associated therapeutic modalities. Our two most advanced GC-C agonists are linaclotide and IW-9179.

We believe that linaclotide, our GC-C agonist being developed for the treatment of patients with irritable bowel syndrome with constipation, or IBS-C, and chronic constipation, or CC, could present patients and healthcare practitioners with a unique therapy for a major medical need not yet met by existing therapies. 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 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 eight Phase 2 and Phase 3 clinical studies involving almost 3,700 IBS-C and CC patients, linaclotide, with once-daily oral dosing, demonstrated sustained improvement of the pain and bloating as well as the constipation symptoms that define these chronic gastrointestinal disorders. In 2010, linaclotide completed the clinical efficacy portion of its development program, achieving favorable efficacy and safety results in all four of its Phase 3 clinical trials (two IBS-C clinical trials and two CC clinical trials), meeting all U.S. and European Union, or E.U., primary and secondary endpoints.

In each of the 12-week and 26-week Phase 3 studies involving patients with IBS-C, linaclotide reduced abdominal pain, abdominal discomfort and bloating within the first week, and these reductions were sustained throughout the entire treatment period. In the 12-week trial, 50% of linaclotide-treated patients had at least a 30% reduction in abdominal pain for at least six of the 12 weeks, and in the 26-week trial, 49% of linaclotide-treated patients had at least a 30% reduction in abdominal pain for at least six of the first 12 weeks of the treatment period. In the 26-week trial, linaclotide elicited a 40% mean decrease in abdominal pain by the sixth week, a 46% mean decrease by the twelfth week, and a 50% mean decrease at the twenty-sixth week.

As with abdominal pain, linaclotide-treated patients experienced a significant improvement in constipation symptoms during the first week of treatment in each of the Phase 3 IBS-C and CC clinical trials, and this improvement was sustained throughout the whole treatment period.

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In the four Phase 3 studies, diarrhea was the most frequently reported adverse event (seen in 14% to 20% of linaclotide-treated patients), and the most frequently reported adverse event that led to study discontinuation (in 3% to 6% of linaclotide-treated patients). 90% of patients who had diarrhea described their diarrhea as mild to moderate.

In August 2011, we and our U.S. collaboration partner, Forest Laboratories, Inc., or Forest, submitted a New Drug Application, or an NDA, with the U.S. Food and Drug Administration, or the FDA, for linaclotide for the treatment of IBS-C and CC. In October 2011, the FDA accepted the NDA for review, and the FDA Prescription Drug User Fee Act, or PDUFA, target action date is expected to occur in June 2012. On February 8, 2012, we were informed that the FDA will not schedule an advisory committee meeting in connection with its review of our NDA. If linaclotide is approved for IBS-C and CC patients age 18 and older in the U.S., we may seek to expand linaclotide's market opportunity by exploring its utility in other gastrointestinal indications and in the pediatric population.

In September 2011, our European partner, Almirall S.A., or Almirall, submitted a Marketing Authorization Application, or an MAA, with the European Medicines Agency, or the EMA, for linaclotide for the treatment of IBS-C.

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. As of December 31, 2011, licensing fees, milestone payments, related equity investments and development costs received from our linaclotide partners totaled approximately $350 million.

In September 2007, we entered into a partnership with 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. 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 $120 million that Forest has already paid to us and the $25 million of our capital stock that Forest has already purchased.

In April 2009, we entered into a license agreement with Almirall to develop and commercialize linaclotide in Europe (including the Commonwealth of Independent States countries and Turkey). If linaclotide is successfully developed and commercialized in the Almirall territory, total licensing, milestone payments and related equity investments to us could total up to $95 million, including the $57 million, net of foreign withholding taxes, that Almirall has already paid to us and the $15 million of our capital stock that Almirall has already purchased.

In November 2009, we entered into a license agreement with Astellas Pharma Inc., or Astellas, to develop and commercialize linaclotide in Japan, South Korea, Taiwan, Thailand, the Philippines and Indonesia. If linaclotide is successfully developed and commercialized in the Astellas territory, total licensing and milestone payments to us could total up to $75 million, including the $30 million that has already been paid to us.

We have retained all rights to linaclotide outside of the territories discussed above and continue to evaluate partnership opportunities in those unpartnered regions.

If linaclotide is approved by the FDA, we will receive five years of exclusivity under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act. In addition, 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 E.U. and Japanese composition of matter patents, both of which expire in 2024, subject to possible patent term extension.

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We invest carefully in our pipeline, and the commitment of funding for each subsequent stage of our development programs is dependent upon the receipt of clear, supportive data. Linaclotide is our only product candidate that has demonstrated clinical proof of concept. IW-9179 is a second generation GC-C agonist discovered by Ironwood scientists that is in early development for the treatment of painful disorders of the small intestine, such as dyspepsia and gastroparesis. We are also investing in several additional early development candidates in multiple therapeutic areas, including gastrointestinal disease, central nervous system, or CNS, disorders, and respiratory disease. We are also conducting discovery research in these therapeutic areas, as well as in the area of cardiovascular disease. Finally, we are actively engaged in evaluating and licensing rights to externally-discovered drug candidates at all stages of development. In evaluating potential assets, we apply the same criteria as those used for investments in internally-discovered assets.

We were incorporated in Delaware on January 5, 1998.

Owner-related Business Principles

We encourage all current and potential stockholders to read the owner-related business principles below that guide our overall strategy and decision making.

1. Ironwood's stockholders own the business; all of our employees work for them.

Each of our employees also has equity in the business, aligning their interests with their fellow stockholders. As employees and co-owners of Ironwood, our management and employee team seek to effectively allocate scarce stockholder capital to maximize the average annual growth of per share value.

Through our policies and communication, we seek to attract like-minded owner-oriented stockholders. We strive to effectively communicate our views of the business opportunities and risks over time so that entering and exiting stockholders are doing so at a price that approximately reflects our intrinsic value.

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

We believe that Ironwood has the potential to deliver outstanding long-term returns to stockholders who are sober to the risks inherent in the pharmaceutical product lifecycle and to the potential dramatic highs and lows along the way, and who focus on superior long-term, per share cash flows.

Since the pharmaceutical product lifecycle 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 stockholders and the highest caliber employees. 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 stockholders 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 provides for super-voting rights of our pre-IPO stockholders only in the event of a change of control vote) is designed to concentrate change of control decisions in the hands of long-term focused owners who have a history of experience with us.

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.

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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 stockholders.

d. All 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 stockholders' 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, develop and commercialize novel drug candidates, seeking to integrate the most successful drugmaking and marketing practices of the past and the best of today's cutting-edge technologies and basic research, development and commercialization 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 making 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.

Our global operations and commercial teams take a similar approach to capital allocation and decision-making. By ensuring redundancy at each critical node of the linaclotide supply chain, our global operations team is mitigating against a fundamental risk inherent with pharmaceuticals unanticipated shortages of commercial product. Likewise, we are building a high-quality commercial organization dedicated to bringing innovative, highly-valued healthcare solutions to all of our customers. Our commercial organization works closely and methodically with our global commercialization partners, striving to maximize linaclotide's commercial potential through focused efforts aimed at educating patients, payors and healthcare providers.

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 out-license 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.

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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 unpredictable, and we have no intention to 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 stockholders, 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 discover, develop and commercialize differentiated medicines that improve patients' lives, and to generate outstanding returns for our stockholders. 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;

solidify and expand our position as the leader in the field of GC-C agonists;

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

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

harvest the maximum value of linaclotide outside of our partnered territories;

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;

maximize the commercial potential of our drugs and participate in an important way in the economics when they reach the market; and

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

Linaclotide Overview

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 gastroesophageal 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 or 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.

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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 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

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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.

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-HT4 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. 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, 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 approved in 2009 by the EMA and is indicated for the treatment of CC in women for whom laxatives have failed to provide adequate relief. Resolor, which is marketed by Shire-Movetis, is a serotonin 5-HT4 receptor agonist like Zelnorm. Resolor is being launched in other European nations in 2012 and is currently in Phase 3 trials as a potential treatment for CC in males and for opioid induced constipation (OIC). Shire has recently announced it acquired rights to develop and commercialize prucalopride in the U.S. for the CC indication. The U.S. patent covering the composition of matter expires in 2015.

The Linaclotide Opportunity. Linaclotide is a 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 once daily, oral dosing regimen.

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Annually, we estimate that over 30 million 30-day units of laxative and fiber medications are purchased in an effort to relieve chronic abdominal and constipation symptoms. Based on our analysis of data from IMS Health, The Nielsen Company and abstracts by P. Schoenfeld, et al. and W. Chey, et al. for the American College of Gastroenterology 2010 Annual Meeting and the 18th United European Gastroenterology Week, respectively, these 30 million units are comprised of 7-8 million laxative prescriptions for patients with constipation and abdominal symptoms and approximately 22 million over-the-counter (OTC) laxative and fiber units for chronic patients. Assuming a price comparable to those for branded prescription drugs for other gastrointestinal indications that are made available in Redbook and First Databank, the daily cost for linaclotide treatment per patient could range from $5.50 to $8.50 per day, with a prescription cost of $165 to $250 per month. Applying these assumptions to the potential market as a whole, these 30 million units could represent a potential U.S. commercial opportunity for a safe and effective IBS-C/CC drug in excess of $6 billion per year. Since many of these 30 million units are taken episodically or as rescue medications, there exists a potential upside in the market if the annual days of therapy increases, assuming that certain patients desire to manage and control their symptoms chronically. There is also the possibility that new patients could enter the marketplace as awareness of a new therapy increases.

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 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 (Na^+ = sodium, Cl^- = chloride, and HCO_3^- = bicarbonate) and fluid (H_2O = water) secretion into the intestinal lumen. The resulting increase in intestinal fluid volume accelerates intestinal transit.

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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. 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.

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.

Clinical

Linaclotide completed the efficacy portion of its clinical development program in 2010, and two long-term safety studies are still ongoing. The clinical development program includes over 4,800 subjects across 13 studies: three in healthy volunteers, four in IBS-C patients, four in CC patients, and two long-term safety studies in IBS-C and CC patients.

Manufacturing and Supply

It is our goal to produce consistent, high-quality, stable drugs on a worldwide basis, with redundancy built into each critical step of the process. We currently manage our global supply of linaclotide through a combination of independent third party suppliers and our collaboration partners. We believe that we have sufficient in-house expertise to manage our global supply chain for linaclotide on an ongoing basis to meet worldwide demand, should it be approved by the regulatory authorities.

Pharmaceutical manufacturing consists of three phases manufacturing of the active pharmaceutical ingredient, or API (sometimes referred to as drug substance), manufacturing of drug product and manufacturing of finished goods. We have entered into arrangements with multiple contract manufacturers for the production of linaclotide API, as it is a fundamental element of our strategy to maintain redundancy at all critical steps in the manufacturing supply chain. Linaclotide is a 14 amino acid peptide, manufactured via solid phase synthesis using naturally occurring amino acids. We have entered into commercial supply agreements with PolyPeptide Laboratories, Inc. and Polypeptide Laboratories (SWEDEN) AB, and with Corden Pharma Colorado, Inc. (formerly known as Roche Colorado Corporation), each for the manufacture of the linaclotide API that is being used to seek regulatory approval of linaclotide, and, pending any such approval, that will be incorporated into the finished product for commercialization in both our partnered and our unpartnered territories. We continue to pursue additional commercial supply agreements with additional manufacturers for linaclotide API for U.S. and worldwide use. We believe our commercial suppliers will have the capabilities to produce linaclotide API in accordance with current good manufacturing practices, or GMP, on a sufficient scale to meet our commercial needs.

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Each of our collaboration partners, Forest, Almirall and Astellas, is responsible for linaclotide drug product and finished goods manufacturing in its respective territory. In addition, we have entered into an agreement with Almac Pharma Services Limited, or Almac, for linaclotide drug product manufacturing in the parts of the world outside of our partnered territories and to introduce redundancy into our supply chain within our partnered territories. We will be dependent upon the success of our partners and Almac in producing drug product for commercial sale.

We believe our efforts to date have led 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 current commercial formulation of linaclotide as well as related formulations. If these claims 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.

Sales and Marketing

For the foreseeable future, we intend to develop and commercialize our drugs in the U.S. alone or with partners, and will evaluate our commercialization opportunities 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.

We are coordinating efforts with our partners Forest in North America and Almirall in Europe to ensure that we launch an integrated, global linaclotide brand. By leveraging the knowledge-base and expertise of our experienced commercial team and the insights of each of our linaclotide commercialization partners, we continually improve our collective marketing strategies.

Maximizing the Value of Linaclotide in the U.S.

We plan to establish linaclotide, if approved, 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 are building our own sales force and commercial presence to complement Forest's existing primary care expertise. We have strong alignment with Forest and a shared vision for linaclotide. The combined Ironwood and Forest marketing team possesses a deep understanding of gastroenterology and primary care customers, and this knowledge will be utilized to develop a compelling medical message and promotional campaign in the hope of delivering an effective treatment for patients suffering with the defining symptoms of IBS-C and CC.

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In order to maximize linaclotide's value in the U.S. as quickly after commercial launch as possible, and to sustain such value over the long term, we and Forest will focus our initial commercialization efforts in the following areas:

Physician education: Our physician education plan encompasses efforts to reach out to over 70,000 of the highest prescribing primary care physicians and gastroenterologists in the U.S., with the goal of helping them identify appropriate patients, educating them on linaclotide's clinical profile and enabling them to assess the clinical benefits of linaclotide.

Patient education: Our patient education plan encompasses efforts to reach out to IBS-C and CC patients to enable them to more effectively communicate symptoms and treatment history to their physicians. Based on our research to date, these patients are high information seekers, pursuing multiple information channels in order to learn about the disease state and potential therapies in order to have productive conversations with their doctors.

Payor value proposition: Based on the existing burden of illness associated with IBS-C and CC, and the efficacy and safety profile of linaclotide that was demonstrated through its clinical development program, we and Forest intend to provide a strong value proposition to governmental authorities, private health insurers and other third-party payors. We understand that sufficient access and reasonable reimbursement are essential in order to optimize linaclotide's commercial potential.

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.

Almirall provides access to the highest potential European markets with an established direct presence in each of the United Kingdom, Italy, France, Germany and Spain, and also has a presence in Austria, Belgium, the Nordics, 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 E.U.

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.

We have retained all rights to linaclotide outside of the territories discussed above and we continue to evaluate partnership opportunities in those unpartnered regions.

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 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.

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To date, almost 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 have in-licensed, and are actively seeking to identify additional, attractive external opportunities. We utilize the same critical filters for investment when evaluating external programs as we do with our own, internally-discovered 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 gastrointestinal disorders, CNS disorders, respiratory disease and cardiovascular disease. Linaclotide is our only product candidate that has demonstrated clinical proof of concept. We have several early development candidates in multiple therapeutic areas, including gastrointestinal disease, CNS disorders and respiratory disease, including IW-9179, which is in early development for the treatment of painful gastrointestinal disorders of the small intestine such as dyspepsia and gastroparesis. We are also conducting discovery research in the afore-mentioned therapeutic areas, as well as in the area of cardiovascular disease.

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.

Linaclotide and GC-C Patent Portfolio

Our linaclotide patent portfolio is currently composed of eight issued U.S. patents, two granted European patents (each of which has been validated in 31 European countries and in Hong Kong), a granted Japanese patent, 11 issued patents in other foreign jurisdictions, and numerous pending provisional, U.S. non-provisional, foreign and PCT patent 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 between 2024 and 2028, 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 our pending patent application covering the current commercial formulation of linaclotide is allowed, it will expire in August 2029 or later, based upon a patent term adjustment. The granted European patents, which will expire in 2024, contain claims directed to the linaclotide molecule, pharmaceutical compositions thereof and uses of linaclotide to prepare medicaments for treating gastrointestinal disorders. The pending provisional, U.S. non-provisional, foreign and PCT 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 2031.

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

In addition to the patents and patent applications related to linaclotide, we currently have two issued U.S. patents and a number of pending provisional, U.S. non-provisional, foreign and PCT applications 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. One of these two patents was issued in January 2012, and it covers the use of plecanatide, another GC-C agonist, for the treatment of IBS-C and constipation. Both of the issued U.S. patents 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; five issued patents in other foreign jurisdictions; and numerous pending provisional, U.S. non-provisional, foreign and PCT patent applications. We own all of the issued patents and own or jointly own all of the pending applications. The issued U.S. patents expire in 2022, 2024 and 2026. The foreign issued patents expire in 2024 and 2026. The pending patent applications, if issued, will expire between 2024 and 2032.

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. We also expect to apply for patent term extensions for some of our patents once issued, depending upon the length of clinical trials and other factors involved in the submission of an NDA.

Government Regulation

In the U.S., 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.

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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 GMP;
- the submission to the FDA of an 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 trial. In such a case, we must work with the FDA to resolve any outstanding concerns before the clinical trial 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 will cause us or FDA to 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 if the trial has been associated with unexpected serious harm to subjects. An institutional review board may also impose other conditions on the trial.

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 1, the initial introduction of the drug into healthy human subjects, the drug is usually tested for 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 clinical trials is subject to extensive regulation, including compliance with good clinical practice regulations and guidance.

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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. On October 24, 2011, we and Forest announced that the FDA filed the linaclotide NDA. Most such applications for non-priority drug products like linaclotide are reviewed by FDA within its PDUFA goal of 10 months. The current FDA PDUFA target action date for linaclotide is expected to occur in June 2012. 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.

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 a generic drug 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.

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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, an application for 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 only protects against FDA approval of ANDAs and 505(b)(2) applications for generic drugs that include the innovation that required new clinical investigations that were essential to approval; it does not prohibit the FDA from accepting or approving ANDAs or 505(b)(2) NDAs for generic drugs that do not include such an 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 20 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 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

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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, prohibitions on promoting drugs for uses or in patient populations that are not described in the drug's approved labeling (known as "off-label use"), and principles governing industry-sponsored scientific and educational activities. 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 or patients, 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 in type and quality to the clinical data supporting the original application for the original indication, and the FDA uses similar procedures and actions in reviewing such 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 to place conditions on an approval that restrict the distribution or use of the product.

Outside the U.S., 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 within the E.U. registration procedures are available to companies wishing to market a product in more than one E.U. member state.

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Employees

As of December 31, 2011, we had 276 employees. Approximately 66 were scientists engaged in discovery research, 117 were in our drug development organization, 16 were in our commercial team, and 77 were in general and administrative functions. None of our employees are represented by a labor union, and we consider our employee relations to be good.

Executive Officers of the Registrant

The following table sets forth the name, age and position of each of our executive officers as of February 15, 2012:

Name	Age	Position
Peter M. Hecht, Ph.D.	48	Chief Executive Officer, Director
Michael J. Higgins	49	Senior Vice President, Chief Operating Officer and Chief Financial Officer
Mark G. Currie, Ph.D.	57	Senior Vice President, R&D and Chief Scientific Officer
Thomas A. McCourt	54	Senior Vice President, Marketing and Sales and Chief Commercial Officer

Peter M. Hecht has served as our chief executive officer and a director since our founding in 1998. Prior to founding Ironwood, Dr. Hecht was a research fellow at Whitehead Institute for Biomedical Research. Dr. Hecht currently serves on the board of directors of Whitehead Institute. 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 senior vice president, 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. 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, Dr. Currie 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 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 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, Mr. McCourt 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 CC 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 and NEXIUM®. Mr. McCourt has a degree in pharmacy from the University of Wisconsin.

Available Information

You may obtain free copies of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and amendments to those reports, as soon as reasonably

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practicable after they are electronically filed or furnished to the United States Securities and Exchange Commission, or the SEC, on the Investors section of our website at www.ironwoodpharma.com or by contacting our Corporate Communications department at (617) 621-8304. The contents of our website are not incorporated by reference into this report and you should not consider information provided on our website to be part of this report.

Item 1A. ***Risk Factors***

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

Risks Related to Our Business and Industry

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

On August 9, 2011, we and our U.S. collaboration partner, Forest, announced that we submitted an NDA with the FDA for our lead product candidate, linaclotide, for the treatment of IBS-C and CC. On October 24, 2011, we and Forest announced that the FDA accepted the NDA for review, and the PDUFA target action date is expected to occur in June 2012. We and Forest are not permitted to market linaclotide in the U.S. until we receive approval of the NDA from the FDA.

On September 29, 2011, we and our European partner, Almirall, each announced that Almirall submitted an MAA, with the EMA for linaclotide for the treatment of IBS-C. Our other partners, including Almirall in Europe, are not permitted to market linaclotide in any foreign jurisdictions until they receive the requisite marketing approvals from the regulatory authorities in such jurisdictions.

Obtaining regulatory approval is a lengthy, expensive and uncertain process. The FDA and foreign regulatory authorities have substantial discretion in the drug approval process, including the ability to delay, limit or deny approval of a product candidate for many reasons. Potential risks include those that the regulatory authorities:

may not deem linaclotide safe and effective;

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

may not approve of manufacturing processes and facilities;

may not approve linaclotide for both IBS-C and CC indications in the U.S.;

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

may change their approval policies or adopt new regulations.

Linaclotide is our GC-C agonist that achieved positive results in each of our two Phase 3 IBS-C trials and each of our two Phase 3 CC trials. Even though linaclotide met all primary and secondary endpoints in each of these trials, it may not be approved for either or both indications or for any other indication for which we seek approval from the FDA or a foreign regulatory authority. Further, the FDA and any foreign regulatory authority may disagree with our trial design or our interpretation of data from clinical trials, or they may change the requirements for approval even after they have reviewed and commented on the design for our clinical trials. The FDA and any foreign regulatory authority 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 and any foreign regulatory authority 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

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failure to obtain such approval for all of the indications and labeling claims we deem desirable could reduce our potential revenue.

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. Any 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 frequently reported adverse event to date in the clinical studies evaluating the safety and efficacy of linaclotide has been diarrhea. In the four Phase 3 clinical trials, our results indicate that diarrhea was seen in 14% to 20% of linaclotide-treated patients, and was the most common adverse event that led to study discontinuation in 3% to 6% of linaclotide-treated patients. 90% of patients who had diarrhea had mild to moderate episodes. In our clinical development program, there have been no serious adverse events in any patients receiving linaclotide treatment that were deemed by a study investigator or us to be "definitely related" or "probably related" to linaclotide treatment, nor have there been any deaths in any patients receiving linaclotide treatment that were deemed by a study investigator or us to be related to linaclotide treatment.

If undesirable side effects are caused or appear to be 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.

If we or our collaboration partners and other third parties upon whom we rely to produce linaclotide are unable to satisfy FDA quality standards and related regulatory requirements, experience manufacturing difficulties, or are unable to manufacture sufficient quantities of our product candidates, our development and commercialization efforts may be materially harmed.

We do not currently possess internal manufacturing capacity we use contract manufacturers to manufacture our clinical and commercial supplies. With respect to the manufacturing of linaclotide API, we have entered into commercial supply agreements with PolyPeptide Laboratories, Inc. and Polypeptide Laboratories (SWEDEN) AB and with Corden Pharma Colorado, Inc. (formerly known as Roche Colorado Corporation), each for the manufacture of the linaclotide API that is being used to seek regulatory approval of linaclotide, and, pending any such approval, that will be incorporated into the finished product for commercialization in both our partnered and our unpartnered territories. However, if we change or add manufacturers, the regulatory authorities in each territory must approve these manufacturers' facilities and processes prior to use, which may require compliance inspections, and the new manufacturers would have to be educated in or independently develop the processes necessary for the production of linaclotide. While we believe we will have arrangements to produce a sufficient amount of API, if we lose a manufacturer, it would take us a substantial amount of time to identify and develop a relationship with an alternative manufacturer.

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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, changes in raw material suppliers may also result in production delays or higher raw material costs.

Upon production of our API, each of our collaboration partners, Forest, Almirall and Astellas, is responsible for completing the manufacturing process of linaclotide in its respective territory, which consists of finishing linaclotide into capsules and into final packaging. In addition, we have entered into an agreement with Almac Pharma Services Limited, or Almac, to complete the drug product manufacturing process of linaclotide in the parts of the world outside of our partnered territories and to introduce redundancy into our supply chain within our partnered territories. We will be dependent upon the success of our partners and Almac in producing product for commercial sale. No party has experience producing drug product for linaclotide at full commercial scale, and there can be no assurance that commercial scale manufacturing capacity will be achieved.

The manufacture of pharmaceutical products requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of pharmaceutical products often encounter difficulties in commercial production. These problems include difficulties with production costs and yields, quality control, including stability of the product and quality assurance testing, shortages of qualified personnel, as well as compliance with federal, state and foreign regulations, and the challenges associated with complex supply chain management. If our manufacturers encounter difficulties or otherwise fail to comply with their obligations to us, our ability to obtain FDA or EMA approval, and market and maintain an adequate commercial supply of linaclotide would be jeopardized.

Each of the linaclotide manufacturers needs to comply with GMP, requirements enforced by the FDA and foreign regulatory authorities through their facilities inspection programs. 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 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 quality of linaclotide is compromised due to a manufacturers' or collaboration partners' failure to adhere to applicable laws or GMP requirements, 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 in 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.

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

We co-develop and plan to co-promote linaclotide in the U.S. with Forest. Forest played a significant role in the conduct of the clinical trials for linaclotide and in the subsequent collection and analysis of data. In addition, since we will co-commercialize linaclotide in the U.S. with Forest, we are working closely with them to develop and implement a commercialization plan for linaclotide if and when it is approved by the FDA. Each of Almirall, our European partner, and Astellas, our partner in certain Asian countries, is responsible for completing the clinical programs and obtaining regulatory

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approval of linaclotide in its respective territory. Further, we and our other partners are responsible for reporting adverse event information to us and to Forest. In addition, each of our partners is responsible for completing the manufacturing process of linaclotide upon production of the API, which consists of finishing and packaging linaclotide into capsules. These functions may not be carried out effectively and efficiently if we fail to communicate and coordinate with our partners, and vice versa. Employees of our partners are not our employees, and we have limited ability to control the amount or timing of resources that they devote to linaclotide. If any of our partners fails to devote sufficient time and resources to linaclotide, or if its performance is substandard, it will delay the potential approval of regulatory applications for linaclotide as well as the manufacturing and commercialization of linaclotide. A material breach by any of our partners of our collaboration agreement with such partner, or a significant disagreement between us and a partner, could also delay the regulatory approval and commercialization of linaclotide, potentially lead to costly litigation, and could have a material adverse impact on our financial condition. Moreover, although we have non-compete restrictions in place with each of our partners, they may have relationships with other commercial entities, some of which may compete with us. If any of our partners assists our competitors, it could harm our competitive position.

If any of our partners undergoes a change in control or management, this may adversely affect our collaborative relationship or the timeline and likelihood of achieving regulatory approval and, ultimately, the commercialization of linaclotide.

We work jointly and collaboratively with Forest, Almirall and Astellas on many decisions related to the development, manufacturing and commercialization of linaclotide. In doing so, we have established relationships with several key members of our partners' management teams in functional areas such as development, quality, regulatory, operations and commercial. The success of our collaborations is highly dependent on the resources, efforts and skills of our partners and their key employees. If a partner undergoes a change of control or a change of management, we will need to reestablish many of these relationships and we will need to regain alignment of our development and commercialization strategy for linaclotide. Further, any change of control or management may result in a reprioritization of linaclotide within such partner's profile, or such partner may fail to maintain the financial resources necessary to continue financing its portion of the development, manufacturing or commercialization costs. In certain circumstances, if one of our partners undergoes a change of control, we have the right to terminate the collaboration or license agreement and reacquire that partner's rights with respect to linaclotide. If we elect to exercise these rights in such circumstances, we will need to either establish the capability to develop and commercialize linaclotide in that partnered territory on our own or we will need to establish a relationship with a new partner. In any of these situations, the timeline and likelihood of achieving regulatory approval and, ultimately, the commercialization of linaclotide would be at risk or impaired.

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

On August 9, 2011, we and Forest announced that we submitted an NDA with the FDA for linaclotide for the treatment of IBS-C and CC, and on October 24, 2011, we and Forest announced that the FDA accepted the NDA for review. However, 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 GMP regulations. If we or a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with a facility where the product is manufactured, a regulatory agency may impose restrictions on that product or the manufacturer,

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

Even 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.

We have out-licensed the European rights to develop and commercialize linaclotide to Almirall, and we have out-licensed the same rights in certain Asian countries to Astellas. In the future, we may seek 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. Almirall submitted an MAA with the EMA in September 2011. The time required to obtain approval in other jurisdictions, including the E.U., 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 linaclotide and have an adverse effect on its commercial potential or require costly post-marketing studies.

Linaclotide may not be widely adopted by patients, payors or healthcare providers, which would adversely impact our potential profitability and future business prospects.

The commercial success of linaclotide depends upon its level of market adoption by patients, payors and healthcare providers. If linaclotide does not achieve an adequate level of market adoption for any reason, our potential profitability and our future business prospects will be severely adversely impacted. The degree of market acceptance of linaclotide depends on a number of factors, including:

- our ability to demonstrate to the medical community, particularly general practitioners, internists and gastrointestinal specialists who may purchase or prescribe linaclotide, the clinical efficacy and safety of linaclotide as the prescription product of choice for patients who suffer from IBS-C or CC;
- the effectiveness of our sales and marketing organizations and our partners' distribution networks;

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the ability of patients or providers to be adequately reimbursed for linaclotide in a timely manner from government and private payors; and

the actual and perceived safety profile of linaclotide, particularly if unanticipated adverse events related to linaclotide treatment arise and create safety concerns among potential patients or prescribers.

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.

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. Further, several European countries have implemented government measures to either freeze or reduce pricing of pharmaceutical products. 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 healthcare reforms discussed below, as well as the trend toward programs aimed at reducing health care costs, the increasing influence of health maintenance organizations, the ongoing federal government debate on reducing the federal deficit and additional legislative proposals.

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

If approved and commercialized, linaclotide will compete globally with certain prescription therapies and over the counter products for the treatment of IBS-C and CC, or certain associated symptoms. The availability of prescription competitors and over the counter products for gastrointestinal conditions could limit the demand, and the price we are able to charge, for linaclotide unless we are able to differentiate linaclotide on the basis of its 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.

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We believe other companies are developing products which could compete with linaclotide, should they be approved by the FDA. Currently, there are a few compounds in late stage development and other potential competitors are in earlier stages of development for the treatment of patients with either IBS-C or CC. 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.

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

We 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-promotion relationship in the U.S. and license relationship in 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.

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 will be subject to healthcare fraud and abuse and patient privacy regulation by both the federal government and the states in which we conduct our business. The regulations include:

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

- federal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party 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;

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

- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party 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;

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

- the federal Physician Payments Sunshine Act, and similar state laws in certain states, that require pharmaceutical and medical device companies to monitor and report payments, gifts and other remuneration made to physicians and other health care professional and health care organizations.

If our operations are found to be in violation of any of the laws described above or any governmental regulations that apply to us, we 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.

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

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

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

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The Food and Drug Administration Amendments Act of 2007 also provides the FDA enhanced post-marketing authority, including the authority to require post-marketing studies and clinical trials, labeling changes based on new safety information, and compliance with risk evaluations and mitigation strategies approved by the FDA. 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.

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

As part of our growth strategy, we intend to develop and market additional products and product candidates. We are pursuing various therapeutic opportunities through our pipeline. We may spend several years completing our development of any particular current or future internal product candidate, and failure can occur at any stage. The product candidates to which we allocate our resources may not end up being successful. Our business depends entirely on the successful development and commercialization of our product candidates. We currently generate no revenue from sales of any product, and we may never be able to develop marketable drugs.

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.

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

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

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

- obtaining regulatory approval to commence a clinical trial;
- reaching agreement on acceptable terms with prospective clinical research organizations, or CROs, and trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- manufacturing sufficient quantities of a product candidate for use in clinical trials;
- obtaining institutional review board approval to conduct a clinical trial at a prospective site;
- recruiting and enrolling patients to participate in clinical trials for a variety of reasons, including competition from other clinical trial programs for the treatment of similar conditions; and
- 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. Each protocol amendment requires institutional review board review and approval, which may adversely impact the costs, timing or successful completion of the associated clinical trials. If we experience delays in completion or if we terminate any of our clinical trials, the commercial prospects for our product candidate may be harmed, and our ability to generate product revenues will be delayed. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval.

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

We may not be able to attract or motivate qualified management and scientific, clinical and commercial personnel in the future due to the intense competition for qualified personnel among biotechnology, pharmaceutical and other businesses, particularly in the greater-Boston area. 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 A. McCourt, our senior vice president, marketing and sales and chief commercial officer. If we lose any members of our management team in the future, we may not be able to find suitable replacements, and our business may be harmed as a result. In addition to the competition for personnel, the Boston area in particular is characterized by a high cost of living. As such, we could have difficulty attracting experienced personnel to our company and may be required to expend significant financial resources in our employee recruitment efforts.

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

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 currently have product liability insurance coverage for our clinical trials that is 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

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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.

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

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

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

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

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. Furthermore, the America Invents Act (AIA), which was recently signed into law, will make several major changes in the U.S. patent statutes over the course of the next few years. These

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changes will permit third parties to challenge our patents more easily and will create uncertainty with respect to the interpretation and practice of U.S. patent law for the foreseeable future.

We also rely upon unpatented trade secrets, unpatented know-how and continuing technological innovation to develop and maintain our competitive position, which we seek to protect, in part, by confidentiality agreements with our employees and our collaborators and consultants. We also have agreements with our employees and selected consultants that obligate them to assign their inventions to us. It is possible that technology relevant to our business will be independently developed by a person that is not a party to such an agreement. Furthermore, if the employees and consultants that are parties to these agreements breach or violate the terms of these agreements, we may not have adequate remedies, and we could lose our trade secrets through such breaches or violations. Further, our trade secrets could otherwise become known or be independently discovered by our competitors.

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

If we are sued for infringing intellectual property rights of third parties, it will be costly and time consuming, and an unfavorable outcome in 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;

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

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

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

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

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

Interference proceedings brought by the 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.

Risks Related to Our Finances and Capital Requirements

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

In recent years, we have focused primarily on developing linaclotide, with the goal of supporting regulatory approval for this product candidate. We have financed our operations primarily through the issuance of equity 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 $64.9 million, $53.0 million and $71.2 million in the years ended December 31, 2011, 2010 and 2009, respectively. As of December 31, 2011, we had an accumulated deficit of approximately $432.4 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

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with developing pharmaceutical products, we are unable to predict the extent of any future losses or when, or if, we will become profitable.

We may need additional funding and may be unable to raise capital when needed, which 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. Circumstances, our strategic imperatives, or opportunities to create or acquire new development programs could require us to, or we may choose to, seek to raise additional funds. The amount and timing of our future funding requirements will depend on many factors, including, but not limited to:

- the rate of progress and cost of our clinical trials and other product development programs for linaclotide and our other product candidates;
- the costs associated with launching and commercializing linaclotide, should it be approved by FDA;
- if linaclotide receives regulatory approval, the level of underlying demand for that product;
- 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 collaboration, 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 and annual operating results may fluctuate significantly.

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

- the achievement and timing of milestone payments under our existing collaboration and license agreements;
- our execution of any collaboration, licensing or similar arrangements, and the timing of payments we may make or receive under these arrangements;
- the costs associated with launching and commercializing linaclotide and any of our product candidates, if we receive regulatory approval of such candidate;
- if linaclotide receives regulatory approval, the level of underlying demand for that product and wholesalers' buying patterns;

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

addition or termination of clinical trials;

regulatory developments affecting our product candidates; and

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

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If our 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 or annual fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially.

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 it is possible that certain transactions or a combination of certain transactions may result in material additional limitations on our ability to use our net operating loss and tax credit carryforwards.

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. We have completed several financings since our 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.

Risks Relating to Securities Markets and Investment in Our Stock

The concentration of our capital stock ownership with our pre-IPO stockholders 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 for the following matters, for which each share of our Class B common stock has ten votes per share and each share of our Class A common stock has one vote per share:

- 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 that 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 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 pre-IPO investors (and their affiliates), founders, directors, executives and certain of our employees, 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. As of February 15, 2012, the holders of our Class A common stock own approximately 70% and the holders of our Class B common stock own approximately 30% 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 have approximately 19% and holders of our Class B common stock have approximately 81% of the total votes in each of the matters identified in the list above. This concentrated control with our Class B

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common stock holders limits the ability of the Class A common stockholders to influence those corporate matters and, as a result, we may take actions that many of our stockholders do not view as beneficial, which could adversely affect the market price 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 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, holders of our Class B common stock 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 are elected at one time. This staggered board structure prevents stockholders from replacing the entire board at a single stockholders' meeting.

- 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 acquirer from conducting a solicitation of proxies to elect such acquirer'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 are not 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 or a majority of our board of directors. As a result, a holder, or holders, controlling a majority of our capital stock are not 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 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.

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If we identify a material weakness in our internal controls over financial reporting, our ability to meet our reporting obligations and the trading price of our stock could be negatively affected.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. Accordingly, a material weakness increases the risk that the financial information we report contains material errors.

We regularly review and update our internal controls, disclosure controls and procedures, and corporate governance policies. In addition, we are required under the Sarbanes-Oxley Act of 2002 to report annually on our internal control over financial reporting. Any system of internal controls, however well designed and operated, is based in part on certain assumptions and can provide only reasonable, not absolute, assurances that the objectives of the system are met. If we, or our independent registered public accounting firm, determine that our internal controls over our financial reporting are not effective, or we discover areas that need improvement in the future, these shortcomings could have an adverse effect on our business and financial results, and the price of our common stock could be negatively affected.

If we cannot conclude that we have effective internal control over our financial reporting, or if our independent registered public accounting firm is unable to provide an unqualified opinion regarding the effectiveness of our internal control over financial reporting, investors could lose confidence in the reliability of our financial statements, which could lead to a decline in our stock price. Failure to comply with reporting requirements could also subject us to sanctions and/or investigations by the SEC, The NASDAQ Stock Market or other regulatory authorities.

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:

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, including clinical trial 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 and annual operating results;

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

sales of additional shares of our common stock;

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.

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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.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including the sections titled "Business," "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" contains forward-looking statements. All statements contained in this Annual Report on Form 10-K 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 ability to obtain U.S. and foreign regulatory approval of linaclotide and the ability of all of our product candidates to meet existing or future regulatory standards;
- our expectations regarding federal, state and foreign regulatory requirements;
- the safety profile and related adverse events of our product candidates;
- our ability to manufacture sufficient amounts of linaclotide for commercialization activities;
- the therapeutic benefits and effectiveness of our product candidates;
- the ability of our partners to perform their obligations under our collaboration and license agreements with them;
- our plans with respect to collaborations and licenses related to the development, manufacture or sale of our product candidates, as well as the in-licensing or acquisition of externally discovered programs;
- the success of our clinical studies for our product candidates;
- the timing of commercializing our product candidates;
- the size and characteristics of the market potential of our product candidates;
- our expectations and desires as to future financial performance, expense levels, capital raising and liquidity sources;
- our ability to compete with other companies that are or may be developing or selling products that are competitive with our product candidates;

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

anticipated trends and challenges in our potential markets;

our goal to execute on our owner related business principles;

our ability to attract and motivate key personnel; and

other factors discussed elsewhere in this Annual Report on Form 10-K.

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Any or all of our forward-looking statements in this Annual Report on Form 10-K may turn out to be inaccurate. These forward-looking statements may be affected by inaccurate assumptions or by known or unknown risks and uncertainties, including the risks, uncertainties and assumptions identified under the heading "Risk Factors" in this Annual Report on Form 10-K. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Annual Report on Form 10-K 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 Annual Report on Form 10-K. 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 Annual Report on Form 10-K.

Item 1B. ***Unresolved Staff Comments***

None.

Item 2. ***Properties***

Our corporate headquarters and operations are located in Cambridge, Massachusetts, where, as of December 31, 2011, we lease and occupy approximately 170,679 rentable square feet of office and laboratory space at 301 Binney Street. In January 2012, we occupied an additional 17,863 rentable square feet of office space at 301 Binney Street pursuant to a lease amendment that we entered into in February 2011. In October 2011, we amended our lease at 301 Binney Street to lease an additional 21,717 rentable square feet of office space that we do not yet occupy. The term of our lease at 301 Binney Street expires on January 31, 2016, with an option to extend the term of the lease for two additional five year periods. We believe that our facilities are suitable and adequate for our needs for the foreseeable future.

Item 3. ***Legal Proceedings***

None.

Item 4. ***Mine Safety Disclosures***

Not Applicable.

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PART II

Item 5. ***Market For Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Shares of our Class A common stock are traded on the NASDAQ Global Select Market under the symbol "IRWD." Our shares have been publicly traded since February 3, 2010.

	Class A Common Stock			
	2011		2010	
	High	Low	High	Low
First Quarter	$ 14.39	$ 10.17	$ 14.91	$ 11.20
Second Quarter	$ 16.50	$ 13.32	$ 15.03	$ 9.73
Third Quarter	$ 16.49	$ 10.18	$ 13.14	$ 8.90
Fourth Quarter	$ 14.35	$ 9.97	$ 11.49	$ 10.00

As of February 15, 2012, there were 47 stockholders of record of our Class A common stock and 134 stockholders of record of our Class B common stock. The number of record holders is based upon the actual number of holders registered on the books of the company at such date and does not include holders of shares in "street names" or persons, partnerships, associations, corporations or other entities identified in security position listings maintained by depositories.

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 are 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.

The information required to be disclosed by Item 201(d) of Regulation S-K, "Securities Authorized for Issuance Under Equity Compensation Plans," is referenced under Item 12 of Part III of this Annual Report on Form 10-K.

Corporate Performance Graph

The following performance graph and related information shall not be deemed to be "soliciting material" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that we specifically incorporate it by reference into such filing.

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The following graph compares the performance of our Class A common stock to the NASDAQ Stock Market (U.S.) and to the NASDAQ Pharmaceutical Index from February 3, 2010 (the first date that shares of our Class A common stock were publicly traded) through December 31, 2011. The comparison assumes $100 was invested after the market closed on February 3, 2010 in our Class A common stock and in each of the foregoing indices, and it assumes reinvestment of dividends, if any.

COMPARISON OF QUARTERLY CUMULATIVE TOTAL RETURN
Among the NASDAQ Stock Market (U.S.),
The NASDAQ Pharmaceutical Index,
and Ironwood Pharmaceuticals, Inc.

Item 6. ***Selected Consolidated Financial Data***

You should read the following selected financial data together with our consolidated financial statements and the related notes appearing elsewhere in this Annual Report on Form 10-K. We have derived the consolidated statements of operations data for the years ended December 31, 2011, 2010 and 2009 and the consolidated balance sheet data as of December 31, 2011 and 2010 from our audited financial statements included elsewhere in this Annual Report on Form 10-K. We have derived the consolidated statements of operations data for the years ended December 31, 2008 and 2007 and the consolidated balance sheet data as of December 31, 2009, 2008 and 2007 from our audited financial statements not included in this Annual Report on Form 10-K. Our historical results for any prior period are not necessarily indicative of results to be expected in any future period.

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	Years Ended December 31,				
	2011	2010	2009	2008	2007
	(in thousands, except share and per share data)				
Consolidated Statement of Operations Data:					
Collaborative arrangements revenue	$ 65,871	$ 43,857	$ 34,321	$ 18,383	$ 4,608
Operating expenses:					
Research and development[(1)]	86,093	77,454	76,100	51,421	50,424
General and administrative[(1)]	45,920	27,169	19,037	15,269	8,872
Total operating expenses	132,013	104,623	95,137	66,690	59,296
Loss from operations	(66,142)	(60,766)	(60,816)	(48,307)	(54,688)
Other income (expense):					
Interest expense	(63)	(196)	(318)	(291)	(232)
Interest and investment income	456	614	240	2,088	3,872
Remeasurement of forward purchase contracts			600	(900)	600
Other income	900	993			
Other income (expense), net	1,293	1,411	522	897	4,240
Net loss from continuing operations before income tax (benefit) expense	(64,849)	(59,355)	(60,294)	(47,410)	(50,448)
Income tax (benefit) expense	3	(2,944)	(296)		
Net loss from continuing operations	(64,852)	(56,411)	(59,998)	(47,410)	(50,448)
Net income (loss) from discontinued operations[(1)]		4,551	(13,314)	(7,621)	(2,712)
Net loss	(64,852)	(51,860)	(73,312)	(55,031)	(53,160)
Net (income) loss from discontinued operations attributable to noncontrolling interest		(1,121)	2,127	1,157	408
Net loss attributable to Ironwood Pharmaceuticals, Inc.	$ (64,852)	$ (52,981)	$ (71,185)	$ (53,874)	$ (52,752)
Net income (loss) per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted:					
Continuing operations	$ (0.65)	$ (0.63)	$ (8.43)	$ (6.88)	$ (7.57)
Discontinued operations		0.04	(1.57)	(0.94)	(0.34)
Net loss per share	$ (0.65)	$ (0.59)	$ (10.00)	$ (7.82)	$ (7.91)
Weighted average number of common shares used in net income (loss) per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted	99,874,790	89,653,364	7,116,774	6,889,817	6,666,601

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

Research and development	$ 6,071	$ 4,112	$ 2,372	$ 1,627	$ 673
General and administrative	5,661	3,384	2,723	991	359
Discontinued operations		59	149	176	122

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	December 31,				
	2011	2010	2009	2008	2007
			(in thousands)		
Consolidated Balance Sheet Data:					
Cash, cash equivalents and available-for-sale securities	$ 164,016	$ 248,027	$ 122,306	$ 88,375	$ 87,860
Working capital of continuing operations (excluding deferred revenue)	138,724	234,699	107,485	86,022	101,036
Assets of discontinued operations			2,346	3,817	4,949
Total assets	208,977	301,365	162,451	138,371	135,635
Deferred revenue, including current portion	57,421	102,433	126,002	66,008	74,392
Long-term debt, including current portion			1,763	1,815	2,752
Capital lease obligations, including current portion	655	590	255	306	
Liabilities of discontinued operations			2,301	1,327	786
Total liabilities	99,121	141,814	162,441	95,382	90,207
Convertible preferred stock			298,350	273,400	223,802
Noncontrolling interest			3,212	5,339	6,495
Total stockholders' equity (deficit)	109,856	159,551	(298,340)	(230,411)	(178,374)

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations***

Forward-Looking Information

The following discussion of our financial condition and results of operations should be read in conjunction with our financial statements and the notes to those financial statements appearing elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve significant risks and uncertainties. As a result of many factors, such as those set forth under "Risk Factors" in Item 1A of this Annual Report on Form 10-K, 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 differentiated medicines that improve patients' lives. To achieve our mission, we are building a team, a culture and processes centered on creating and marketing important new drugs. We believe that linaclotide, our GC-C agonist being developed for the treatment of patients with IBS-C and CC, could present patients and healthcare practitioners with a unique therapy for a major medical need not yet met by existing therapies. Linaclotide is our only product candidate that has demonstrated clinical proof of concept. In August 2011, we along with Forest submitted an NDA, with the FDA, for linaclotide for the treatment of IBS-C and CC. In October 2011, the FDA accepted the NDA for review, and the FDA PDUFA target action date is expected to occur in June 2012. In February 2012, we were informed that the FDA will not schedule an advisory committee meeting in connection with its review of our NDA. In addition to linaclotide, we have a pipeline of early development candidates in multiple therapeutic areas, including gastrointestinal disease, CNS disorders and respiratory disease. We are also conducting discovery research in these therapeutic areas, as well as in the area of cardiovascular disease. 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.

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

Prior to September 2010, we held a majority ownership interest in Microbia, Inc. (formerly known as Microbia Precision Engineering), a subsidiary formed in September 2006. Microbia, Inc., or

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Microbia, engaged in a specialty biochemicals business based on a proprietary strain-development platform. On September 21, 2010, we sold our interest in Microbia to DSM Holding Company USA, Inc., or DSM, in exchange for cash proceeds of $9.5 million, the payment of approximately $1.1 million of Microbia debt and interest by DSM and future contingent consideration based on the sale of products incorporating Microbia's technology.

We currently operate in one reportable business segment human therapeutics. Our human therapeutics segment consists of the development and commercialization of our product candidates, including linaclotide. Prior to the sale of our interest in Microbia, we also operated in the biomanufacturing segment. Our biomanufacturing segment, which comprised a much smaller part of our business, consisted of our majority ownership interest in Microbia. Our human therapeutics segment represented 100% of our total assets at December 31, 2011 and 2010. For the years ended December 31, 2010 and 2009, results of operations of our biomanufacturing segment are included in net income (loss) from discontinued operations in our financial statements.

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 $64.9 million, $53.0 and $71.2 million in the years ended December 31, 2011, 2010 and 2009, respectively. As of December 31, 2011, we had an accumulated deficit of approximately $432.4 million and we expect to incur losses for the foreseeable future.

In February, we sold 6,037,500 shares of our Class A common stock through a firm commitment, underwritten public offering at a price to the public of $15.09 per share. As a result of the offering, we received aggregate net proceeds, after underwriting discounts and commissions and other estimated offering expenses, of approximately $85.3 million. We intend to use these proceeds for general corporate purposes, including to further strengthen our balance sheet in advance of the potential market launch of linaclotide (if approved).

Financial Overview

Revenue. Revenue to date from our human therapeutics segment is generated primarily through our collaboration agreement with Forest and our license agreements with Almirall and Astellas. The terms of these agreements contain multiple deliverables which may include (i) licenses, (ii) research and development activities, and (iii) the manufacture of API and development materials for the collaborative partner. Payments to us may include one or more of the following: nonrefundable license fees; payments for research and development activities, payments for the manufacture of API and development materials, payments based upon the achievement of certain milestones 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 was generated by our former subsidiary, Microbia, which had entered into research and development service agreements with various third parties. These agreements generally provided for fees for research and development services rendered. As a result of the sale of our interest in Microbia, revenue from our biomanufacturing segment is included in net income (loss) from discontinued operations. 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.

Research and development expense. Research and development expense consists of expenses incurred in connection with the discovery and development of our product candidates. These expenses consist primarily of compensation, benefits and other employee related expenses, research and development related facility costs and third-party contract costs relating to research, formulation, manufacturing, preclinical study and clinical trial activities. The costs of revenue related to the

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Microbia services contracts and costs associated with Microbia's research and development activities are included in net income (loss) from discontinued operations. 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 being developed for the treatment of IBS-C and CC and is our only product candidate that has demonstrated clinical proof of concept. Linaclotide achieved positive results in each of our two Phase 3 IBS-C trials and in each of our two Phase 3 CC trials. An NDA for linaclotide with respect to both IBS-C and CC was submitted to the FDA and accepted for review in October 2011, and the PDUFA target action date is expected to occur in June 2012. Additionally, an MAA for linaclotide for IBS-C was submitted to the EMA by Almirall in September 2011. We have a pipeline of early development candidates in multiple therapeutic areas, including gastrointestinal disease, CNS disorders and respiratory disease. We are also conducting discovery research in these therapeutic areas, as well as in the area of cardiovascular disease.

The following table sets forth our research and development expenses related to our product pipeline for the years ended December 31, 2011, 2010 and 2009. These expenses relate primarily to external costs associated with manufacturing, including supply chain development, preclinical studies and clinical trial costs. Costs related to facilities, depreciation, share-based compensation and research and development support services are not directly charged to programs.

	Years Ended December 31,		
	2011	2010	2009
		(unaudited)	
		(in thousands)	
Demonstrated clinical proof of concept	$ 24,697	$ 26,684	$ 41,052
Early development candidates	13,498	13,067	5,742
Discovery research	13,454	6,134	5,701

We began tracking program expenses for linaclotide in 2004, and research and development program expenses from inception to December 31, 2011 were approximately $148.1 million. 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.

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 our other product candidates 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, or any of our other product candidates will generate revenues and cash flows.

We invest carefully in our pipeline, and the commitment of funding for each subsequent stage of our development programs is dependent upon the receipt of clear, supportive data. In addition, we are actively engaged in evaluating externally-discovered drug candidates at all stages of development. In evaluating potential assets, we apply the same criteria as those used for investments in internally-discovered assets.

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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 provided that no other clinical trials are necessary to obtain regulatory approval in the U.S. If our other product candidates are successful in early stage clinical trials, we would expect external costs to increase as the programs progress 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 may not be favorable.
- The emergence of competing technologies and products and other adverse market developments may negatively impact us.

As a result of the uncertainties discussed above, we are unable to determine the duration and costs to complete current or future preclinical and 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.

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. Additionally, our research and development costs will increase as we will fund full-time equivalents for research and development activities under our external collaboration and license agreements that are not related to linaclotide.

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, general and administrative related facility costs and professional fees for accounting and legal services. We anticipate substantial increases in expenses related to developing the organization necessary to commercialize linaclotide.

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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 U.S., 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 estimates and assumptions, including those related to revenue recognition, research and development expenses and share-based compensation are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates could occur in the future. 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. Actual results may differ from our estimates under different assumptions or conditions.

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 Annual Report on Form 10-K.

Revenue Recognition

Our revenue is generated primarily through collaborative research and development and license agreements. The terms of these agreements contain multiple deliverables which may include (i) licenses, (ii) research and development activities, and (iii) the manufacture of API and development materials for the collaborative partner. Payments to us under these agreements may include non-refundable license fees, payments for research and development activities, payments for the manufacture of API and development materials, payments based upon the achievement of certain milestones and royalties on product sales. In addition, prior to September 2010, we generated services revenue through agreements that generally provided for fees for research and development services rendered.

We evaluate revenue from agreements that have multiple elements under the guidance of Accounting Standards Update, or ASU, No. 2009-13, *Multiple-Deliverable Revenue Arrangements,* or ASU 2009-13, which we adopted in January 2011. We identify the deliverables included within the agreement and evaluate which deliverables represent separate units of accounting. We 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;
- 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.

The consideration received is allocated among the separate units of accounting, and the applicable revenue recognition criteria are applied to each of the separate units. The determination that multiple elements in an arrangement meet the criteria for separate units of accounting requires us to exercise our judgment.

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.

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

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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. In June 2011, we revised our estimate of the development period associated with our Almirall license agreement from 50 months to 41 months and adjusted the amortization of the remaining deferred revenue accordingly. Aside from this change, we have had no other material changes to our estimated periods of continuing involvement under existing collaboration and license agreements.

Milestones

At the inception of each arrangement that includes contingent milestone payments, the Company evaluates whether each milestone is substantive. This evaluation includes an assessment of whether (a) the consideration is commensurate with either (1) the entity's performance to achieve the milestone, or (2) the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from the entity's performance to achieve the milestone, (b) the consideration relates solely to past performance and (c) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. We evaluate factors such as the scientific, clinical, regulatory, commercial and other risks that must be overcome to achieve the respective milestone, the level of effort and investment required and whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment. Substantive milestones are due to us upon NDA approval of linaclotide in the U.S., upon the initiation of a Phase 3 study for linaclotide in Japan, upon the filing and approval of the Japanese equivalent of an NDA with the relevant regulatory authority in Japan.

On January 1, 2011, we adopted ASU No. 2010-17, *Revenue Recognition Milestone Method,* or ASU 2010-17. Refer to Note 2*Summary of Significant Accounting Policies*, to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K for additional discussion of the adoption of this standard and its impact on our accounting for collaboration and license agreements. As a result of this adoption, in those circumstances where a substantive milestone is achieved and collection of the related receivable is reasonably assured, we recognize revenue related to the milestone in its entirety in the period in which the milestone is achieved.

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Prior to January 1, 2011, in those circumstances where a substantive milestone was achieved, collection of the related receivable was reasonably assured and we had remaining obligations to perform under the collaboration arrangement, we recognized as revenue on the date the milestone was achieved an amount equal to the applicable percentage of the performance period that had elapsed as of the date the milestone was achieved, with the balance being deferred and recognized over the remaining period of performance. Milestone payments received prior to the adoption of ASU 2010-17 under the Forest collaboration and Almirall license agreement will continue to be recognized based upon this method.

If we do not consider a milestone to be substantive, 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 to date under our Forest collaboration agreement and our Almirall license agreement were substantive. As of December 31, 2011, we had not achieved any milestones under our Astellas license agreement.

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, 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.

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 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

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 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,

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we expense the fair value of non-employee stock options over the vesting term of the underlying stock options.

For employee share-based awards, 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 weighted average assumptions used in calculating the fair value of share-based awards granted in 2011, 2010 and 2009 are set forth below:

	Years Ended December 31,		
	2011	2010	2009
Volatility	49.8%	57.4%	62.3%
Dividend yield	%	%	%
Expected life of options (in years)	6.5	6.5	6.5
Risk-free interest rate	2.4%	2.9%	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 our initial public offering, we lacked company-specific historical and implied volatility information. Therefore, we use a blended volatility rate using our own historical volatility and that of publicly-traded peer companies. 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 5.5%, 5.5% and 5.8% as of December 31, 2011, 2010 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.

Prior to our public offering, we 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. Due to the absence of an active market for our common stock, prior to our initial public offering on February 2, 2010, our board of directors had 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;

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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.

In connection with the preparation of the consolidated financial statements for the year ended December 31, 2009, 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 31, June 30, September 30, November 2 and December 31, 2009, and valued our common stock at $5.00, $5.48, $7.36, $11.75 and $12.05 per share, respectively. The valuations were used to estimate the fair value of our common stock as of each option grant date and in calculating share-based compensation expense. Our board of directors had consistently used the most recent quarterly valuation provided by management for determining the fair value of our common stock unless a specific event occurred that necessitated 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. We used the probability-weighted expected return method described in the Practice Aid to allocate the enterprise values to the common stock.

There are significant judgments and estimates inherent in the determination of these valuations. These judgments and estimates included 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 milestones 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-based milestones. If the actual achievement of the performance-based 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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As of December 31, 2011, there was approximately $0.9 million and $25.6 million of unrecognized share-based compensation, net of estimated forfeitures, related to restricted stock awards and unvested stock option grants with time-based vesting, respectively which are expected to be recognized over a weighted average period of 2.0 years and 3.66 years, respectively. The total unrecognized share-based compensation cost will be adjusted for future changes in estimated forfeitures. Additionally, at December 31, 2011, approximately $6.3 million of additional share-based compensation related to options subject to performance-based milestone vesting was not yet recognized. See Notes 2 and 15 to our consolidated financial statements located in this Annual Report on Form 10-K for further discussion of share-based compensation.

Results of Operations

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

	Years Ended December 31,		
	2011	2010	2009
	(in thousands)		
Collaborative arrangements revenue	$ 65,871	$ 43,857	$ 34,321
Operating expenses:			
Research and development	86,093	77,454	76,100
General and administrative	45,920	27,169	19,037
Total operating expenses	132,013	104,623	95,137
Loss from operations	(66,142)	(60,766)	(60,816)
Other income (expense):			
Interest expense	(63)	(196)	(318)
Interest and investment income	456	614	240
Remeasurement of forward purchase contracts			600
Other income	900	993	
Other income (expense), net	1,293	1,411	522
Net loss from continuing operations before income tax (benefit) expense	(64,849)	(59,355)	(60,294)
Income tax (benefit) expense	3	(2,944)	(296)
Net loss from continuing operations	(64,852)	(56,411)	(59,998)
Net income (loss) from discontinued operations		4,551	(13,314)
Net loss	(64,852)	(51,860)	(73,312)
Net (income) loss from discontinued operations attributable to noncontrolling interest		(1,121)	2,127
Net loss attributable to Ironwood Pharmaceuticals, Inc.	$ (64,852)	$ (52,981)	$ (71,185)

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010

Revenue

	Years Ended December 31,		Change	
	2011	2010	$	%
	(dollars in thousands)			
Collaborative arrangements revenue	$ 65,871	$ 43,857	$ 22,014	50.2%

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Collaborative Arrangements. The increase in revenue from collaborative arrangements for the year ended December 31, 2011 compared to the year ended December 31, 2010 was primarily due to an increase in revenue from the achievement of the $10 million IBS-C NDA acceptance milestone and the achievement of the $10 million CC NDA acceptance milestone in our Forest collaboration. In accordance with ASU 2010-17, which we adopted in January 2011, we recognized these substantive milestones in their entirety upon their achievement. Such milestones were achieved in connection with the FDA's acceptance of our NDA for review in October 2011. Other changes in revenue were mostly related to the Almirall license agreement. In June 2011, we revised our estimate of the development period associated with the Almirall license agreement which resulted in approximately $5.0 million in additional revenue recognized in 2011. This amount is partially offset by the revenue recognized upon achievement of the Phase 3 milestone in November 2010. The revenue from this milestone was recorded pre-adoption of ASU 2010-17 and resulted in the recognition of approximately $3.0 million more in revenue during 2010 than in 2011.

Operating Expenses

	Years Ended December 31,		Change	
	2011	2010	$	%
	(dollars in thousands)			
Operating expenses:				
Research and development	$ 86,093	$ 77,454	$ 8,639	11.2%
General and administrative	45,920	27,169	18,751	69.0%
Total operating expenses	$ 132,013	$ 104,623	$ 27,390	26.2%

Research and Development Expense. The increase in research and development expense of approximately $8.6 million for the year ended December 31, 2011 compared to the year ended December 31, 2010 was primarily due to an increase of approximately $8.0 million in compensation, benefits, and employee related expenses associated mainly with increased headcount, an increase of approximately $2.0 million in share-based compensation expense primarily related to our new hire grants and our annual stock option grant made in February 2011, an increase of approximately $6.0 million in external research costs related to the research and development fees paid in connection with our licensing agreements that are not related to linaclotide, offset by a decrease of approximately $7.4 million in support of linaclotide, primarily resulting from lower clinical trial and collaboration expenses as we completed the efficacy portion of linaclotide's development program.

General and Administrative Expense. The increase in general and administrative expense of approximately $18.8 million for the year ended December 31, 2011 compared to the year ended December 31, 2010 was primarily due to an increase of approximately $7.4 million in compensation, benefits and other employee related expenses associated with increased headcount, an increase of approximately $2.3 million in share-based compensation expense primarily related to our new hire grants and our annual stock option grant made in February 2011, an increase of approximately $2.5 million in general and administrative related facilities costs primarily due to increased depreciation expense associated with the amortization of leasehold improvements at our 301 Binney Street facility and improvements in our IT infrastructure, an increase in external consulting costs of approximately $4.9 million primarily associated with developing the infrastructure to commercialize and support linaclotide and an increase of approximately $0.9 million in the net expense from Forest on our collaborative commercial activities.

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Other Income (Expense), Net

	Years Ended December 31,		Change	
	2011	2010	$	%
	(dollars in thousands)			
Other income (expense):				
Interest expense	$ (63)	$ (196)	$ 133	67.9%
Interest and investment income	456	614	(158)	(25.7)%
Other income	900	993	(93)	(9.4)%
Total other income (expense), net	$ 1,293	$ 1,411	$ (118)	(8.4)%

Interest Expense. The decrease in interest expense of approximately $0.1 million for the year ended December 31, 2011 compared to the year ended December 31, 2010 was primarily the result of a reduction in long-term debt associated with the payment of all the long-term debt in September 2010.

Interest and Investment Income. The decrease in interest and investment income of approximately $0.2 million for the year ended December 31, 2011 compared to the year ended December 31, 2010 was due to lower average cash, cash equivalents and investment balances.

Other Income. The decrease in other income for the year ended December 31, 2011 compared to the year ended December 31, 2010 was primarily due to the timing of tax incentives or awards we received. In 2011, we recognized a Life Sciences Tax Incentive Program award of approximately $0.9 million from the Massachusetts Life Sciences Center. In 2010, we recognized approximately $1.0 million in federal grants awarded to us under the Qualifying Therapeutic Discovery Project Program.

Income Tax (Benefit) Expense. The approximately $2.9 million decrease in income tax benefit for the year ended December 31, 2011 compared to the year ended December 31, 2010 is related to intra-period income tax allocation requirements in 2010 for which we recorded a benefit for income taxes from continuing operations of approximately $2.9 million, offset by an identical income tax provision from discontinued operations for the year ended December 31, 2010. The intra-period income tax allocation considers discontinued operations for purposes of determining the amount of tax benefit that results from our loss from continuing operations. There was no corresponding tax allocation in 2011.

Net Income (Loss) From Discontinued Operations. The income from discontinued operations in 2010 is associated with the approximately $12.2 million gain recognized on the sale of Microbia, partially offset by the tax provision related to the intra-period tax allocation. As a result of the sale of Microbia in September 2010, there were no discontinued operations in 2011.

Net (Income) Loss From Discontinued Operations Attributable to Noncontrolling Interest. The approximately $1.1 million in net income from discontinued operations attributable to noncontrolling interest for the year ended December 31, 2010 was attributable to amounts recognized by Microbia immediately prior to the sale of Microbia in September 2010. As a result of the sale of Microbia in September 2010, there was no corresponding income in 2011.

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Year Ended December 31, 2010 Compared to Year Ended December 31, 2009

Revenue

	Years Ended December 31,		Change	
	2010	2009	$	%
	(dollars in thousands)			
Collaborative arrangements revenue	$ 43,857	$ 34,321	$ 9,536	27.8%

Collaborative Arrangements. The increase in revenue from collaborative arrangements for the year ended December 31, 2010 compared to the year ended December 31, 2009 was primarily due to increases in revenue from the Almirall license agreement, which we entered into in April 2009, and the Astellas license agreement, which we entered into in November 2009, offset by decreases in revenue from the Forest collaboration. In the year ended December 31, 2010, we recognized approximately $10.6 million of revenue, compared with approximately $7.0 million of revenue in 2009, related to the $38.0 million up-front license payment received in May 2009 from Almirall and the amortization of the deferred revenue resulting from recording the initial $6.0 million valuation of the Almirall forward purchase contract. Additionally in 2010, we recognized approximately $7.6 million of revenue associated with the $19.0 million milestone payment, net of taxes, received in December 2010 under the Almirall license agreement. In the year ended December 31, 2010, we recognized approximately $2.6 million of revenue related to the $30.0 million up-front license payment received in November 2009 from Astellas, compared with none in 2009, as the development period and related amortization did not commence until March 2010. Additionally, in the year ended December 31, 2010 we recognized approximately $1.3 million from shipments of clinical trial materials to both Almirall and Astellas compared to approximately $0.3 million in 2009. This was offset by a decrease in revenue recognized in relation to the Forest collaboration primarily due to the achievement of a $20.0 million milestone in July 2009. During the year ended December 31, 2010, we recognized approximately $4.0 million related to this milestone compared to approximately $9.2 million during 2009, of which approximately $7.5 million was recognized upon achievement, resulting in a decrease of approximately $5.2 million from 2010 to 2009.

Operating Expenses

	Years Ended December 31,		Change	
	2010	2009	$	%
	(dollars in thousands)			
Operating expenses:				
Research and development	$ 77,454	$ 76,100	$ 1,354	1.8%
General and administrative	27,169	19,037	8,132	42.7%
Total operating expenses	$ 104,623	$ 95,137	$ 9,486	10.0%

Research and Development Expense. The increase in research and development expense of approximately $1.4 million for the year ended December 31, 2010 compared to the year ended December 31, 2009 was primarily due to an increase of approximately $4.3 million in compensation, benefits, and employee related expenses associated mainly with increased headcount, an increase of approximately $1.8 million due to the implementation in the first quarter of 2010 of our employee incentive plan, an increase of approximately $1.7 million in share-based compensation expense primarily related to our annual stock option grant made in February 2010, an increase of approximately $2.9 million in research and development related facilities and other research and development support costs largely due to increased rent and depreciation expense associated with the additional space we leased at our 301 Binney Street facility in February 2010 and an increase of approximately $0.8 million

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in internal research costs, such as laboratory supplies, to support the development of our pipeline, offset by a decrease of approximately $10.2 million in support of linaclotide, primarily resulting from lower clinical trial, collaboration and manufacturing expenses as we completed the efficacy portion of linaclotide's development program.

General and Administrative Expense. The increase in general and administrative expense of approximately $8.1 million for the year ended December 31, 2010 compared to the year ended December 31, 2009 was primarily due to an increase of approximately $2.3 million in compensation, benefits and other employee related expenses associated with increased headcount, an increase of approximately $0.7 million in share-based compensation expense primarily related to our annual stock option grant made in February 2010, an increase of approximately $0.8 million due to the implementation in the first quarter of 2010 of our employee incentive plan, an increase of approximately $1.2 million in general and administrative related facilities costs primarily due to increased rent expense associated with the additional space we leased at our 301 Binney Street facility in February 2010, an increase of approximately $0.8 million in expenses due to being a public company, such as audit and tax fees, filing fees, and directors' and officers' insurance and an increase in external consulting costs of approximately $2.2 million primarily associated with preparing to commercialize linaclotide and public company requirements, such as investor relations, Sarbanes-Oxley compliance and stock administration offset by an increase of approximately $0.8 million in the reimbursement from Forest on our collaborative commercial activities.

Other Income (Expense), Net

	Years Ended December 31,		Change	
	2010	2009	$	%
	(dollars in thousands)			
Other income (expense):				
Interest expense	$ (196)	$ (318)	$ 122	38.4%
Interest and investment income	614	240	374	155.8%
Remeasurement of forward purchase contracts		600	(600)	(100.0)%
Other income	993		993	100.0%
Total other income (expense), net	$ 1,411	$ 522	$ 889	170.3%

Interest Expense. The decrease in interest expense of approximately $0.1 million for the year ended December 31, 2010 compared to the year ended December 31, 2009 was primarily the result of a reduction in long-term debt, partially offset by early payment fees incurred in connection with the repayment of the long-term debt in September 2010.

Interest and Investment Income. The increase in interest and investment income of approximately $0.4 million for the year ended December 31, 2010 compared to the year ended December 31, 2009 was due to higher average cash, cash equivalents and investment balances, partially offset by lower prevailing interest rates during the period.

Remeasurement of Forward Purchase Contracts. The decrease in the remeasurement of forward purchase contracts of approximately $0.6 million for the year ended December 31, 2010 compared to the year ended December 31, 2009 resulted from the final settlement of the Forest forward purchase contract in July 2009 and the Almirall forward purchase contract in November 2009. The Forest forward purchase contract was remeasured in July 2009 when Forest made its equity investment and the Almirall forward purchase contract was remeasured at November 2, 2009 when Almirall made its equity investment, resulting in total respective gains on remeasurement of $0.1 million and $0.5 million for the year ended December 31, 2009. As a result of the final settlements of both forward purchase contracts, there were no corresponding remeasurements during 2010.

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Other Income. The increase in other income for the year ended December 31, 2010 compared to the year ended December 31, 2009 was primarily due to approximately $978,000 in grants awarded to us under the Qualifying Therapeutic Discovery Project Program in 2010. There was no corresponding award in 2009.

Income Tax (Benefit) Expense. The approximately $2.6 million increase in income tax benefit for the year ended December 31, 2010 compared to the year ended December 31, 2009 was related to intra-period income tax allocation requirements for which we recorded a benefit for income taxes from continuing operations of approximately $2.9 million, offset by an identical income tax provision from discontinued operations for the year ended December 31, 2010. The intra-period income tax allocation considers discontinued operations for purposes of determining the amount of tax benefit that results from our loss from continuing operations.

Net Income (Loss) From Discontinued Operations. The approximately $17.9 million increase in net income (loss) from discontinued operations for the year ended December 31, 2010 compared to the year ended December 31, 2009 was primarily the result of the approximately $12.2 million gain recognized on the sale of Microbia in September 2010 and lower operating expenses of Microbia resulting from reduced headcount and rent expense associated with Microbia's November 2009 restructuring activities, partially offset by the tax provision related to the intra-period tax allocation.

Net (Income) Loss From Discontinued Operations Attributable to Noncontrolling Interest. The approximately $3.2 million increase in net income from discontinued operations attributable to noncontrolling interest for the year ended December 31, 2010 compared to the year ended December 31, 2009 was primarily due to an increase in net income for Microbia due to a gain recognized on the settlement of intercompany balances immediately prior to the sale of Microbia in September 2010 and lower operating expenses of Microbia resulting from reduced headcount and rent expense associated with Microbia's November 2009 restructuring activities.

Liquidity and Capital Resources

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

	Years Ended December 31,		
	2011	2010	2009
	(in thousands)		
Net cash provided by (used in):			
Operating activities	$ (75,237)	$ (67,899)	$ (3,445)
Investing activities	115,065	(213,042)	17,758
Financing activities	3,133	202,956	41,663
Net increase (decrease) in cash and cash equivalents	$ 42,961	$ (77,985)	$ 55,976

We have incurred losses since our inception on January 5, 1998 and, as of December 31, 2011, we had an accumulated deficit of approximately $432.4 million. We have financed our operations to date primarily through the sale of preferred stock and common stock, including approximately $203.2 million of net proceeds from our IPO, payments received under collaborative arrangements, including reimbursement of certain expenses, debt financings and interest earned on investments. At December 31, 2011, we had approximately $164.0 million of unrestricted cash, cash equivalents and available-for-sale securities. Our cash equivalents include amounts held in money market funds, stated at cost plus accrued interest, which approximates fair market value and amounts held in certain U.S. Treasury securities and U.S. government sponsored securities. Our available-for-sale securities include

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amounts held in U.S. Treasury securities and U.S. government sponsored securities. We invest cash in excess of immediate requirements in accordance with our investment policy, which limits the amounts we may invest in any one type of investment and requires all investments held by us to be A+ rated so as to primarily achieve liquidity and capital preservation.

In February 2012, we raised approximately $85.3 million when we sold 6,037,500 shares of our Class A common stock through a firm commitment, underwritten public offering at a price to the public of $15.09 per share.

Cash Flows From Operating Activities

Net cash used in operating activities totaled approximately $75.2 million for the year ended December 31, 2011. The primary uses of cash were our net loss from continuing operations of approximately $64.9 million and a decrease of approximately $34.3 million in working capital resulting primarily from changes in deferred revenue associated with the recognition of revenue from our Forest collaboration agreement and our Almirall and Astellas license agreements, as well as the achievement of the milestone associated with the Almirall agreement. These uses of cash were partially offset by non-cash items of approximately $24.0 million.

Net cash used in operating activities totaled approximately $67.9 million for the year ended December 31, 2010. The primary uses of cash were our net loss from continuing operations of approximately $56.4 million, approximately $6.0 million used in operating activities from discontinued operations and a decrease of approximately $21.3 million in working capital resulting primarily from changes in deferred revenue associated with the recognition of revenue from our Forest collaboration agreement and our Almirall and Astellas license agreements, as well as the achievement of the milestone associated with the Almirall agreement. These uses of cash were partially offset by non-cash items of approximately $15.8 million.

Net cash used in operating activities totaled approximately $3.4 million for the year ended December 31, 2009. The primary uses of cash were our net loss from continuing operations of approximately $60.0 million and approximately $11.5 million included in net cash used in operating activities from discontinued operations, offset by approximately $9.6 million in non-cash items and an increase of approximately $58.5 million in working capital. The increase in working capital was due primarily to an increase in deferred revenue resulting from the $38.0 million up-front cash payment associated with the Almirall license agreement, the $30.0 million up-front payment associated with the Astellas license and the $20.0 million milestone payment related to the Forest collaboration agreement, partially offset by reductions in deferred revenue as revenue was recognized from our Forest collaboration and our Almirall license agreement.

Cash Flows From Investing Activities

Cash provided by investing activities for the year ended December 31, 2011 totaled approximately $115.1 million and resulted primarily from the sale and maturity of approximately $222.3 million in investments. This was partially offset by the purchase of approximately $97.5 million of securities and the purchase of approximately $9.7 million of property and equipment, primarily leasehold improvements, associated with the expansion of our 301 Binney Street facility and software to improve our IT infrastructure.

Cash used in investing activities for the year ended December 31, 2010 totaled approximately $213.0 million and resulted primarily from the purchase of approximately $441.8 million of securities related to the investment of the net proceeds of our IPO and the purchase of approximately $17.2 million of property and equipment, primarily leasehold improvements, associated with the expansion of our 301 Binney Street facility. These uses of cash were partially offset by the sale and

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maturity of approximately $236.5 million in investments and $9.5 million in proceeds received from DSM for the sale of our interest in Microbia.

Cash provided by investing activities for the year ended December 31, 2009 totaled approximately $17.8 million and resulted primarily from the sales and maturities of securities of approximately $48.5 million, partially offset by the purchase of approximately $26.7 million of securities, the purchase of approximately $4.0 million of property and equipment of which approximately $0.5 million is included in net cash provided by (used in) investing activities from discontinued operations.

Cash Flows From Financing Activities

Cash provided by financing activities for the year ended December 31, 2011 totaled approximately $3.1 million and resulted primarily from the approximately $3.4 million in cash provided by stock option exercises and the purchase of shares under the employee stock purchase plan, partially offset by approximately $0.3 million in cash used for payments on our capital leases.

Cash provided by financing activities for the year ended December 31, 2010 totaled approximately $203.0 million and resulted primarily from the net proceeds of our IPO of approximately $203.2 million and approximately $2.0 million in cash provided by stock option exercises, partially offset by approximately $2.2 million in cash used for payments of the long term debt, of which approximately $0.3 million was repayment of debt from discontinued operations.

Cash provided by financing activities for year ended December 31, 2009 totaled approximately $41.7 million, primarily resulting from approximately $40.3 million in proceeds from the sale of preferred stock and approximately $1.1 million received from net borrowings under our debt facility, of which approximately $1.3 million is included in net cash (used in) provided by financing activities from discontinued operations. We received a total of $25.0 million of proceeds from the sale of 2,083,333 shares of our Series G convertible preferred stock to Forest, $15.0 million of proceeds from the sale of 681,819 shares of our Series I convertible preferred stock to Almirall and approximately $0.2 million of proceeds from the sale of 20,833 shares of Series H convertible preferred stock.

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 that our cash on hand as of the date of this Annual Report on Form 10-K, additional cash milestone payments we may receive from our current or future collaborators, and cash received from our recent equity offering provides significant optionality and will be sufficient to meet our projected operating needs through the anticipated commercialization of linaclotide. If our forecasted operating needs change, we may require additional funding in the form of public or private equity or debt offerings or a credit facility, or we may be required to delay, reduce the scope of or eliminate one or more of our development programs or our commercialization efforts. In addition, if favorable opportunities arise to further strengthen our balance sheet, we may take advantage of one or more of the previously mentioned funding alternatives at that time. Our forecast of the period of time through which our financial resources will be adequate to support our operations, including the underlying estimates regarding the costs to obtain regulatory approval and the costs to commercialize linaclotide, is a forward-looking statement that involves risks and uncertainties, and

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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 Annual Report on Form 10-K. We have based our estimates on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect.

Due to the numerous risks and uncertainties associated with the development of our product candidates, we are unable to estimate precisely the amounts of capital outlays and operating expenditures necessary to complete the development of, and to obtain regulatory approval for, linaclotide 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.

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 or that Forest pays to us 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.

In connection with our collaboration agreement with Bionomics Limited, or Bionomics, entered into in January 2012, we are obligated to make an up-front payment to Bionomics of $3.0 million. We will also fund full-time equivalents for drug discovery activities performed by Bionomics, as well as those associated with our other collaboration agreements that are not related to linaclotide. Due to the uncertainties involved in the discovery phase of a product candidate, we are unable to determine the duration and costs required to complete these drug discovery activities and as a result, we have not included these amounts in the table below. Pending the achievement of certain development and commercialization milestones in each of the agreements, we will make certain milestone and royalty payments. As these payments are contingent upon the occurrence of certain future events and, given the nature of these events, it is unclear when, if ever, we may be required to pay such amounts and as a result, these contingent payments have not been included in the table below.

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As of December 31, 2011, we have multiple commercial supply agreements with contract manufacturing organizations for the purchase of a portion of the linaclotide API and drug product that will be used to seek regulatory approval of linaclotide in North America and the E.U., and, depending on such approval, that would be used for commercial sales in such countries. The table below reflects our minimum purchase requirements under these commercial supply agreements, as well as any outstanding non-cancellable purchase orders.

The following table summarizes our contractual obligations at December 31, 2011 (excluding interest):

	Payments Due by Period				
	Total	Less Than 1 Year	1 3 Years	3 5 Years	More Than 5 Years
	(in thousands)				
Commercial supply obligations	$ 58,670	$ 16,485	$ 16,885	$ 19,440	$ 5,860
Capital lease obligations	733	276	407	50	
Operating lease obligations	46,857	11,167	23,350	12,123	217
Total contractual obligations	$ 106,260	$ 27,928	$ 40,642	$ 31,613	$ 6,077

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

Our commitments for operating leases relate to our lease of office and laboratory space in Cambridge, Massachusetts and our data collocation space in Boston.

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. 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 Adopted Accounting Standards

In October 2009, the FASB issued ASU 2009-13. ASU 2009-13 amended existing revenue recognition accounting pronouncements that are currently within the scope of FASB Accounting Standards 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

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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. On January 1, 2011, we adopted ASU 2009-13 on a prospective basis. The adoption did not have a material impact on our consolidated financial position or results of operations.

In April 2010, the FASB issued ASU 2010-17. ASU 2010-17 provides guidance in applying the milestone method of revenue recognition to research or development arrangements. Under this guidance, management may recognize revenue contingent upon the achievement of a milestone in its entirety, in the period in which the milestone is achieved, only if the milestone meets all the criteria within the guidance to be considered substantive. This ASU is effective on a prospective basis for research and development milestones achieved in fiscal years beginning on or after June 15, 2010. On January 1, 2011, we adopted ASU 2010-17 to change our accounting policy to begin applying the milestone method on a prospective basis. As we elected prospective adoption, there was no material impact on our consolidated financial position or results of operations. However, during the fourth quarter of 2011, we recognized two milestone payments for a total of $20 million in revenue due to substantive milestones achieved after ASU 2010-17 was adopted. The adoption resulted in approximately $2.7 million ($0.03 per share) of additional revenue recognized in 2011 upon the achievement of the milestones as compared to recognition under our prior milestone accounting policy. Our prior milestone accounting policy recorded as revenue 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.

In December 2010, the FASB issued ASU No. 2010-27, *Fees Paid to the Federal Government by Pharmaceutical Manufacturers*, or ASU 2010-27, which provides guidance on how to recognize and classify the fees mandated by the Patient Protection and Affordable Care Act as amended by the Health Care and Education Reconciliation Act, together the Acts. The Acts impose an annual fee for each calendar year beginning on or after January 1, 2011 payable by branded prescription drug manufacturers and importers on branded prescription drugs. The liability for the fee should be estimated and recorded in full upon the first qualifying sale with a corresponding deferred cost that is amortized to expense using a straight-line method of allocation over the calendar year that it is payable. ASU 2010-27 is effective for calendar years beginning on or after December 31, 2010, when the fee initially becomes effective. On January 1, 2011, we adopted ASU 2010-27 on a prospective basis. As we do not currently have a commercial product, the effect of this guidance will be limited to future transactions.

Recently Issued Accounting Standards

In May 2011, the FASB issued ASU No. 2011-04, *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs,* or ASU 2011-04. ASU 2011-04 amends ASC 820, *Fair Value Measurement*, to ensure that fair value has the same meaning in GAAP and International Financial Reporting Standards, or IFRS. IFRS and improves the comparability of the fair value measurement and disclosure requirements in GAAP and IFRS. ASU 2011-04 applies to all entities that measure assets, liabilities or instruments classified in shareholder's equity at fair value, or provide fair value disclosures for items not recorded at fair value. ASU 2011-04 results in common fair value measurement and disclosure requirements in U.S. GAAP and IFRSs. Consequently, ASU 2011-04 changes the wording used to describe many of the requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements. For many of the requirements, ASU 2011-04 will not result in a change in the application of the requirements in ASC 820. Some of the requirements in ASU 2011-04 clarify the FASB's intent about the application of existing fair value

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measurement requirements. Other requirements change a particular principle or requirement for measuring fair value or for disclosing information about fair value measurements. ASU 2011-04 is effective for public companies for interim and annual periods beginning after December 15, 2011 and should be applied prospectively. Early application is not permitted. We intend to adopt this standard beginning in 2012. We are currently evaluating the impact, if any, that our adoption of ASU 2011-04 will have on our consolidated financial statements.

In June 2011, the FASB issued ASU No. 2011-05, *Presentation of Comprehensive Income,* or ASU 2011-05, which is intended to facilitate the convergence of U.S. GAAP and IFRS as well as to increase the transparency of items reported in other comprehensive income. As a result of ASU 2011-05, all nonowner changes in stockholders' equity are required to be presented in a single continuous statement of comprehensive income or in two separate but consecutive statements. The option to present other comprehensive income in the statement of changes in equity has been eliminated. ASU 2011-05 is effective for public companies for fiscal years, and interim periods within those years, beginning after December 15, 2011 and should be applied retrospectively. In December 2011, the FASB issued ASU No. 2011-12, *Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05,* or ASU 2011-12, which defers the effective date of the provisions of ASU 2011-05 pertaining to the presentation of reclassification adjustments out of accumulated other comprehensive income. All other requirements in ASU 2011-05 are not affected by ASU 2011-12. ASU 2011-12 is effective for public companies for fiscal years, and interim periods within those years, beginning after December 15, 2011. We intend to adopt these standards beginning in 2012. As ASU 2011-05 and ASU 2011-12 impact presentation only, they will have no effect on our consolidated financial position or results of operations.

Item 7A. ***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 1% change in interest rates would not have a material effect on the fair market value of our portfolio. Accordingly, we would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest rates on our investment portfolio.

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

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Our 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, 2011, 2010 and 2009 had a significant impact on our results of operations.

Item 8. ***Consolidated Financial Statements and Supplementary Data***

Our consolidated financial statements, together with the independent registered public accounting firm report thereon, appear at pages F-1 through F-46, respectively, of this Annual Report on Form 10-K.

Item 9. ***Changes in and Disagreements with Accountants on Accounting and Financial Disclosure***

None.

Item 9A. ***Controls and Procedures***

Evaluation of Disclosure Controls and Procedures

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

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Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act as the process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that:

(1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets;

(2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with the authorizations of management and directors; and

(3) provide reasonable assurance regarding the prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on our financial statements.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework provided in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2011.

The effectiveness of our internal control over financial reporting as of December 31, 2011 has been audited by Ernst and Young LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

Changes in Internal Control

As required by Rule 13a-15(d) of the Exchange Act, our management, including our principal executive officer and our principal financial officer, conducted an evaluation of the internal control over financial reporting to determine whether any changes occurred during the quarter ended December 31, 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, our principal executive officer and principal financial officer concluded no such changes during the quarter ended December 31, 2011 materially affected, or were reasonably likely to materially affect, our internal control over financial reporting.

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Ironwood Pharmaceuticals, Inc.

We have audited Ironwood Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Ironwood Pharmaceuticals, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Controls Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit 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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Ironwood Pharmaceuticals, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Ironwood Pharmaceuticals, Inc. as of December 31, 2011 and 2010, 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, 2011 of Ironwood Pharmaceuticals, Inc. and our report dated February 29, 2012 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Boston, Massachusetts
February 29, 2012

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Item 9B. ***Other Information***

None.

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PART III

Item 10. ***Directors, Executive Officers and Corporate Governance***

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 is available on our corporate website at http://www.ironwoodpharma.com. 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 Annual Report on Form 10-K.

Certain information regarding our executive officers is set forth at the end of Part I, Item 1 of this Form 10-K under the heading, "Executive Officers of the Registrant." The other information required by this item is incorporated by reference from our proxy statement for our 2012 Annual Meeting of Stockholders.

Item 11. ***Executive Compensation***

The information required by this item is incorporated by reference from our proxy statement for our 2012 Annual Meeting of Stockholders.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

The information relating to security ownership of certain beneficial owners of our common stock and information relating to the security ownership of our management required by this item is incorporated by reference from our proxy statement for our 2012 Annual Meeting of Stockholders.

The table below sets forth information with regard to securities authorized for issuance under our equity compensation plans as of December 31, 2011. As of December 31, 2011, we had four active equity compensation plans, each of which was approved by our stockholders:

Our Amended and Restated 2002 Stock Incentive Plan;

Our Amended and Restated 2005 Stock Incentive Plan;

Our Amended and Restated 2010 Employee, Director and Consultant Equity Incentive Plan; and

Our 2010 Employee Stock Purchase Plan.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants, and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	16,424,500	$ 6.09	6,519,027
Equity compensation plans not approved by security holders			
Total	16,424,500		6,519,027

Item 13. ***Certain Relationships and Related Transactions, and Director Independence***

The information required by this item is incorporated by reference from our proxy statement for our 2012 Annual Meeting of Stockholders.

Item 14. ***Principal Accountant Fees and Services***

The information required by this item is incorporated by reference from our proxy statement for our 2012 Annual Meeting of Stockholders.

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PART IV

Item 15. ***Exhibits and Financial Statement Schedules***

(a) List of documents filed as part of this report

(1) Consolidated Financial Statements listed under Part II, Item 8 and included herein by reference.

(2) Consolidated Financial Statement Schedules
No schedules are submitted because they are not applicable, not required or because the information is included in the Consolidated Financial Statements or Notes to Consolidated Financial Statements.

(3) Exhibits

		Incorporated by reference herein	
Number	**Description**	**Form**	**Date**
3.1	Eleventh Amended and Restated Certificate of Incorporation	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2010
3.2	Fifth Amended and Restated Bylaws	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2010
4.1	Specimen Class A common stock certificate	Registration Statement on Form S-1, as amended (File No. 333-163275)	January 20, 2010
4.2	Eighth Amended and Restated Investors' Rights Agreement, dated as of September 1, 2009, by and among Ironwood Pharmaceuticals, Inc., the Founders and the Investors named therein	Registration Statement on Form S-1, as amended (File No. 333-163275)	November 20, 2009
10.1#	1998 Amended and Restated Stock Option Plan and form agreements thereunder	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.2#	Amended and Restated 2002 Stock Incentive Plan and form agreements thereunder	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.3#	Amended and Restated 2005 Stock Incentive Plan and form agreements thereunder	Registration Statement on Form S-1, as amended (File No. 333-163275)	January 29, 2010
10.4#	Amended and Restated 2010 Employee, Director and Consultant Equity Incentive Plan	Quarterly Report on Form 10-Q (File No. 001-34620)	May 13, 2011
10.4.1#	Form agreement under the 2010 Employee, Director and Consultant Equity Incentive Plan	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2010
10.5#	2010 Employee Stock Purchase Plan	Registration Statement on Form S-8 (File No. 333-165230)	March 5, 2010

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Number	Description	Incorporated by reference herein Form	Date
10.6#	Change of Control Severance Benefit Plan	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.7#	Director Compensation Plan	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.8#	Form of Indemnification Agreement with directors and officers	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.9#	Consulting Agreement, dated as of November 30, 2009, by and between Christopher Walsh and Ironwood Pharmaceuticals, Inc.	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.10+	Collaboration Agreement, dated as of September 12, 2007, as amended on November 3, 2009, by and between Forest Laboratories, Inc. and Ironwood Pharmaceuticals, Inc.	Registration Statement on Form S-1, as amended (File No. 333-163275)	February 2, 2010
10.11+	License Agreement, dated as of April 30, 2009, by and between Almirall, S.A. and Ironwood Pharmaceuticals, Inc.	Registration Statement on Form S-1, as amended (File No. 333-163275)	February 2, 2010
10.12+	License Agreement, dated as of November 10, 2009, by and among Astellas Pharma, Inc. and Ironwood Pharmaceuticals, Inc.	Registration Statement on Form S-1, as amended (File No. 333-163275)	February 2, 2010
10.13+	Commercial Supply Agreement, dated as of June 23, 2010, by and among PolyPeptide Laboratories, Inc. and Polypeptide Laboratories (SWEDEN) AB, Forest Laboratories, Inc. and Ironwood Pharmaceuticals, Inc.	Quarterly Report on Form 10-Q (File No. 001-34620)	August 10, 2010
10.14+	Commercial Supply Agreement, dated as of March 28, 2011, by and among Corden Pharma Colorado (f/k/a Roche Colorado Corporation), Ironwood Pharmaceuticals, Inc. and Forest Laboratories, Inc.	Quarterly Report on Form 10-Q (File No. 001-34620)	May 13, 2011

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		Incorporated by reference herein	
Number	**Description**	**Form**	**Date**
10.15	Lease for facilities at 301 Binney St., Cambridge, MA, dated as of January 12, 2007, as amended on April 9, 2009, by and between Ironwood Pharmaceuticals, Inc. and BMR-Rogers Street LLC	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.15.1	Second Amendment to Lease for facilities at 301 Binney St., Cambridge, MA, dated as of February 9, 2010, by and Ironwood Pharmaceuticals, Inc. and BMR-Rogers Street LLC	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2010
10.15.2	Third Amendment to Lease for facilities at 301 Binney St., Cambridge, MA, dated as of July 1, 2010, by and between Ironwood Pharmaceuticals, Inc. and BMR-Rogers Street LLC	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2011
10.15.3	Fourth Amendment to Lease for facilities at 301 Binney St., Cambridge, MA, dated as of February 3, 2011, by and between Ironwood Pharmaceuticals, Inc. and BMR-Rogers Street LLC	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2011
10.15.4*	Fifth Amendment to Lease for facilities at 301 Binney St., Cambridge, MA, dated as of October 18, 2011, by and between Ironwood Pharmaceuticals, Inc. and BMR-Rogers Street LLC		
21.1*	Subsidiaries of Ironwood Pharmaceuticals, Inc.		
23.1*	Consent of Independent Registered Public Accounting Firm		
31.1*	Certification of Chief Executive Officer pursuant to Rules 13a-14 or 15d-14 of the Exchange Act		
31.2*	Certification of Chief Financial Officer pursuant to Rules 13a-14 or 15d-14 of the Exchange Act		
32.1	Certification of Chief Executive Officer pursuant to Rules 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350		

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Number	Description	Incorporated by reference herein Form	Date
32.2	Certification of Chief Financial Officer pursuant to Rules 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350		
101.INS	XBRL Instance Document		
101.SCH	XBRL Taxonomy Extension Schema Document		
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document		
101.LAB	XBRL Taxonomy Extension Label Linkbase Database		
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document		

*
Filed herewith.

Furnished herewith.

+
Confidential treatment granted under 17 C.F.R. §§200.80(b)(4) and 230.406. The confidential portions of this exhibit have been omitted and are marked accordingly. The confidential portions have been provided separately with the SEC pursuant to the confidential treatment request.

#
Management contract or compensatory plan, contract, or agreement.

(b) Exhibits.

The exhibits required by this Item are listed under Item 15(a)(3).

(c) Financial Statement Schedules.

The financial statement schedules required by this Item are listed under Item 15(a)(2).

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Commonwealth of Massachusetts, on the 29th day of February 2012.

Ironwood Pharmaceuticals, Inc.

By: /s/ PETER M. HECHT

Peter M. Hecht, Ph.D.
Chief Executive Officer

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

Signature	Title	Date
/s/ PETER M. HECHT Peter M. Hecht	Chief Executive Officer and Director *(Principal Executive Officer)*	February 29, 2012
/s/ MICHAEL J. HIGGINS Michael J. Higgins	Chief Operating Officer & Chief Financial Officer *(Principal Financial Officer & Principal Accounting Officer)*	February 29, 2012
/s/ BRYAN E. ROBERTS Bryan E. Roberts	Chairman of the Board	February 29, 2012
/s/ GEORGE CONRADES George Conrades	Director	February 29, 2012
/s/ JOSEPH C. COOK, JR. Joseph C. Cook, Jr.	Director	February 29, 2012
/s/ DAVID EBERSMAN David Ebersman	Director	February 29, 2012
/s/ MARSHA H. FANUCCI Marsha H. Fanucci	Director	February 29, 2012

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Signature	Title	Date
/s/ TERRANCE G. MCGUIRE Terrance G. McGuire	Director	February 29, 2012
/s/ DAVID E. SHAW David E. Shaw	Director	February 29, 2012
/s/ CHRISTOPHER T. WALSH Christopher T. Walsh	Director	February 29, 2012

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Index to Consolidated Financial Statements of
Ironwood Pharmaceuticals, Inc.

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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, 2011 and 2010, 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, 2011. 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. 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, 2011 and 2010, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2011, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financial statements, effective January 1, 2011, the Company adopted Financial Accounting Standards Board Accounting Standards Update No. 2010-17, *Revenue Recognition Milestone Method.*

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Ironwood Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 29, 2012 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Boston, Massachusetts
February 29, 2012

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Ironwood Pharmaceuticals, Inc.

Consolidated Balance Sheets

(In thousands, except share and per share amounts)

	December 31,	
	2011	**2010**
Assets		
Current assets:		
Cash and cash equivalents	$ 87,282	$ 44,321
Available-for-sale securities	76,734	203,706
Accounts receivable	74	19
Related party accounts receivable, net	578	2,876
Prepaid expenses and other current assets	2,899	5,320
Restricted cash		2,833
Total current assets	167,567	259,075
Restricted cash	7,647	7,647
Property and equipment, net	33,625	34,369
Other assets	138	274
Total assets	$ 208,977	$ 301,365
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 6,436	$ 4,302
Accrued research and development costs	7,010	8,140
Accrued expenses	11,122	8,938
Current portion of capital lease obligations	233	197
Current portion of deferred rent	4,042	2,799
Current portion of deferred revenue	36,291	40,050
Total current liabilities	65,134	64,426
Capital lease obligations, net of current portion	422	393
Deferred rent, net of current portion	12,435	14,612
Deferred revenue, net of current portion	21,130	62,383
Commitments and contingencies (Note 12 and Note 13)		
Stockholders' equity:		
Preferred stock, $0.001 par value, 75,000,000 shares authorized, no shares issued and outstanding at December 31, 2011 and December 31, 2010		
Class A common stock, $0.001 par value, 500,000,000 shares authorized and 61,801,770 shares issued and outstanding at December 31, 2011 and 48,202,089 shares issued and outstanding at December 31, 2010	62	48
Class B common stock, $0.001 par value, 100,000,000 shares authorized and 38,914,080 shares issued and outstanding at December 31, 2011 and 50,970,247 shares issued and outstanding at December 31, 2010	39	51
Additional paid-in capital	542,141	526,991
Accumulated deficit	(432,392)	(367,540)
Accumulated other comprehensive income	6	1
Total stockholders' equity	109,856	159,551
Total liabilities and stockholders' equity	$ 208,977	$ 301,365

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,		
	2011	**2010**	**2009**
Collaborative arrangements revenue	$ 65,871	$ 43,857	$ 34,321
Operating expenses:			
Research and development	86,093	77,454	76,100
General and administrative	45,920	27,169	19,037
Total operating expenses	132,013	104,623	95,137
Loss from operations	(66,142)	(60,766)	(60,816)
Other income (expense):			
Interest expense	(63)	(196)	(318)
Interest and investment income	456	614	240
Remeasurement of forward purchase contracts			600
Other income	900	993	
Other income (expense), net	1,293	1,411	522
Net loss from continuing operations before income tax (benefit) expense	(64,849)	(59,355)	(60,294)
Income tax (benefit) expense	3	(2,944)	(296)
Net loss from continuing operations	(64,852)	(56,411)	(59,998)
Net income (loss) from discontinued operations, net of tax provision of $2,944 in the year ended December 31, 2010		4,551	(13,314)
Net loss	(64,852)	(51,860)	(73,312)
Net (income) loss from discontinued operations attributable to noncontrolling interest		(1,121)	2,127
Net loss attributable to Ironwood Pharmaceuticals, Inc.	$ (64,852)	$ (52,981)	$ (71,185)
Net income (loss) per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted:			
Continuing operations	$ (0.65)	$ (0.63)	$ (8.43)
Discontinued operations		0.04	(1.57)
Net loss per share	$ (0.65)	$ (0.59)	$ (10.00)
Weighted average number of common shares used in net income (loss) per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted	99,874,790	89,653,364	7,116,774

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 (Note 14)		Class A common stock		Class B common stock		Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive income (loss)	Noncontrolling interest	Total stockholders' equity (deficit)
	Shares	Amount	Shares	Amount	Shares	Amount					
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 common stock upon exercise of stock options					255,875		272				272
Issuance of restricted common stock awards					515,549	1					1
Issuance of Series G Convertible preferred stock	2,083,333	25,000									
Settlement of forward purchase contract in connection with issuance of Series G Convertible preferred stock		(8,800)									
Issuance of Series H Convertible preferred stock	20,833	250									
Issuance of Series I Convertible preferred stock	681,819	15,000									
Settlement of forward purchase contract in connection with issuance of Series I Convertible preferred stock		(6,500)									
Share-based compensation expense related to issuance of stock options to non-employees							301				301
Share-based compensation expense related to issuance of stock options to employees							4,794				4,794
Share-based compensation expense from discontinued operations							149				149
Restricted common stock shares subject to repurchase							(111)				(111)
Comprehensive income (loss):											
Unrealized loss on short-term investments									(23)		(23)
Net loss								(71,185)		(2,127)	(73,312)
Total comprehensive loss											(73,335)
Balance at December 31, 2009	69,904,843	298,350			7,854,602	8	12,999	(314,559)		3,212	(298,340)
Issuance of common stock upon exercise of stock options and employee stock purchase plan			30,438		1,746,184	2	2,021				2,023
Issuance of common stock awards			22,825				259				259
Cancellation of restricted common stock awards					(40,000)						
Conversion of convertible preferred stock into common stock upon initial public offering	(69,904,843)	(298,350)			70,391,620	70	298,280				298,350
Issuance of shares upon initial public offering, net of offering costs of approximately $12.4 million			19,166,667	19			203,148				203,167

Conversion of Class B common stock to Class A common stock	28,982,159	29	(28,982,159)	(29)				
Share-based compensation expense related to issuance of stock options to non-employees					123			123
Share-based compensation expense related to issuance of stock options to employees and employee stock purchase plan					7,114			7,114
Share-based compensation expense from discontinued operations					59			59
Restricted common stock no longer subject to repurchase					55			55
Decrease in noncontrolling interest in subsidiary					2,933		(4,333)	(1,400)
Comprehensive income (loss):								
Unrealized gain on short-term investments						1		1
Net loss						(52,981)	1,121	(51,860)
Total comprehensive loss								(51,859)

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) (Continued)

(In thousands, except share amounts)

	Convertible preferred stock (Note 14)		Class A common stock		Class B common stock		Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive income (loss)	Noncontrolling interest	Total stockholders' equity (deficit)
	Shares	Amount	Shares	Amount	Shares	Amount					
Balance at December 31, 2010			48,202,089	48	50,970,247	51	526,991	(367,540)	1		159,551
Issuance of common stock upon exercise of stock options and employee stock purchase plan			112,433		1,463,449	2	3,391				3,393
Issuance of common stock awards			2,328				30				30
Cancellation of restricted common stock awards					(27,500)						
Conversion of Class B common stock to Class A common stock			13,484,920	14	(13,484,920)	(14)					
Share-based compensation expense related to issuance of stock options to non-employees							152				152
Share-based compensation expense related to issuance of stock options to employees and employee stock purchase plan							11,550				11,550
Repurchase and retirement of shares of common stock					(7,196)						
Restricted common stock no longer subject to repurchase							27				27
Comprehensive income (loss):											
Unrealized gain on short-term investments									5		5
Net loss								(64,852)			(64,852)
Total comprehensive loss											(64,847)
Balance at December 31, 2011	$		61,801,770	$ 62	38,914,080	$ 39	$ 542,141	$ (432,392)	$ 6	$	$ 109,856

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,		
	2011	**2010**	**2009**
Cash flows from operating activities:			
Net loss	$ (64,852)	$ (51,860)	$ (73,312)
Income (loss) from discontinued operations		4,551	(13,314)
Loss from continuing operations	(64,852)	(56,411)	(59,998)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	9,999	6,161	4,763
Loss on disposal of property and equipment	7	474	80
Remeasurement of forward purchase contracts			(600)
Share-based compensation expense	11,732	7,496	5,095
Accretion of discount/premium on investment securities	2,234	1,619	239
Changes in assets and liabilities:			
Accounts receivable	2,243	2,324	(648)
Restricted cash	2,833	(2,348)	(446)
Prepaid expenses and other current assets	2,421	(2,647)	(464)
Other assets	136	(253)	50
Accounts payable and accrued expenses	5,086	2,740	1,732
Accrued research and development costs	(1,130)	(4,261)	2,990
Deferred revenue	(45,012)	(23,569)	53,993
Deferred rent	(934)	6,745	1,279
Net cash provided by (used in) operating activities from continuing operations	(75,237)	(61,930)	8,065
Net cash used in operating activities from discontinued operations		(5,969)	(11,510)
Total net cash used in operating activities	(75,237)	(67,899)	(3,445)
Cash flows from investing activities:			
Purchases of available-for-sale securities	(97,511)	(441,799)	(26,673)
Sales and maturities of available-for-sale securities	222,254	236,475	48,455
Purchases of property and equipment	(9,682)	(17,220)	(3,524)
Proceeds from sale of property and equipment	4	1	21
Proceeds from sale of subsidiary		9,500	
Net cash provided by (used in) investing activities from continuing operations	115,065	(213,043)	18,279
Net cash provided by (used in) investing activities from discontinued operations		1	(521)
Total net cash provided by (used in) investing activities	115,065	(213,042)	17,758
Cash flows from financing activities:			
Proceeds from issuance of preferred stock, net of issuance costs			40,250
Proceeds from initial public offering		203,167	
Proceeds from exercise of stock options, stock purchase plan and issuance of restricted stock	3,393	2,023	272
Proceeds from borrowings			1,079
Payments on borrowings	(260)	(1,957)	(1,250)
Net cash provided by financing activities from continuing operations	3,133	203,233	40,351
Net cash provided by (used in) financing activities from discontinued operations		(277)	1,312
Total net cash provided by financing activities	3,133	202,956	41,663
Net increase (decrease) in cash and cash equivalents	42,961	(77,985)	55,976

Cash and cash equivalents, beginning of period	44,321	122,306	66,330
Cash and cash equivalents, end of period	$ 87,282	$ 44,321	$ 122,306
Supplemental cash flow disclosures:			
Cash paid for interest (includes cash paid by Microbia)	$ 64	$ 325	$ 412
Cash paid for income taxes	$ 3	$	$ (153)
Settlement of forward purchase contracts	$	$	$ (15,300)
Purchases under capital leases	$ 325	$ 529	$ 67
Debt and interest paid by purchaser of subsidiary	$	$ 1,075	$

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

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements

1. Nature of Business

Ironwood Pharmaceuticals, Inc. (the "Company") is an entrepreneurial pharmaceutical company that discovers, develops and intends to commercialize differentiated medicines that improve patients' lives. The Company's lead product candidate is linaclotide, a guanylate cyclase type-C ("GC-C") agonist being developed for the treatment of patients with irritable bowel syndrome with constipation ("IBS-C") and chronic constipation ("CC"). The Company and its U.S. collaboration partner, Forest Laboratories, Inc. ("Forest"), announced in August 2011 that they submitted a New Drug Application ("NDA") to the U.S. Food and Drug Administration ("FDA") for linaclotide for the treatment of IBS-C and CC. In October 2011, the FDA accepted the NDA for review, and the FDA Prescription Drug User Fee Act ("PDUFA") target action date is expected to occur in June 2012. In September 2011, the Company and its European partner, Almirall, S.A. ("Almirall") each announced that Almirall submitted a Market Authorization Application ("MAA") to the European Medicines Agency ("EMA") for linaclotide for the treatment of IBS-C. The Company also has a pipeline focused on both research and development of early development candidates and discovery research in multiple therapeutic areas, including gastrointestinal disease, CNS disorders, respiratory disease and cardiovascular disease.

Prior to September 2010, the Company held a majority ownership interest in Microbia, Inc. (formerly known as Microbia Precision Engineering), a subsidiary formed in September 2006. Microbia, Inc. ("Microbia") engaged in a specialty biochemicals business based on a proprietary strain-development platform. In September 2010, the Company sold its interest in Microbia to DSM Holding Company USA, Inc. ("DSM") (Note 2).

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 currently operates in one reportable business segment, human therapeutics. Prior to September 21, 2010, the Company operated in two reportable business segments, human therapeutics and biomanufacturing (Note 19).

The Company has generated an accumulated deficit as of December 31, 2011 of approximately $432.4 million since inception. In February 2010, the Company completed its initial public offering of Class A common stock and raised a total of approximately $203.2 million in net proceeds (Note 3).

2. Summary of Significant Accounting Policies

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 21). The accompanying consolidated financial statements of Ironwood Pharmaceuticals, Inc. include the assets, liabilities, revenue, and expenses of Microbia, over which the Company exercised control until September 21, 2010, when the Company sold its interest in Microbia to DSM. The Company recorded 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.

Sale of Subsidiary and Discontinued Operations

On September 21, 2010, the Company sold its interest in Microbia to DSM in exchange for cash proceeds of $9.5 million, the payment of approximately $1.1 million of Microbia debt and interest by

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

DSM and future contingent consideration based on the sale of products incorporating Microbia's technology. As a result of the sale of its interest in Microbia, the Company ceased to have any financial interest in Microbia. The Company maintained no further investment in Microbia and recorded a gain on the sale of Microbia in its consolidated statements of operations of approximately $12.2 million at the time of the sale. The Company determined that Microbia qualified for presentation as discontinued operations and accordingly, the Company classified the assets, liabilities, operations and cash flows of Microbia as discontinued operations for all periods presented.

The agreement with DSM also included future contingent consideration in the form of a royalty on future sales of products incorporating Microbia's technology through the earlier of a) 2024, b) the invalidity of any Microbia patent, or c) the maximum agreed upon amount is reached. The Company's accounting policy is to account for the future contingent consideration, if any, as a gain contingency as the proceeds have not been received and the receipt of royalty income is uncertain. As a result, proceeds will only be recorded in future earnings as they are earned. As of December 31, 2011, no amounts have been recorded for the contingent consideration in the Company's consolidated financial statements.

Use of Estimates

The preparation of consolidated financial statements in accordance with generally accepted accounting principles in the U.S. 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, available-for-sale securities, impairment of long-lived assets, income taxes including the valuation allowance for deferred tax assets, 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.

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, U.S. Treasury securities and certain U.S. government sponsored securities. The carrying amount of cash equivalents approximates fair value. The amount of cash equivalents included in cash and cash equivalents was approximately $77.2 million and $39.2 million at December 31, 2011 and 2010, respectively.

Restricted Cash

The Company is contingently liable under unused letters of credit with a bank, related to the Company's facility lease agreements and credit card arrangements, in the amount of approximately $7.6 million and $10.5 million as of December 31, 2011 and 2010, respectively. As a result, the Company has restricted cash of approximately $7.6 million and $10.5 million as of December 31, 2011 and 2010, respectively, securing these letters of credit. The cash will be restricted until the termination

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

of the leases and credit card arrangements. In January 2011, approximately $2.8 million of restricted cash was released due to the expiration of the 320 Bent Street facility lease in December 2010. As of December 31, 2010, the $2.8 million is shown as a current asset on the Company's consolidated balance sheets.

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 other-than-temporary impairments for the years ended December 31, 2011, 2010 and 2009.

Accounts Receivable and Related Valuation Account

The Company makes judgments as to its ability to collect outstanding receivables and provides an 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 its collaboration and license agreements. 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, 2011 and 2010.

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, including related party accounts receivable, primarily consist of amounts due under the collaboration agreement with Forest and license agreements with Almirall, S.A. ("Almirall") and Astellas Pharma Inc. ("Astellas") (Note 5) 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

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

shares of the Company's Series G convertible preferred stock and effective November 2, 2009, Almirall became a related party when the Company sold to them 681,819 shares of its Series I convertible preferred stock.

The percentages of revenue from continuing operations recognized from significant customers of the Company in the years ended December 31, 2011, 2010 and 2009 are included in the following table:

	Years Ended December 31,		
	2011	2010	2009
Collaborative Partner:			
Forest	64%	50%	79%
Almirall	31%	43%	21%
Astellas	5%	7%	%

Tate & Lyle Investments, Ltd. ("T&L") accounted for approximately 98% and 100% of the Company's revenue from discontinued operations for the years ended December 31, 2010 and 2009, respectively. For the years ended December 31, 2011, 2010 and 2009, no additional customers accounted for more than 10% of the Company's revenue from continuing operations.

At December 31, 2011 and 2010, accounts receivable from Forest, net of any payables due Forest, accounted for approximately 86% and 89%, respectively, of the Company's total accounts receivable. At December 31, 2011 and 2010, Almirall accounted for approximately 2% and 10%, respectively, of the Company's total accounts receivable. At December 31, 2011 and 2010, Astellas accounted for approximately 11% and 0%, respectively of the Company's total accounts receivable.

Revenue Recognition

The Company's revenue is generated through collaborative research and development and licensing agreements. The terms of these agreements contain multiple deliverables which may include (i) licenses, (ii) research and development activities, and (iii) the manufacture of active pharmaceutical ingredient ("API") and development materials for the collaborative partner. Payments to the Company under these agreements may include non-refundable license fees, payments for research and development activities, payments for the manufacture of API and development materials, payments based upon the achievement of certain milestones and royalties on product sales. In addition, prior to September 2010, the Company generated services revenue through agreements that generally provided for fees for research and development services rendered.

For arrangements that include multiple deliverables, the Company follows the provisions of the Accounting Standards Codification ("ASC") Topic 605-25, *Revenue Recognition Multiple-Element Arrangements,* in accounting for these agreements. Effective January 1, 2011, the Company adopted Accounting Standards Update ("ASU") No. 2009-13, *Multiple-Deliverable Revenue Arrangements* ("ASU 2009-13"), which amends ASC Topic 605-25. Refer to Note 2, "Recently Adopted Accounting Standards," for additional discussion of this standard and its impact on the Company's accounting for collaboration and license agreements. In order to account for these agreements, the Company must identify the deliverables included within the agreement and evaluate which deliverables represent separate units of accounting based on if certain criteria are met, including whether the delivered element has standalone value to the collaborator. The consideration received is allocated among the

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

separate units of accounting based on the relative selling price, and the applicable revenue recognition criteria are applied to each of the separate units. If the separation criteria is not met, revenue of the combined unit of accounting is recorded based on the method appropriate for the last delivered item. 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 or determinable, and collection is reasonably assured.

At December 31, 2011, the Company had collaboration and license agreements with Forest, Almirall and Astellas. Refer to Note 5, "Collaboration and License Agreements," for additional discussion of these agreements.

There are no performance, cancellation, termination or refund provisions in any of the Company's arrangements that contain material financial consequences to the Company.

Collaboration and License Agreements

The significant deliverables under the Company's collaboration and license agreements generally include the license to develop and commercialize linaclotide, the Company's GC-C agonist, and may also include deliverables related to research and development activities, and the manufacture of API and development materials for the collaborative partner.

Generally, collaboration and license agreements contain non-refundable terms for payments and, depending on the terms of the agreement, provide that the Company will (i) provide research and development activities, including participation on a joint development committee, (ii) manufacture API and development materials which are reimbursed at a contractually determined rate, (iii) earn payments upon the achievement of certain milestones, and (iv) earn royalty payments on sales of linaclotide. In determining the separate units of accounting, management evaluates whether the license has standalone value to the partner based on the consideration of the relevant facts and circumstances for each arrangement. Factors considered in this determination include the research capabilities of the partner and the availability of peptide research expertise in the general marketplace. In addition, the Company considers whether the collaborator can use the license for its intended purpose without the receipt of the remaining deliverables, and whether the value of the license is dependent on the undelivered items and whether there are other vendors that can provide the undelivered item.

For all of the collaboration and license agreements discussed in Note 5, the licenses and research and development activities did not qualify as separate units of accounting since the licenses did not have standalone value without the research and development activities. Up-front payments on a license are deferred if facts and circumstances dictate that the license does not have standalone value. The determination of the length of the period over which to recognize the revenue is subject to judgment and estimation and can have an impact on the amount of revenue recognized in a given period. The Company generally estimates this period as the estimated period of performance, which is typically the research and development term due to the Company's continuing involvement in the performance of research and development activities, primarily through its participation on a joint development committee. Typically the research and development term begins at the inception of the collaboration or license agreement and concludes when the Company's significant research and development obligations under the agreement have concluded. The Company believes this period of involvement is 60 months for the Forest collaboration, 41 months for the Almirall license agreement and 115 months for the Astellas license agreement. Quarterly, the Company reassesses its periods of substantial involvement

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

over which the Company amortizes its up-front license fees and makes adjustments as appropriate. In the event that a license were to be terminated, the Company would recognize as revenue any portion of the up-front fee that had not previously been recorded as revenue, but was classified as deferred revenue at the date of such termination.

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. Refer to Note 5 for details on the specific milestones in each of the Company's agreements.

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 has historically recognized as revenue on the date the milestone was achieved an amount equal to the applicable percentage of the performance period that had elapsed as of the date the milestone was achieved, with the balance being deferred and recognized on a straight-line basis over the remaining period of performance. Effective January 1, 2011, the Company adopted ASU No. 2010-17, *Revenue Recognition Milestone Method* ("ASU 2010-17"). Refer to Note 2, "Recently Adopted Accounting Standards," for additional discussion of the adoption of this standard and its impact on the Company's accounting for collaboration and license agreements. Under ASU 2010-17, beginning January 1, 2011, in those circumstances where a substantive milestone is achieved and collection of the related receivable is reasonably assured, the Company recognizes revenue related to the milestone in its entirety in the period in which the milestone is achieved. At the inception of each arrangement that includes milestone payments, the Company evaluates whether each milestone is substantive. This evaluation includes an assessment of whether (a) the consideration is commensurate with either (1) the entity's performance to achieve the milestone, or (2) the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from the entity's performance to achieve the milestone, (b) the consideration relates solely to past performance and (c) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. The Company evaluates factors such as the scientific, clinical, regulatory, commercial and other risks that must be overcome to achieve the respective milestone, the level of effort and investment required and whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment. Substantive milestones are due to the Company upon NDA approval of linaclotide in the U.S., upon the initiation of a Phase 3 study for linaclotide in Japan, upon the filing and approval of the Japanese equivalent of an NDA with the relevant regulatory authority in Japan. Milestone payments received prior to the adoption of ASU 2010-17 will continue to be recognized over the remaining period of performance.

The Company produces development materials and API for its collaborators and is reimbursed for its costs to produce the material. The Company recognizes revenue on development material and API when the material has passed all quality testing required for collaborator acceptance, delivery has occurred, title and risk of loss have transferred to the collaborator, the price is fixed or determinable, and collection is reasonably assured.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

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 license agreement with Almirall, it is required that taxes be withheld on its payments. The Company has adopted a policy to recognize revenue net of these tax withholdings.

Services Revenue

Prior to September 2010, the Company recognized services revenue when there was persuasive evidence that an arrangement existed, services had been rendered or delivery had occurred, the price was fixed or determinable, and collection was reasonably assured. Revenue from research and development services rendered was recognized as services were performed. As a result of the sale of the Company's interest in Microbia in September 2010, services revenue is included in net income from discontinued operations.

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 are comprised of 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, including supply chain development; and other outside expenses. As a result of the sale of the Company's interest in Microbia in September 2010, costs of revenue related to the Microbia services contracts and costs associated with Microbia's research and development activities are included in net income (loss) from discontinued operations.

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 primarily 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

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

employees was determined as the difference, if any, between the fair value of the underlying common stock on the date compensation was 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.

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 unvested 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. During the years ended December 31, 2011, 2010 and 2009, the Company recorded expense for sabbatical costs of approximately $0.3 million, $0.3 million and $0.1 million, respectively. These values exclude any amounts recorded for sabbatical costs from discontinued operations.

Noncontrolling Interest

Noncontrolling interest represents the noncontrolling stockholder's proportionate share of equity and net income or net loss of the Company's former consolidated subsidiary, Microbia. On September 21, 2010, the Company sold its interest in Microbia, resulting in the deconsolidation of its former subsidiary bringing the noncontrolling interest balance to zero. Immediately prior to the sale, the Company converted certain intercompany debt and payables into preferred stock of Microbia, which resulted in an approximately $2.9 million decrease in the noncontrolling interest. Prior to the sale of Microbia, the noncontrolling stockholder's proportionate share of the equity in Microbia was reflected as noncontrolling interest in the Company's consolidated balance sheets as a component of stockholders' equity (deficit). The proportionate share of the net loss attributable to noncontrolling interest is reflected in the accompanying consolidated statements of operations.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

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 unvested restricted stock and 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. The loss attributable to the noncontrolling interest is included in the net income (loss) per share from discontinued operations.

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 (In Years)
Laboratory equipment	5
Computer and office equipment	3
Furniture and fixtures	7
Software	3

Included in property and equipment are certain costs of software obtained for internal use. Costs incurred during the preliminary project stage are expensed as incurred, while costs incurred during the application development stage are capitalized and amortized over the estimated useful life of the software. The Company also capitalizes costs related to specific upgrades and enhancements when it is probable the expenditures will result in additional functionality. Maintenance and training costs related to software obtained for internal use are expensed as incurred.

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.

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.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

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 were no indicators of impairment at December 31, 2011 or December 31, 2010. At December 31, 2009, the Company concluded that impairments of certain long-lived assets existed at its former subsidiary, Microbia, resulting from its restructuring in the fourth quarter of 2009 (Note 21). Such long-lived assets were written down to their estimated fair value, which resulted in a charge of approximately $0.9 million. This charge is shown as part of net income (loss) from discontinued operations.

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.

Prior to the sale of its interest in Microbia in September 2010, the Company had 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 presented as a component of the net income (loss) from discontinued operations.

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 Adopted Accounting Standards

In October 2009, the FASB issued ASU 2009-13. ASU 2009-13 amended existing revenue recognition accounting pronouncements that are currently within the scope of FASB ASC 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

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

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. On January 1, 2011, the Company adopted ASU 2009-13 on a prospective basis. The adoption did not have a material impact on the Company's consolidated financial position or results of operations.

In April 2010, the FASB issued ASU 2010-17. ASU 2010-17 provides guidance in applying the milestone method of revenue recognition to research or development arrangements. Under this guidance, management may recognize revenue contingent upon the achievement of a milestone in its entirety, in the period in which the milestone is achieved, only if the milestone meets all the criteria within the guidance to be considered substantive. This ASU is effective on a prospective basis for research and development milestones achieved in fiscal years beginning on or after June 15, 2010. On January 1, 2011, the Company adopted ASU 2010-17 to change its accounting policy to begin applying the milestone method on a prospective basis. As the Company elected prospective adoption, there was no material impact on its consolidated financial position or results of operations at the time of adoption. However, during the fourth quarter of 2011, the Company recognized two milestone payments for a total of $20 million in revenue due to substantive milestones achieved after ASU 2010-17 was adopted. The adoption resulted in approximately $2.7 million ($0.03 per share) of additional revenue recognized in 2011 upon the achievement of the milestones as compared to recognition under the Company's prior milestone accounting policy. The Company's prior milestone accounting policy recorded as revenue 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.

In December 2010, the FASB issued ASU No. 2010-27, *Fees Paid to the Federal Government by Pharmaceutical Manufacturers* ("ASU 2010-27") which provides guidance on how to recognize and classify the fees mandated by the Patient Protection and Affordable Care Act as amended by the Health Care and Education Reconciliation Act (together, the "Acts"). The Acts impose an annual fee for each calendar year beginning on or after January 1, 2011 payable by branded prescription drug manufacturers and importers on branded prescription drugs. The liability for the fee should be estimated and recorded in full upon the first qualifying sale with a corresponding deferred cost that is amortized to expense using a straight-line method of allocation over the calendar year that it is payable. ASU 2010-27 is effective for calendar years beginning on or after December 31, 2010, when the fee initially becomes effective. On January 1, 2011, the Company adopted ASU 2010-27 on a prospective basis. As the Company does not currently have a commercial product, the effect of this guidance will be limited to future transactions.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

2. Summary of Significant Accounting Policies (Continued)

Recently Issued Accounting Standards

In May 2011, the FASB issued ASU No. 2011-04, *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs* ("ASU 2011-04"). ASU 2011-04 amends ASC 820, *Fair Value Measurement*, to ensure that fair value has the same meaning in GAAP and International Financial Reporting Standards ("IFRS") and improves the comparability of the fair value measurement and disclosure requirements in GAAP and IFRS. ASU 2011-04 applies to all entities that measure assets, liabilities or instruments classified in shareholder's equity at fair value, or provide fair value disclosures for items not recorded at fair value. ASU 2011-04 results in common fair value measurement and disclosure requirements in U.S. GAAP and IFRSs. Consequently, ASU 2011-04 changes the wording used to describe many of the requirements in U.S. GAAP for measuring fair value and for disclosing information about fair value measurements. For many of the requirements, ASU 2011-04 will not result in a change in the application of the requirements in ASC 820. Some of the requirements in ASU 2011-04 clarify the FASB's intent about the application of existing fair value measurement requirements. Other requirements change a particular principle or requirement for measuring fair value or for disclosing information about fair value measurements. ASU 2011-04 is effective for public companies for interim and annual periods beginning after December 15, 2011 and should be applied prospectively. Early application is not permitted. The Company will adopt this standard beginning in 2012. The Company is currently evaluating the impact, if any, that its adoption of ASU 2011-04 will have on its consolidated financial statements.

In June 2011, the FASB issued ASU No. 2011-05, *Presentation of Comprehensive Income* ("ASU 2011-05") which is intended to facilitate the convergence of U.S. GAAP and IFRS as well as to increase the transparency of items reported in other comprehensive income. As a result of ASU 2011-05, all nonowner changes in stockholders' equity are required to be presented in a single continuous statement of comprehensive income or in two separate but consecutive statements. The option to present other comprehensive income in the statement of changes in equity has been eliminated. ASU 2011-05 is effective for public companies for fiscal years, and interim periods within those years, beginning after December 15, 2011 and should be applied retrospectively. In December 2011, the FASB issued ASU No. 2011-12, *Deferral of the Effective Date for Amendments to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income in Accounting Standards Update No. 2011-05* ("ASU 2011-12") which defers the effective date of the provisions of ASU 2011-05 pertaining to the presentation of reclassification adjustments out of accumulated other comprehensive income. All other requirements in ASU 2011-05 are not affected by ASU 2011-12. ASU 2011-12 is effective for public companies for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company will adopt these standards beginning in 2012. As ASU 2011-05 and ASU 2011-12 impact presentation only, they will have no effect on the Company's consolidated financial position or results of operations.

3. Initial Public Offering

In February 2010, the Company completed its initial public offering of Class A common stock pursuant to a registration statement that was declared effective on February 2, 2010. The Company sold 19,166,667 shares of its Class A common stock, which included 2,500,000 shares of the Company's Class A common stock sold pursuant to an over-allotment option granted to the underwriters, at a price to the public of $11.25 per share. As a result of the initial public offering, the Company raised a total of $215.6 million in gross proceeds, and approximately $203.2 million in net proceeds after

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

3. Initial Public Offering (Continued)

deducting underwriting discounts and commissions of $10.5 million and offering expenses of approximately $1.9 million.

Upon the closing of the initial public offering, 69,904,843 shares of the Company's outstanding convertible preferred stock automatically converted into 70,391,620 shares of its Class B common stock.

4. Net Loss Per Share

Basic and diluted net loss per share is calculated as follows (in thousands, except share and per share amounts):

	Years Ended December 31,		
	2011	**2010**	**2009**
Numerator:			
Net loss from continuing operations.	$ (64,852)	$ (56,411)	$ (59,998)
Net income (loss) from discontinued operations		4,551	(13,314)
Less: Net (income) loss from discontinued operations attributable to noncontrolling interest		(1,121)	2,127
Net income (loss) from discontinued operations attributable to Ironwood Pharmaceuticals, Inc.		3,430	(11,187)
Net loss attributable to Ironwood Pharmaceuticals, Inc.	$ (64,852)	$ (52,981)	$ (71,185)
Denominator:			
Weighted average number of common shares used in net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted	99,874,790	89,653,364	7,116,774
Net loss per share associated with continuing operations. basic and diluted	$ (0.65)	$ (0.63)	$ (8.43)
Net income (loss) per share from discontinued operations attributable to Ironwood Pharmaceuticals, Inc. basic and diluted		0.04	(1.57)
Net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted	$ (0.65)	$ (0.59)	$ (10.00)

The following potentially dilutive securities have been excluded from the computation of diluted weighted average shares outstanding as of December 31, 2011, 2010 and 2009, as they would be anti-dilutive:

	Years Ended December 31,		
	2011	**2010**	**2009**
Convertible preferred stock			69,904,843
Options to purchase common stock	16,424,500	14,603,229	13,691,579
Shares subject to repurchase	160,413	284,960	434,156
	16,584,913	14,888,189	84,030,578

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

5. 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 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 U.S. 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. Because the license to jointly develop and commercialize linaclotide did not have standalone value without the research and development activities provided by the Company, the Company is recognizing the up-front license fee as revenue on a straight-line basis over 60 months, which is the Company's estimate of the period over which linaclotide will be jointly developed under the collaboration. At December 31, 2011, approximately $9.9 million of the up-front license fee remains deferred and is being recognized on a straight-line basis over the remaining estimated development period. The collaboration agreement also includes contingent milestone payments, as well as a contingent equity investment based on the achievement of specific development and commercial milestones. 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. At December 31, 2011, $120.0 million in license fees and milestone payments had already been received, as well as a $25.0 million equity investment in the Company's capital stock. Of the remaining milestones, each of which the Company considers substantive, pre-commercial milestone payments could total up to $85.0 million upon NDA approval. The Company can also achieve up to approximately $100.0 million in a sales related milestone if certain conditions are met.

The collaboration agreement included a contingent equity investment, in the form of a forward purchase contract, which required Forest to purchase shares of the Company's convertible preferred stock, upon achievement of a specific clinical milestone. Based on the Company's evaluation, this financial instrument was considered an asset or liability, which was required to be carried at fair value. At the inception of the arrangement, the Company valued the contingent equity investment and recorded a $9.0 million asset and incremental deferred revenue. The $9.0 million of incremental deferred revenue is being recognized as revenue on a straight-line basis over the period of the Company's continuing involvement, which was estimated to be 60 months from the inception of the arrangement. At December 31, 2011, approximately $1.3 million of the incremental deferred revenue remains deferred. In July 2009, the Company achieved the clinical milestone triggering the equity investment and 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 Company has achieved four of the development milestones under this agreement, all of which the Company determined to be substantive. In September 2008, the Company achieved a clinical milestone which triggered a $10.0 million milestone payment and in July 2009, the Company achieved a second clinical milestone which triggered a $20.0 million milestone payment. At December 31, 2011, approximately $1.4 million and $2.8 million of the milestone payments, respectively, remain deferred and are being recognized on a straight-line basis over the remaining estimated development period. In October 2011, the Company achieved the pre-commercial milestones of FDA acceptance of the linaclotide NDA for both IBS-C and CC and received milestone payments of

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

5. Collaboration and License Agreements (Continued)

$20.0 million from Forest. In accordance with ASU 2010-17, adopted in January 2011, these milestones were recognized as revenue in their entirety upon achievement.

The Company recognized revenue from the Forest collaboration agreement totaling approximately $41.8 million, $21.8 million and $27.0 million during the years ended December 31, 2011, 2010 and 2009, respectively.

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. As a result of the cost-sharing arrangements under the collaboration, the Company offset approximately $8.2 million, $15.5 million and $15.1 million during the years ended December 31, 2011, 2010 and 2009 respectively, against research and development expense.

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 Company elected to record the non-refundable up-front payment on a net basis. Because the license to develop and commercialize linaclotide did not have standalone value without the research and development activities provided by the Company, the Company is recognizing the up-front license fee as revenue on a straight-line basis over the development period, the Company's estimate of the period over which linaclotide will be developed under the license agreement for the European territory. In June 2011, the Company revised its estimate of the development period from 50 months to 41 months and based on the Company's assessment of approval timelines adjusted its amortization of the remaining deferred revenue accordingly. This resulted in the recognition of an additional approximately $5.0 million of revenue in 2011. At December 31, 2011, approximately $10.7 million of the up-front license fee remains deferred. The license agreement also includes contingent milestone payments, as well as a contingent equity investment, that could total up to $55.0 million upon achievement of specific clinical and sales milestones. At December 31, 2011, $19.0 million, net of foreign withholding taxes, in milestone payments has already been received, as well as a $15.0 million equity investment in the Company's capital stock. Remaining pre-commercial milestone payments, each of which the Company considers substantive, consist of $4.0 million due upon the first commercial launch in each of the five major E.U. countries set forth in the agreement.

The license agreement included a contingent equity investment, in the form of a forward purchase contract, which required Almirall to purchase shares of the Company's convertible preferred stock, upon achievement of a specific clinical milestone. Based on the Company's evaluation, this financial instrument was considered an asset or liability, which was required to be carried at fair value. The contingent equity investment was valued at inception at its fair value. At the inception of the arrangement, the Company valued the contingent equity investment and recorded a $6.0 million asset and incremental deferred revenue. The $6.0 million of incremental deferred revenue is being

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

5. Collaboration and License Agreements (Continued)

recognized as revenue on a straight-line basis over the period of the Company's continuing involvement, which was originally estimated to be 50 months and was revised in June 2011 to 41 months. The reduction in the development period was recorded as a change in estimate and deferred revenue will be recorded over the revised period on a prospective basis. At December 31, 2011, approximately $1.7 million of the incremental deferred revenue remains deferred. In November 2009, the Company achieved the clinical milestone triggering the equity investment and reclassified the forward purchase contract as a reduction to convertible preferred stock. On November 13, 2009, the Company received $15.0 million from Almirall for the purchase of 681,819 shares of convertible preferred stock.

In November 2010, the Company achieved a second development milestone under the Almirall license agreement, which the Company determined to be substantive, which resulted in a $19.0 million payment, representing the $20.0 million milestone, net of foreign withholding taxes. The Company recognized revenue of approximately $7.2 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. At December 31, 2011, approximately $5.3 million of the milestone payment remains deferred.

The Company recognized approximately $20.5 million, $18.9 million and $7.4 million in total revenue from the Almirall license agreement during the years ended December 31, 2011, 2010 and 2009, respectively, including approximately $0.5 million, $0.7 million and $0.3 million, respectively, from the sale of API to Almirall.

Astellas Pharma Inc.

On November 9, 2009, the Company entered into a license agreement with Astellas. Astellas has the right to develop and commercialize linaclotide for the treatment of IBS-C, CC and other gastrointestinal conditions in Japan, South Korea, Taiwan, Thailand, the 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 license agreement requires the Company to participate on a joint development committee over linaclotide's development period. The agreement includes additional development milestone payments, each of which the Company considers substantive, that could total up to $45.0 million. These milestone payments consist of $15.0 million upon initiation of a Phase 3 study for linaclotide in Japan, $15.0 million upon filing of the Japanese equivalent of an NDA with the relevant regulatory authority in Japan, and $15.0 million upon approval of such equivalent by the relevant regulatory authority. In addition, the Company will receive 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. Because the license to develop and commercialize linaclotide did not have standalone value without the research and development activities provided by the Company, the Company is recognizing the up-front license fee as revenue on a straight-line basis over 115 months, which is the Company's estimate of the period over which linaclotide will be developed under the license agreement for the Asian market. At December 31, 2011, approximately $24.3 million of the up-front license fee remains deferred. During the years ended December 31, 2011 and 2010, the Company recognized approximately $3.5 million and $3.2 million, respectively, in revenue from the Astellas license agreement, including approximately $0.4 million and $0.6 million, respectively, from the sale of API to Astellas. The Company did not

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

5. Collaboration and License Agreements (Continued)

recognize any revenue associated with the Astellas agreement in 2009 because the expected performance period of the Company's significant continuing obligations could not be reasonably and reliably estimated until the first quarter of 2010.

Protagonist Therapeutics, Inc.

The Company entered into a collaboration agreement with Protagonist Therapeutics, Inc. and Protagonist Pty Ltd. (collectively "Protagonist") in January 2011. Under this agreement, Protagonist will use its proprietary technology platform to discover peptides against certain targets and the Company has the rights to develop and commercialize these peptides. In connection with entering into the agreement, the Company made an up-front payment to Protagonist of approximately $2.8 million. In accordance with the applicable accounting guidance, the Company expensed the up-front payment as research and development expense. The Company also funds full-time equivalents for Protagonist's drug discovery activities, and will make certain milestone and royalty payments for each product pending the achievement of certain development and commercialization milestones. These contingent milestones could total up to approximately $111.5 million per product if all milestones are achieved. The Company will expense these payments as incurred. During the year ended December 31, 2011, the Company recorded approximately $5.0 million in research and development expense, including the up-front payment, associated with the Protagonist agreement.

6. Fair Value of Financial Instruments

The tables below present information about the Company's assets that are measured at fair value on a recurring basis as of December 31, 2011 and 2010 and indicates 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 applies other available information as applicable through processes such as benchmark yields, benchmarking of like securities, sector groupings and matrix pricing to prepare valuations. In addition, model processes were used to assess interest rate impact and develop prepayment scenarios. These models take into consideration relevant credit information, perceived market movements, sector news and economic events. The inputs into these models may include benchmark yields, reported trades, broker-dealer quotes, issuer spreads and other relevant data.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

6. Fair Value of Financial Instruments (Continued)

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

Description	December 31, 2011	Fair Value Measurements at Reporting Date Using Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Money market funds (included in cash and cash equivalents)	$ 77,158	$ 77,158	$	$
U.S. Treasury securities	21,821	21,821		
U.S. government-sponsored securities	54,913		54,913	
Total	$ 153,892	$ 98,979	$ 54,913	$

Description	December 31, 2010	Fair Value Measurements at Reporting Date Using Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Money market funds (included in cash and cash equivalents)	$ 36,228	$ 36,228	$	$
U.S. government-sponsored securities (included in cash and cash equivalents)	2,998		2,998	
U.S. Treasury securities	116,219	116,219		
U.S. government-sponsored securities	87,487		87,487	
Total	$ 242,932	$ 152,447	$ 90,485	$

During the year ended December 31, 2009, the Company held forward purchase contracts associated with the Company's collaboration agreement with Forest and license agreement with Almirall, as described in Note 5. The agreements required Forest and Almirall to purchase shares of the Company's convertible preferred stock at a pre-determined price upon meeting specific development milestones. The values of the forward purchase contracts represented the estimated probability weighted value of the premium above fair value that Forest and Almirall paid for the convertible preferred shares should the milestones be achieved. The Company estimated the fair value of the convertible preferred stock using methods consistent with the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held Company Equity Securities Issued as Compensation* (the "Practice Aid"). The Company remeasured 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.

Cash equivalents, accounts receivable, including related party accounts receivable, prepaid expenses and other current assets, accounts payable, accrued expenses and the current portion of capital lease obligations are carried at amounts that approximate fair value due to their short-term maturities. Capital lease obligations approximate fair value as they bear interest at a rate approximating a market interest rate.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

6. Fair Value of Financial Instruments (Continued)

As a result of the strategic restructuring plan implemented by Microbia in November 2009 (Note 21), the Company identified certain assets as impaired and at December 31, 2009 had measured approximately $0.7 million of assets at fair value on a nonrecurring basis, recognizing an impairment charge of approximately $0.9 million. These long-lived assets were classified as Level 2. They were initially valued at cost and when identified as impaired, valued at estimated selling price. The Company used observable inputs such as selling prices of similar equipment in similar condition. The impaired assets were associated with the biomanufacturing segment and the loss associated with the restructuring and impairment is shown as part of net income (loss) from discontinued operations on the consolidated statements of operations. The assets held at fair value were included in the sale of the Company's interest in Microbia to DSM and thus were not re-evaluated for impairment at December 31, 2010 or December 31, 2011.

7. Available-for-Sale Investments

The following tables summarize the available-for-sale securities held at December 31, 2011 and December 31, 2010 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2011:				
U.S. government-sponsored securities	$ 54,911	$ 12	$ (10)	$ 54,913
U.S. Treasury securities	21,817	4		21,821
Total	$ 76,728	$ 16	$ (10)	$ 76,734

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2010:				
U.S. government-sponsored securities	$ 87,503	$ 3	$ (19)	$ 87,487
U.S. Treasury securities	116,200	24	(5)	116,219
Total	$ 203,703	$ 27	$ (24)	$ 203,706

The contractual maturities of all securities held at December 31, 2011 are one year or less. There were twelve investments classified as available-for-sale securities in an unrealized loss position at December 31, 2011, none of which had been in an unrealized loss position for more than twelve months. The aggregate fair value of these securities was approximately $35.5 million. There were thirty-one investments classified as available-for-sale securities in an unrealized loss position at December 31, 2010, none of which had been in an unrealized loss position for more than twelve months. The aggregate fair value of these securities was approximately $94.7 million. The Company reviews its investments for other-than-temporary impairment whenever the fair value of an investment is less than amortized cost and evidence indicates that an investment's carrying amount is not recoverable within a reasonable period of time. To determine whether an impairment is other-than-temporary, the Company considers whether it has the ability and intent to hold the investment until a market price recovery and considers whether evidence indicating the cost of the investment is recoverable outweighs evidence to the contrary. The Company does not intend to sell the

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

7. Available-for-Sale Investments (Continued)

investments and it is not more likely than not that the Company will be required to sell the investments before recovery of their amortized cost bases, which may be maturity. The Company did not hold any securities with an other-than-temporary impairment at December 31, 2011.

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.

8. Property and Equipment

Property and equipment consisted of the following (in thousands):

	December 31,	
	2011	**2010**
Laboratory equipment	$ 13,544	$ 11,375
Computer and office equipment	4,858	3,198
Furniture and fixtures	1,698	1,481
Software	5,254	3,299
Construction in process	1,860	2,701
Leasehold improvements	32,166	29,248
	59,380	51,302
Less accumulated depreciation and amortization	(25,755)	(16,933)
	$ 33,625	$ 34,369

In both the years ended December 31, 2011 and 2010, the Company entered into capital leases for certain computer and office equipment. As of December 31, 2011 and 2010, the Company had approximately $1.3 million and $1.0 million, respectively, of assets under capital leases with accumulated amortization balances of approximately $0.7 million and $0.4 million, respectively.

Depreciation and amortization expense of property and equipment associated with continuing operations, including equipment recorded under capital leases, was approximately $10.0 million, $6.2 million and $4.8 million for the years ended December 31, 2011, 2010 and 2009, respectively. Approximately $0.1 million and $0.5 million in depreciation and amortization expense associated with property and equipment of Microbia, included in net income (loss) from discontinued operations, was recorded in the years ended December 31, 2010 and 2009, respectively. In the year ended December 31, 2009, the Company recorded a charge for impairment of long-lived assets of approximately $0.9 million, which was required to adjust certain assets at Microbia to their fair value at the time Microbia implemented its strategic restructuring plan. This amount is included in net income (loss) from discontinued operations for the year ended December 31, 2009.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

9. Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	December 31,	
	2011	2010
Salaries and benefits	$ 7,525	$ 5,063
Professional fees	820	836
Other	2,777	3,039
	$ 11,122	$ 8,938

10. Patent Costs

The Company incurred and recorded as operating expense legal and other fees related to patents of approximately $2.2 million, $1.9 million and $1.6 million for the years ended December 31, 2011, 2010 and 2009, respectively. These costs were charged to general and administrative expenses as incurred. Additionally, patent costs of approximately $0.1 million and $0.2 million related to Microbia are included in net income (loss) from discontinued operations for the years ended December 31, 2010 and 2009, respectively.

11. Debt

In September 2010, the Company repaid all outstanding principal and interest under a master loan and security agreement with a financing company to finance the purchase of laboratory and other equipment agreement. The Company incurred pre-payment fees of approximately $67,000 in conjunction with the repayment of debt of which approximately $31,000 is included in net income (loss) from discontinued operations and the remainder is included in interest expense in the statement of operations.

12. Commitments and Contingencies

The Company leases its facility, offsite data storage location and various equipment under leases that expire at varying dates through 2018. 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 for 113,646 rentable square feet of office and lab space at 301 Binney Street, Cambridge, Massachusetts. The initial term of the lease is eight years expiring in January 2016, and the Company has the right to extend the initial term for two additional terms of five years each. The Company's occupancy of the space occurred in four distinct phases, and rent for each phase commenced at the earlier of a contractually set date or the occupancy date. Base rent for the space ranges from $49.25 to $60.50 per rentable square foot per year. Base rent escalates in January 2012 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 initial occupancy commenced in January 2008. The rent expense, inclusive of the escalating rent payments and free rent period is recognized on a straight-line basis over the term of the lease agreement. In accordance with the terms of the lease agreement, the Company maintains a letter of credit securing its obligations under the lease agreement of approximately $7.6 million.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

12. Commitments and Contingencies (Continued)

The Company amended the lease agreement in February 2010, July 2010, February 2011 and October 2011 (together "the Amendments") in order to lease additional space. Pursuant to the Amendments, the Company leases an additional 96,613 rentable square feet of the 301 Binney Street building, comprised of (a) an initial phase of 35,444 rentable square feet (the "Initial Phase"), (b) a second phase of 21,589 rentable square feet (the "Second Phase"), (c) a third phase of 17,863 rentable square feet (the "Third Phase") and (d) a fourth phase of 21,717 rentable square feet (the "Fourth Phase"). Rent for the Initial Phase commenced on July 1, 2010, rent for the Second Phase commenced on March 1, 2011, rent for the Third Phase is expected to commence January 1, 2012, and rent for the Fourth Phase will commence no later than June 1, 2012. Initial base rent for the Initial Phase is $42.00 per rentable square foot per year and the initial base rent for the Second Phase, Third Phase and Fourth Phase is $42.50 per rentable square foot per year. Base rent for the Initial Phase, Second Phase, Third Phase and Fourth Phase will increase annually by $0.50 per rentable square foot. Consistent with the Company's treatment of the lease expense associated with the initial lease agreement, lease expense associated with the Amendments, inclusive of the escalating rent payments, is recognized on a straight-line basis over the term of the lease agreement. The Amendments do not change the expiration date of the lease agreement.

The landlord has reimbursed the Company for its tenant improvements for the space occupied prior to the Amendments at a set rate per rentable square foot. Under the terms of the Amendments, the landlord has or will provide the Company with an allowance for the additional space, which consists of $55.00 per rentable square foot for tenant improvements in the Initial Phase and the Second Phase and an allowance of $40.00 per rentable square foot for the Third Phase and the Fourth Phase. As of December 31, 2011, approximately $15.9 million has been paid to the Company as reimbursement for tenant improvements under the lease agreement, including the Amendments. The reimbursement amount is recorded as deferred rent on the consolidated balance sheets and is being amortized as a reduction to rent expense over the term of the lease agreement or the Amendments, as applicable.

The Company elected not to renew its lease of approximately 39,000 square feet of space at 320 Bent Street, Cambridge, Massachusetts, which expired in December 2010.

The Company, and in some cases, along with its collaboration partner, Forest, has entered into multiple commercial supply agreements for the purchase of linaclotide API and drug product. Certain of the agreements contain minimum purchase commitments, the earliest of which commences in 2012. As of December 31, 2011, the Company's minimum purchase requirement across all the agreements is approximately $58.7 million through 2017. The Company's minimum purchase requirement by year is as follows: approximately $16.5 million, $7.2 million, $9.7 million, $9.7 million, $9.7 million and $5.9 million for the years ending December 31, 2012, 2013, 2014, 2015, 2016 and 2017, respectively.

In the years ended December 31, 2011 and 2010, the Company entered into capital leases totaling approximately $0.3 million and $1.0 million, respectively, for certain computer and office equipment. The capital leases expire at various times through June 2015. At December 31, 2011 and 2010, the weighted average interest rate on the outstanding capital lease obligations was 8.0% and 10.6%, respectively.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

12. Commitments and Contingencies (Continued)

At December 31, 2011, future minimum lease payments under all non-cancelable lease arrangements are as follows (in thousands):

	Operating Leases	Capital Leases
2012	$ 11,167	$ 276
2013	11,648	234
2014	11,702	173
2015	11,756	50
2016	367	
Thereafter	217	
Total future minimum lease payments	$ 46,857	733
Less amounts representing interest		(78)
Capital lease obligations at December 31, 2011		655
Less current portion of capital lease obligations		(233)
Capital lease obligations, net of current portion		$ 422

Rent expense of approximately $6.6 million, $8.9 million and $9.1 million was charged to continuing operations for the years ended December 31, 2011, 2010 and 2009, respectively. Rent expense of approximately $1.3 million and $2.7 million related to Microbia for the years ended December 31, 2010 and 2009, respectively, is included in net income (loss) from discontinued operations.

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 a non-cancelable operating lease. The Company has a standard indemnification arrangement under the lease that requires it to indemnify its landlord 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 lease. The aggregate maximum potential future liability of the Company under such indemnification provisions is uncertain.

As of December 31, 2011 and 2010, 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,

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

12. Commitments and Contingencies (Continued)

consequently, concluded that the fair value of these obligations is negligible. As a result, the Company has not established any related reserves.

13. Litigation

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, individually and in aggregate, will have a material adverse effect on the Company's consolidated financial statements.

14. Stockholders' Equity (Deficit)

In February 2010, in conjunction with the Company's initial public offering (Note 3), the Company amended its certificate of incorporation to authorize it to issue 500,000,000 shares of Class A common stock, 100,000,000 shares of Class B common stock and 75,000,000 shares of preferred stock. Upon the closing of the Company's initial public offering, 69,904,843 shares outstanding of the Company's convertible preferred stock automatically converted into 70,391,620 shares of its Class B common stock.

Preferred Stock

The Company's preferred stock ($0.001 par value per share) may be issued from time to time in one or more series, with each such series to consist of such number of shares and to have such terms as adopted by the board of directors. Authority is given to the board of directors to determine and fix such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitation or restrictions thereof, including without limitation thereof, dividend rights, conversion rights, redemption privileges and liquidation preferences.

Common Stock

The Company has designated two series of common stock, Series A Common Stock ($0.001 par value per share), which is referred to as "Class A Common Stock," and Series B Common Stock ($0.001 par value per share), which is referred to as "Class B Common Stock." All shares of common stock that were outstanding immediately prior to August 2008 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, on a one-for-one basis, 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.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

14. Stockholders' Equity (Deficit) (Continued)

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.

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.

The holders of shares of Class A Common Stock and Class B Common Stock are entitled to dividends if and when declared by the board of directors. In the event that dividends are paid in the form of common stock or rights to acquire common stock, the holders of shares of Class A Common Stock shall receive Class A Common Stock or rights to acquire Class A Common Stock and the holders of shares of Class B Common Stock shall receive Class B Common Stock or rights to acquire Class B Common Stock, as applicable.

In the event of a voluntary or involuntary liquidation, dissolution, distribution of assets, or winding up of the Company, the holders of shares of Class A Common Stock and the holders of shares of Class B Common Stock are entitled to share equally, on a per share basis, in all assets of the Company of whatever kind available for distribution to the holders of common stock.

Restricted Stock

In 2009, the Company granted an aggregate of 515,549 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 Amended and Restated 2005 Stock Incentive Plan ("2005 Plan") and the Company's director compensation program. 115,549 shares of restricted common stock granted in 2009 vested 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.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

14. Stockholders' Equity (Deficit) (Continued)

A summary of the unvested shares of restricted stock as of December 31, 2011 is presented below:

	Shares	Weighted-Average Grant Date Fair Value
Unvested at December 31, 2010	270,000	$ 5.69
Granted		
Vested	(82,500)	$ 5.71
Forfeited	(27,500)	$ 5.48
Unvested at December 31, 2011	160,000	$ 5.72

15. Stock Option Plans

The Company has several share-based compensation plans. At December 31, 2011, there were 6,222,981 shares available for future grant under all 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, 2011, options for 25,000 shares were outstanding under the 1998 Plan.

Under the Company's Amended and Restated 2002 Stock Incentive Plan ("2002 Plan") and 2005 Plan, stock awards may be granted to employees, officers, directors, consultants, or advisors of the Company. The 2002 Plan and 2005 Plan provide for the granting of stock options, restricted stock, restricted stock units, and other share-based awards. There were 4,700,000 shares of common stock allocated for issuance under the 2002 Plan and 12,200,000 shares allocated for issuance under the 2005 Plan. 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, 2011, there were 61,831 shares available for future grant under the 2002 Plan and 30,853 shares available for future grant under the 2005 Plan.

During 2010, the Company's stockholders approved and amended the Amended and Restated 2010 Employee, Director and Consultant Equity Incentive Plan ("2010 Plan") (together with the 2002 Plan and 2005 Plan, the "Plans") which became effective upon the closing of the Company's initial public offering on February 8, 2010. Under the 2010 Plan, stock awards may be granted to employees, officers, directors, or consultants of the Company. There are 6,000,000 shares of common stock initially reserved for issuance under the 2010 Plan. The number of shares available for future grant under the 2010 Plan may be increased on the first day of each fiscal year by an amount equal to the lesser of (i) 6,600,000; (ii) 4% of the number of outstanding shares of Class A common stock on the first day of each fiscal year; and (iii) an amount determined by the board of directors. Accordingly, during 2011, 3,966,893 shares were added to the 2010 Plan. Awards that are returned to the Company's 1998 Plan, 2002 Plan and 2005 Plan as a result of their expiration, cancellation, termination or repurchase are automatically made available for issuance under the 2010 Plan. Accordingly, during 2011, 182,575 shares were transferred to the 2010 Plan. At December 31, 2011, there were 6,130,297 shares available for future grant under the 2010 Plan.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

15. Stock Option Plans (Continued)

During 2010, the Company's stockholders approved the 2010 Employee Stock Purchase Plan ("Purchase Plan") which became effective upon the closing of the Company's initial public offering on February 8, 2010. The Purchase Plan allows eligible employees the right to purchase shares of common stock at the lower of 85% of the fair market value of a share of common stock on the first or last day of an offering period. Each offering period is six months. There were 400,000 shares of common stock initially reserved for issuance pursuant to the Purchase Plan. The number of shares available for future grant under the Purchase Plan may be increased on the first day of each fiscal year by an amount equal to the lesser of (i) 1,000,000 shares, (ii) 1% of the shares of common stock outstanding on the last day of the immediately preceding fiscal year, or (iii) such lesser number of shares as is determined by the board of directors. At December 31, 2011, there were 296,046 shares available for future grant under the Purchase Plan.

Each plan, other than the Purchase Plan, provides for the granting of stock awards whereby the Company's Class B common stock is issuable upon exercise of options granted prior to the closing of the Company's initial public offering and Class A common stock is issuable upon exercise of options granted after the closing of the Company's initial public offering. At December 31, 2011, options exercisable into 10,307,587 shares of Class B common stock and 6,116,913 shares of Class A common stock were outstanding.

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, prior to the Company's initial public offering on February 2, 2010, 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.

The option exercise period may not extend beyond ten years from the date of grant. The 1998 Plan, the 2002 Plan and the 2005 Plan 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, 2011 and 2010, there were 413 and 14,960 shares, respectively, that had been issued pursuant to the exercise of unvested options that remain unvested and subject to repurchase by the Company. At December 31, 2011, the Company does not 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, 2011 and 2010.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

15. Stock Option Plans (Continued)

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. 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. During the years ended December 31, 2011 and 2010, 1,059,000 shares and 52,500 shares vested as a result of milestone or service period achievements, respectively. At December 31, 2011 and 2010, there were 1,210,000 and 2,279,000 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 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. At December 31, 2011, the Company has approximately $0.5 million in unrecognized share-based compensation, net of estimated forfeitures, related to these options.

During 2005, the Company granted to employees performance-based 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 was not fixed on the date of grant. Therefore, the options are remeasured at each reporting period until settlement of the option. All 97,500 options are fully vested. During the year ended December 31, 2010, 37,500 shares were exercised and will no longer be remeasured. The Company recorded share-based compensation related to these performance-based options of approximately $0.1 million, ($43,000) and $0.7 million during the years ended December 31, 2011, 2010 and 2009, respectively.

During 2011 and 2010, the Company granted to employees options to purchase a total of 230,000 and 67,500 shares of common stock subject to performance-based milestone vesting, respectively. The vesting of these stock options will occur upon the achievement of certain performance-based milestones. During 2011 and 2010, 65,000 shares and 5,000 shares vested as a result of milestone achievements, respectively, and the Company recorded related share-based compensation expense of approximately $0.4 million and $31,000, respectively, for these options. As of December 31, 2011, the Company concluded that only two of the milestones are probable of achievement. As a result, the Company recognized approximately $0.2 million of share-based compensation expense. At December 31, 2011, the unrecognized share-based compensation related to performance-based milestone options was approximately $6.3 million.

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, expected stock price volatility and, up to the date of the Company's initial public offering, the fair value of the Company's common stock. The weighted average assumptions used to estimate the fair value of the

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

15. Stock Option Plans (Continued)

stock options using the Black-Scholes option pricing model were as follows for the years ended December 31, 2011, 2010 and 2009:

	Years Ended December 31,		
	2011	2010	2009
Weighted-average fair value of common stock	$ 11.98	$ 11.23	$ 5.19
Expected volatility	49.8%	57.4%	62.3%
Expected term (in years)	6.5	6.5	6.5
Risk-free interest rate	2.4%	2.9%	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. The Company uses a blended volatility rate that blends its own historical volatility with that of comparable public companies. Prior to February 3, 2010, the Company was not publicly traded and therefore had no trading history. Therefore, stock price volatility was estimated 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, 2011, 2010 and 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 5.5%, 5.5% and 5.8% as of December 31, 2011, 2010 and 2009, respectively.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

15. Stock Option Plans (Continued)

The following table summarizes the expense recognized for all share-based compensation arrangements in the consolidated statements of operations (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Ironwood:			
Employee stock options	$ 10,904	$ 6,545	$ 4,010
Restricted stock awards	431	469	784
Non-employee stock options	152	123	301
Employee stock purchase plan	215	100	
Stock award	30	259	
	11,732	7,496	5,095
Microbia Stock Plan (included in discontinued operations)		59	149
	$ 11,732	$ 7,555	$ 5,244

Share-based compensation is reflected in the consolidated statements of operations as follows for the years ended December 31, 2011, 2010 and 2009 (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Research and development	$ 6,071	$ 4,112	$ 2,372
General and administrative	5,661	3,384	2,723
Net income (loss) from discontinued operations		59	149

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

15. Stock Option Plans (Continued)

The following table summarizes stock option activity under the Company's stock option plans, including performance-based options:

	Shares of Common Stock Attributable to Options	Weighted-Average Exercise Price	Weighted-Average Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2010	14,603,229	$ 4.25	6.44	$ 91,575
Granted	3,615,050	$ 11.98		
Exercised	(1,502,366)	$ 1.80		
Cancelled	(291,413)	$ 8.83		
Outstanding at December 31, 2011	16,424,500	$ 6.09	6.40	$ 98,999
Vested or expected to vest at December 31, 2011	15,318,950	$ 5.99	6.32	$ 93,797
Exercisable at December 31, 2011[(1)]	8,194,142	$ 3.39	4.87	$ 70,488

(1) All stock options granted under the 1998 Plan, the 2002 Plan and the 2005 Plan 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, 2011.

The weighted-average grant date fair value per share of options granted to employees during the years ended December 31, 2011, 2010 and 2009 was $6.21, $6.48 and $3.17, respectively. The total intrinsic value of options exercised during the years ended December 31, 2011, 2010 and 2009 was approximately $17.4 million, $18.6 million and $1.6 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 $11.97, $10.35 and $12.05 per share at December 31, 2011, 2010 and 2009, respectively.

The aggregate grant-date fair value of the options granted to employees during the years ended December 31, 2011, 2010 and 2009 was approximately $20.5 million, $17.7 million and $9.1 million, respectively.

As of December 31, 2011, there was approximately $0.9 million and $25.6 million of unrecognized share-based compensation, net of estimated forfeitures, related to restricted stock awards and unvested stock option grants with time-based vesting, respectively which are expected to be recognized over a weighted average period of 2.0 years and 3.66 years, respectively. The total unrecognized share-based compensation cost will be adjusted for future changes in estimated forfeitures.

Microbia Stock Plan

As a result of the sale of the Company's interest in Microbia to DSM in September 2010, the Microbia Stock Plan was cancelled, resulting in the cancellation of all existing shares.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

16. Income Taxes

In general, the Company has not recorded a provision for federal or state income taxes as it has had cumulative net operating losses since inception. However, the Company recorded an approximately $3,000 provision for state taxes for the year ended December 31, 2011. In addition, because of intra-period income tax allocation requirements, the Company recorded a benefit for income taxes from continuing operations of $2.9 million for the year ended December 31, 2010, offset by an identical and corresponding income tax provision from discontinued operations. The intra-period income tax allocation considers income (loss) from discontinued operations for purposes of determining the amount of tax benefit resulting from the loss from continuing operations. The Company recognized a federal income tax benefit of approximately $0.3 million for the year ending December 31, 2009 related to refundable research and development tax credits, resulting from a provision in the Housing Assistance Tax Act of 2008 that allowed the Company to claim a refund for a portion of its unused pre-2006 research tax credits on its 2008 U.S. federal income tax return.

A reconciliation of income taxes from continuing operations computed using the U.S. federal statutory rate to that reflected in operations follows (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Income tax benefit using U.S. federal statutory rate	$ (22,050)	$ (20,181)	$ (20,500)
Permanent differences	245	(3,126)	2,047
State income taxes, net of federal benefit	(3,531)	(3,427)	(3,282)
Stock compensation	2,104	(243)	1,300
Tax credits	509	(2,041)	(4,633)
Expiring net operating losses and tax credits	803	912	570
Effect of change in state tax rate on deferred tax assets and deferred tax liabilities	98	613	1,744
Change in the valuation allowance	20,955	27,608	22,400
Other	870	(115)	58
Total before intra-period allocation	3		(296)
Intra-period tax allocation		(2,944)	
	$ 3	$ (2,944)	$ (296)

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

16. Income Taxes (Continued)

Components of the Company's deferred tax assets and liabilities are as follows (in thousands):

	December 31,	
	2011	2010
Deferred tax assets:		
Net operating loss carryforwards	$ 91,031	$ 57,257
Tax credit carryforwards	14,024	14,534
Capitalized research and development	22,589	27,874
Deferred revenue	22,555	35,758
Other	17,980	12,424
Total deferred tax assets	168,179	147,847
Valuation allowance	(168,179)	(147,847)
Net deferred tax asset	$	$

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, 2011 and 2010. Management reevaluates the positive and negative evidence on a quarterly basis.

The valuation allowance increased approximately $20.3 million during the year ended December 31, 2011, due primarily to the increase in the net operating loss carryforwards, share-based compensation expense and deferred accrued expenses. The valuation allowance increased approximately $16.0 million during the year ended December 31, 2010, due primarily to the increase in the net operating loss carryforwards and deferred revenue.

Subject to the limitations described below at December 31, 2011 and 2010, the Company has net operating loss carryforwards of approximately $239.2 and $153.2 million, respectively, to offset future federal taxable income, which expire beginning in 2018 continuing through 2031. The federal net operating loss carryforwards exclude approximately $19.5 million of deductions related to the exercise of stock options. This amount represents an excess tax benefit and has not been included in the gross deferred tax asset reflected for net operating losses. This amount will be recorded as an increase in additional paid in capital on the consolidated balance sheet once the excess benefits are "realized" in accordance with ASC 718. As of December 31, 2011 and 2010, the Company has state net operating loss carryforwards of approximately $183.8 million and $97.7 million, respectively, to offset future state taxable income, which have begun to expire and will continue to expire through 2021. The Company also has tax credit carryforwards of approximately $15.0 million and $15.8 million as of December 31, 2011 and 2010, respectively, to offset future federal and state income taxes, which expire at various times through 2031.

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") and with Section 383 of the Internal Revenue Code of 1986, as well as similar state provisions. These ownership changes may limit the amount of net

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

16. Income Taxes (Continued)

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 stockholders 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 applies ASC 740, *Income Taxes*. ASC 740 provides guidance on the accounting for uncertainty in income taxes recognized in financial statements and requires the impact of a tax position to be recognized in the financial statements if that position is more likely than not of being sustained by the taxing authority. As a result of the implementation of the new guidance, the Company recognized no material adjustment for unrecognized income tax benefits. At December 31, 2011 and December 31, 2010, 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 December 31, 2011, 2010 and 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 ended December 31, 2010, 2009 and 2008, although carryforward attributes that were generated prior to tax year 2008 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.

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 deferred tax asset established for the research and development credit carryforward and the valuation allowance.

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 Internal Revenue Code 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. The Company provides a matching contribution of 50% of the employee's first $6,000 of contributions. During the years ended December 31, 2011, 2010 and 2009, the Company recorded approximately $0.6 million, $0.5 million and $0.4 million of expense in net income (loss) from continuing operations related to its 401(k) company match. Included in net income (loss) from discontinued operations for each of the years ended December 31, 2010 and 2009 is approximately $0.1 million related to the 401(k) company match.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

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 $0.2 million, $0.3 million and $0.1 million in legal fees to this investor during the years ended December 31, 2011, 2010 and 2009, respectively. At December 31, 2011, the Company had approximately $26,000 in accounts payable related to this related party. At December 31, 2010, there was no accounts payable associated with this related party.

In September 2009, Forest became a related party when the Company sold to Forest 2,083,333 shares of the Company's convertible preferred stock and in November 2009, Almirall became a related party when the Company sold to Almirall 681,819 shares of the Company's convertible preferred stock (Note 5). These shares of preferred stock converted to the Company's common stock on a 1:1 basis upon the completion of the Company's initial public offering. Additional related party disclosure related to Microbia and T&L is included in Note 21.

19. Segment Reporting

Prior to the sale of its interest in Microbia in September 2010, the Company had two reportable business segments: human therapeutics and biomanufacturing. The Company had 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, 2011, 2010 and 2009 (in thousands):

	Years Ended December 31,		
	2011	2010	2009
Revenue:			
Human therapeutics	$ 65,871	$ 43,857	$ 34,321
Biomanufacturing (included in discontinued operations)		1,985	1,781
Total	$ 65,871	$ 45,842	$ 36,102
Loss from operations:			
Human therapeutics	$ (66,142)	$ (60,766)	$ (60,816)
Biomanufacturing (included in discontinued operations)		(4,532)	(13,161)
Total	$ (66,142)	$ (65,298)	$ (73,977)

	December 31,	
	2011	2010
Total assets:		
Human therapeutics	$ 208,977	$ 301,365
Biomanufacturing (included in discontinued operations)		
Total	$ 208,977	$ 301,365

At December 31, 2011 and 2010, all of the Company's accounts receivable related to the human therapeutics segment.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

20. Federal and State Grants

Federal Grant

In 2010, the Company was awarded approximately $1.0 million in grants under the Qualifying Therapeutic Discovery Project Program which was created in March 2010 as part of the Patient Protection and Affordability Care Act. The total amount awarded was recognized in the fourth quarter of 2010 and is recorded as other income on the Company's consolidated statements of operations.

State Grant

In May 2011, the Company recorded approximately $0.9 million as a receivable associated with the Life Sciences Tax Incentive Program from the Massachusetts Life Sciences Center. The program was established in 2008 in order to incentivize life sciences companies to create new sustained jobs in Massachusetts. Jobs must be maintained for at least five years, during which time the grant proceeds can be recovered by the Massachusetts Department of Revenue ("DOR") if the Company does not meet and maintain its job creation commitments. The Company received the funds in July 2011 and recognized the award as other income in its consolidated statement of operations in September 2011, as the Company believed it had satisfied its job creation commitments. The Company's hiring plan for 2011-2015 is significantly in excess of the hiring requirement for the 5 year period, as such, the Company believes that the likelihood of recovery of the award by the DOR is remote.

21. Microbia, Inc.

On September 21, 2010, the Company sold its interest in Microbia to DSM in exchange for cash proceeds of $9.5 million, the payment of approximately $1.1 million of Microbia debt and interest by DSM and future contingent consideration based on the sale of products incorporating Microbia's technology (See Note 2).

Tate & Lyle Investments, Ltd.

In September 2006, the Company entered into a collaboration agreement with T&L. The collaboration agreement had a five-year term with a one-year notice of termination. 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 was entirely comprised 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 was recorded as noncontrolling interest in the consolidated financial statements.

On June 15, 2010, T&L and Microbia entered into an agreement to terminate their collaboration. The terms and conditions of the agreement included an exchange of intellectual property and a one-time payment to Microbia of approximately $1.8 million. All current and future obligations between Microbia and T&L were terminated as a result of this agreement.

Revenue earned from the T&L collaboration agreement totaled approximately $1.9 million and $1.8 million during the years ended December 31, 2010 and 2009, respectively. This revenue is included

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

21. Microbia, Inc. (Continued)

in net income (loss) from discontinued operations for all periods presented. There was no accounts receivable from T&L at December 31, 2011 or December 31, 2010.

Strategic Restructuring Plan

In November 2009, Microbia implemented a strategic restructuring plan that included an immediate reduction of its workforce by approximately 40% of its existing workforce, and a reduced workweek for an additional 12% of its existing workforce. Microbia took this action to focus on its proprietary strain-development platform and existing service agreements.

In connection with the strategic restructuring plan, Microbia recorded restructuring charges of approximately $1.2 million in the year ended December 31, 2009. Provisions associated with the strategic restructuring are included in net income (loss) from discontinued operations in the consolidated statements of operations. Payments associated with the restructuring charges were fully paid as of December 31, 2010.

22. Selected Quarterly Financial Data (Unaudited)

The following table contains quarterly financial information for 2011 and 2010. The Company believes that the following information reflects all normal recurring adjustments necessary for a fair presentation of the information for the periods presented. The operating results for any quarter are not necessarily indicative of results for any future period. Amounts associated with the Company's former subsidiary, Microbia, which was sold in September 2010, have been presented as discontinued operations for all periods shown in the information below.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
	(in thousands, except per share data)				
2011					
Collaborative arrangements revenue	$ 10,237	$ 11,262	$ 12,218	$ 32,154	$ 65,871
Total operating expenses	28,779	30,214	33,834	39,186	132,013
Other income (expense), net	141	108	986	58	1,293
Net loss	(18,401)	(18,844)	(20,633)	(6,974)	(64,852)
Net loss per share basic and diluted	$ (0.19)	$ (0.19)	$ (0.21)	$ (0.07)	$ (0.65)

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

22. Selected Quarterly Financial Data (Unaudited) (Continued)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
	(in thousands, except per share data)				
2010					
Collaborative arrangements revenue	$ 8,838	$ 9,188	$ 9,059	$ 16,772	$ 43,857
Total operating expenses	23,334	26,498	25,224	29,567	104,623
Other income (expense), net	15	145	107	1,144	1,411
Net loss from continuing operations	(14,481)	(17,165)	(13,114)	(11,651)	(56,411)
Net income (loss) from discontinued operations	(1,772)	(44)	6,367		4,551
Net loss	(16,253)	(17,209)	(6,747)	(11,651)	(51,860)
Net (income) loss from discontinued operations attributable to noncontrolling interest	329	73	(1,523)		(1,121)
Net loss attributable to Ironwood Pharmaceuticals, Inc.	(15,924)	(17,136)	(8,270)	(11,651)	(52,981)
Net loss per share from continuing operations basic and diluted	$ (0.23)	$ (0.18)	$ (0.13)	$ (0.12)	$ (0.63)
Net income (loss) per share from discontinued operations attributable to Ironwood Pharmaceuticals, Inc. basic and diluted	(0.02)		0.05		0.04
Net loss per share attributable to Ironwood Pharmaceuticals, Inc. basic and diluted	$ (0.25)	$ (0.18)	$ (0.08)	$ (0.12)	$ (0.59)

23. Subsequent Events

Bionomics Limited

The Company entered into a collaboration and license agreement with Bionomics Limited ("Bionomics") in January 2012 in which it licensed the rights to Bionomics' investigational anti-anxiety compound, BNC210. Under the terms of the agreement, the Company and Bionomics will collaborate on initial research and the Company will be responsible for development and commercialization of any resulting products. In connection with entering into the agreement, the Company will make an up-front payment of $3.0 million to Bionomics. The Company will fund full-time equivalents for Bionomics to perform certain drug discovery activities, make certain milestone payments pending the achievement of certain development and regulatory milestones, and make royalty payments if BNC210 is ever successfully commercialized.

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Ironwood Pharmaceuticals, Inc.

Notes to Consolidated Financial Statements (Continued)

23. Subsequent Events (Continued)

Class A Common Stock Offering

In February 2012, the Company sold 6,037,500 shares of its Class A common stock through a firm commitment, underwritten public offering at a price to the public of $15.09 per share. As a result of the offering, the Company received aggregate net proceeds, after underwriting discounts and commissions and other estimated offering expenses, of approximately $85.3 million. The Company intends to use these proceeds for general corporate purposes, including to further strengthen its balance sheet in advance of the potential market launch of linaclotide (if approved).

State Grant

In February 2012, the Company was notified that it was awarded an approximately $1.8 million tax incentive associated with the Life Sciences Tax Incentive Program from the Massachusetts Life Sciences Center. This program was established in 2008 in order to incentivize life sciences companies to create new sustained jobs in Massachusetts. Jobs must be maintained for at least five years, during which time the grant proceeds can be recovered by the DOR if the Company does not meet and maintain its job creation commitments.

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Exhibit Index

Number	Description	Incorporated by reference herein Form	Date
3.1	Eleventh Amended and Restated Certificate of Incorporation	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2010
3.2	Fifth Amended and Restated Bylaws	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2010
4.1	Specimen Class A common stock certificate	Registration Statement on Form S-1, as amended (File No. 333-163275)	January 20, 2010
4.2	Eighth Amended and Restated Investors' Rights Agreement, dated as of September 1, 2009, by and among Ironwood Pharmaceuticals, Inc., the Founders and the Investors named therein	Registration Statement on Form S-1, as amended (File No. 333-163275)	November 20, 2009
10.1#	1998 Amended and Restated Stock Option Plan and form agreements thereunder	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.2#	Amended and Restated 2002 Stock Incentive Plan and form agreements thereunder	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.3#	Amended and Restated 2005 Stock Incentive Plan and form agreements thereunder	Registration Statement on Form S-1, as amended (File No. 333-163275)	January 29, 2010
10.4#	Amended and Restated 2010 Employee, Director and Consultant Equity Incentive Plan	Quarterly Report on Form 10-Q, (File No. 001-34620)	May 13, 2011
10.4.1#	Form agreement under the 2010 Employee, Director and Consultant Equity Incentive Plan	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2010
10.5#	2010 Employee Stock Purchase Plan	Registration Statement on Form S-8 (File No. 333-165230)	March 5, 2010
10.6#	Change of Control Severance Benefit Plan	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.7#	Director Compensation Plan	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.8#	Form of Indemnification Agreement with directors and officers	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009

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Number	Description	Incorporated by reference herein Form	Date
10.9#	Consulting Agreement, dated as of November 30, 2009, by and between Christopher Walsh and Ironwood Pharmaceuticals, Inc.	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.10+	Collaboration Agreement, dated as of September 12, 2007, as amended on November 3, 2009, by and between Forest Laboratories, Inc. and Ironwood Pharmaceuticals, Inc.	Registration Statement on Form S-1, as amended (File No. 333-163275)	February 2, 2010
10.11+	License Agreement, dated as of April 30, 2009, by and between Almirall, S.A. and Ironwood Pharmaceuticals, Inc.	Registration Statement on Form S-1, as amended (File No. 333-163275)	February 2, 2010
10.12+	License Agreement, dated as of November 10, 2009, by and among Astellas Pharma, Inc. and Ironwood Pharmaceuticals, Inc.	Registration Statement on Form S-1, as amended (File No. 333-163275)	February 2, 2010
10.13+	Commercial Supply Agreement, dated as of June 23, 2010, by and among PolyPeptide Laboratories, Inc. and Polypeptide Laboratories (SWEDEN) AB, Forest Laboratories, Inc. and Ironwood Pharmaceuticals, Inc.	Quarterly Report on Form 10-Q (File No. 001-34620)	August 10, 2010
10.14+	Commercial Supply Agreement, dated as of March 28, 2011, by and among Corden Pharma Colorado (f/k/a Roche Colorado Corporation), Ironwood Pharmaceuticals, Inc. and Forest Laboratories, Inc.	Quarterly Report on Form 10-Q (File No. 001-34620)	May 13, 2011
10.15	Lease for facilities at 301 Binney St., Cambridge, MA, dated as of January 12, 2007, as amended on April 9, 2009, by and between Ironwood Pharmaceuticals, Inc. and BMR-Rogers Street LLC	Registration Statement on Form S-1, as amended (File No. 333-163275)	December 23, 2009
10.15.1	Second Amendment to Lease for facilities at 301 Binney St., Cambridge, MA, dated as of February 9, 2010, by and between Ironwood Pharmaceuticals, Inc. and BMR-Rogers Street LLC	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2010

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Number	Description	Incorporated by reference herein Form	Date
10.15.2	Third Amendment to Lease for facilities at 301 Binney St., Cambridge, MA, dated as of July 1, 2010, by and between Ironwood Pharmaceuticals, Inc. and BMR-Rogers Street LLC	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2011
10.15.3	Fourth Amendment to Lease for facilities at 301 Binney St., Cambridge, MA, dated as of February 3, 2011, by and between Ironwood Pharmaceuticals, Inc. and BMR-Rogers Street LLC	Annual Report on Form 10-K (File No. 001-34620)	March 30, 2011
10.15.4*	Fifth Amendment to Lease for facilities at 301 Binney St., Cambridge, MA, dated as of October 18, 2011, by and between Ironwood Pharmaceuticals, Inc. and BMR-Rogers Street LLC		
21.1*	Subsidiaries of Ironwood Pharmaceuticals, Inc.		
23.1*	Consent of Independent Registered Public Accounting Firm		
31.1*	Certification of Chief Executive Officer pursuant to Rules 13a-14 or 15d-14 of the Exchange Act		
31.2*	Certification of Chief Financial Officer pursuant to Rules 13a-14 or 15d-14 of the Exchange Act		
32.1	Certification of Chief Executive Officer pursuant to Rules 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350		
32.2	Certification of Chief Financial Officer pursuant to Rules 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350		
101.INS	XBRL Instance Document		
101.SCH	XBRL Taxonomy Extension Schema Document		
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document		

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Number	Description	Incorporated by reference herein Form	Date
101.LAB	XBRL Taxonomy Extension Label Linkbase Database		
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document		
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document		

*

Filed herewith.

Furnished herewith.

+

Confidential treatment granted under 17 C.F.R. §§200.80(b)(4) and 230.406. The confidential portions of this exhibit have been omitted and are marked accordingly. The confidential portions have been provided separately with the SEC pursuant to the confidential treatment request.

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Management contract or compensatory plan, contract, or agreement.

(b)

Exhibits.

The exhibits required by this Item are listed under Item 15(a)(3).

(c)

Financial Statement Schedules.

The financial statement schedules required by this Item are listed under Item 15(a)(2).