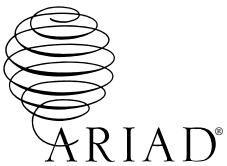

2012 Annual Report

www.ariad.com

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

FORM 10-K

(Mark One)

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2012
OR
[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____to _____
Commission file number 0-21696

ARIAD Pharmaceuticals, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**22-3106987**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

26 Landsdowne Street, Cambridge, Massachusetts 02139-4234
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (617) 494-0400

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

Title of each class	**Name of each exchange on which registered**
Common Stock, $.001 par value	**The 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 [X] No [ ]

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

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

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

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. [X]

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. (Check one):

Large accelerated filer [X] Accelerated filer [ ]
Non-accelerated filer [ ] (Do not check if a smaller reporting company) Smaller reporting company [ ]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes [ ] No [X]

The aggregate market value of the registrant's common stock held by nonaffiliates of the registrant (without admitting that any person whose shares are not included in such calculation is an affiliate), computed by reference to the price at which the common stock was last sold, as of the last business day of the registrant's most recently completed second fiscal quarter was approximately $2.8 billion.

As of February 22, 2013, the registrant had 183,817,824 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents (or parts thereof) are incorporated by reference into the following parts of this Form 10-K: Certain information required in Part III of this Annual Report on Form 10-K is incorporated from the Registrant's Definitive Proxy Statement for the 2013 Annual Meeting of Stockholders.

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PART I

ITEM 1: BUSINESS

The following Business Section contains forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain risks, uncertainties and other factors including the risk factors set forth in Part I, Item 1A of this annual report. Unless the content requires otherwise, references to "ARIAD," "company," "we," "our," and "us," in this annual report refer to ARIAD Pharmaceuticals, Inc. and our subsidiaries.

Overview

ARIAD is a global oncology company whose vision is to transform the lives of cancer patients with breakthrough medicines. Our mission is to discover, develop and commercialize small-molecule drugs to treat cancer in patients with the greatest and most urgent unmet medical need – aggressive cancers where current therapies are inadequate. We are focused on commercializing our first approved cancer medicine, Iclusig™ (*ponatinib*), and developing additional molecularly targeted therapies to treat patients with blood cancers and solid tumors.

Iclusig and our product candidates, AP26113 and ridaforolimus, were discovered internally by our scientists based on our expertise in computational and structure-based drug design. Ridaforolimus is being developed by Merck & Co., Inc., or Merck, pursuant to a license agreement we entered into with Merck in 2010.

Iclusig (ponatinib)

U.S. Approval

On December 14, 2012, we obtained accelerated approval from the U.S. Food and Drug Administration, or FDA, to sell our first new cancer medicine, Iclusig. We have commenced sales and marketing of Iclusig, and the medicine is now available for patients in the United States through specialty pharmacies and specialty distributors. Iclusig is a tyrosine kinase inhibitor, or TKI, that is approved in the United States for the treatment of adult patients with chronic, accelerated or blast phase chronic myeloid leukemia, or CML, who are resistant or intolerant to prior TKI therapy, and the treatment of adult patients with Philadelphia chromosome-positive acute lymphoblastic leukemia, or Ph+ ALL, who are resistant or intolerant to prior TKI therapy.

According to the National Cancer Institute, approximately 5,000 new cases of CML and 1,800 new cases of Ph+ ALL are diagnosed each year in the United States. CML and Ph+ ALL patients treated with TKIs can develop resistance or intolerance over time to these therapies. Iclusig was designed by ARIAD scientists to inhibit the BCR-ABL protein, including drug-resistant mutants that arise during treatment. Iclusig is the only approved TKI that is currently known to demonstrate activity against the T315I gatekeeper mutation of BCR-ABL, the most common mutation occurring in approximately 10 percent of patients with drug resistance.

CML is a rare form of leukemia that is characterized by an excessive and unregulated production of white blood cells by the bone marrow due to a genetic abnormality that produces the BCR-ABL protein. After a chronic phase of production of too many white blood cells, CML typically evolves to the more aggressive phases referred to as accelerated phase and blast phase. Ph+ ALL is a subtype of acute lymphoblastic leukemia that carries the Ph+ chromosome that produces BCR-ABL. It has a more aggressive course than CML and is often treated with a combination of chemotherapy and tyrosine kinase inhibitors. The BCR-ABL protein is expressed in both of these diseases.

The FDA approval of Iclusig was based on results from the pivotal Phase 2 PACE (**P**onatinib Ph+ **A**LL and **C**ML **E**valuation) trial in patients with CML or Ph+ ALL who were resistant or intolerant to prior TKI therapy, or who had the T315I mutation of BCR-ABL. Iclusig had robust anti-leukemic activity, with 54 percent of chronic-phase CML patients, including 70 percent of patients with the T315I mutation, achieving a major cytogenetic response, or MCyR, which was the primary endpoint of the PACE trial for chronic-phase patients. A MCyR means that 35 percent or less of the cells in a patient's bone marrow test positive for the Philadelphia chromosome. In patients with advanced disease, 52 percent of accelerated-phase CML patients, 31 percent of blast-phase CML patients and 41 percent of Ph+ ALL patients achieved a major hematologic response, or MaHR, to Iclusig. MaHR was the primary endpoint in the trial for patients with advanced disease. A MaHR, as measured through the counting of white blood cells in blood and bone marrow, means that either a complete hematologic response has occurred or there is no evidence of leukemia. The most common non-hematologic adverse reactions reported (greater than or equal to 20 percent) were hypertension, rash, abdominal pain, fatigue, headache, dry skin, constipation, arthralgia, nausea, and pyrexia. Hematologic adverse reactions included thrombocytopenia, anemia, neutropenia, lymphopenia, and leukopenia.

The full prescribing information for Iclusig includes a boxed warning specifying that arterial thrombosis and hepatotoxicity have occurred in some patients during clinical trials of Iclusig. Cardiovascular, cerebrovascular, and peripheral vascular thrombosis, including fatal myocardial infarction and stroke, have occurred in Iclusig-treated patients. Serious arterial thrombosis occurred in 8 percent of Iclusig-treated patients. In addition, hepatotoxicity, liver failure and death have occurred in Iclusig-treated patients.

The recommended dose of Iclusig is a 45 mg tablet taken once daily, with or without food.

Status of Other Regulatory Submissions

In August 2012, we filed for marketing authorization for Iclusig with the European Medicines Authority, or EMA, and we currently anticipate approval of our marketing authorization application, or MAA, in the third quarter of 2013. If applicable regulatory criteria are not met, the EMA could refuse to approve the MAA or delay the approval of Iclusig. In addition, we will need to obtain pricing and reimbursement approval in certain countries in Europe before it will be widely available for use. We currently anticipate receiving pricing and reimbursement approvals in Europe commencing in 2014.

We also plan to file for marketing authorization for Iclusig with regulatory authorities in other selected territories around the world, including Switzerland, Canada and Australia in the second half of 2013 and Japan in mid-2014. Each of these regulatory authorities has its own processes and timelines for the review and approval of marketing authorization applications.

Commercialization

We have commenced sales and marketing of Iclusig, and it is now commercially available to patients in the United States. We currently charge approximately $115,000, on a wholesale basis, for an annual supply of the recommended dose of Iclusig.

We plan to commercialize Iclusig on our own in the United States and, subject to obtaining regulatory approval, in Europe and other selected territories worldwide. Our initial commercial strategy is to position Iclusig as the product of choice for CML and Ph+ ALL patients who are resistant or intolerant to TKI therapies. During the past year, we have been actively focused on preparing for the commercial launch of Iclusig in the United States, including establishing an experienced and trained sales force and other professional staff necessary for an effective launch, implementing systems and processes to support launch, developing tools and materials to be utilized during the commercialization of Iclusig and other activities, and arranging for Iclusig to be provided for patients through a network of specialty pharmacies and specialty distributors. In the United States, we have hired an experienced hematology/oncology team

of approximately 60 professionals, including experienced account specialists, regional business directors, corporate account directors and medical science liaisons, that will target approximately 5,000 physicians who generate the majority of TKI prescriptions.

We have also initiated operations in Europe, with headquarters in Switzerland, in preparation for potential EMA approval of Iclusig. We have hired management and other key personnel in Switzerland who are building our business infrastructure and capabilities in Europe. We are hiring country-level personnel in key markets in Europe to build company and brand awareness upon approval, while managing the local country pricing and reimbursement process, and anticipate being ready for commercial launch of Iclusig in Europe by July 1, 2013.

Novartis and Bristol-Myers Squibb, the current leading marketers of TKI's to treat CML and Ph+ ALL, have reported combined annual revenues in 2011 of nearly $5 billion for these drugs. The worldwide market for these therapies is growing annually. It is estimated that the markets in the United States and Europe account for about 70 percent of those revenues, with Japan accounting for an additional 10 percent. The number of newly diagnosed patients in these three geographies was estimated to be approximately 13,000 in 2011 and is expected to grow to approximately 14,000 in five years, based on data from third-party healthcare information providers. Through chronic treatment of their disease with available TKIs, we estimate that most of these patients will benefit from one or more therapies for over a decade. We believe that the majority of patients will likely switch therapies in the course of managing this chronic disease due to resistance or intolerance. We estimate that there are approximately 2,500 patients in the United States, 3,800 patients in Europe and 600 patients in Japan with CML and Ph+ ALL who will become resistant or intolerant to their existing TKI therapy in 2013, based on healthcare information providers and published data from clinical trials for existing CML therapies. We currently estimate that global sales of Iclusig for treatment of patients with CML and Ph+ ALL patients may reach $1 billion by 2018, subject to the risks and cautionary statements in the "Risk Factors" set forth in Part I, Item 1A of this annual report.

Pipeline

Our product pipeline currently consists of three product candidates – Iclusig (for which we plan to seek approval in additional cancer indications and in countries outside of the United States), AP26113 and ridaforolimus, which is being developed by Merck under a license agreement we entered into with Merck in 2010.

Iclusig (for Additional Indications and Regions)

In July 2012, we initiated a randomized Phase 3 clinical trial of ponatinib, referred to as the EPIC (**E**valuation of **P**onatinib versus **I**matinib in **C**hronic Myeloid Leukemia) trial, in adult patients with newly diagnosed CML in the chronic phase. The trial is designed to provide definitive clinical data to support regulatory approval of ponatinib in newly diagnosed CML patients. This trial is a randomized, two-arm, multi-center trial that compares the efficacy of ponatinib with that of imatinib. Approximately 500 patients will be enrolled and randomized 1:1 to treatment with Iclusig or imatinib. The primary endpoint of the trial is major molecular response, or MMR, rate at 12 months of treatment. A MMR means that the level of BCR-ABL RNA in a patient's blood is less than 0.1% on the International Scale. We currently anticipate completion of enrollment by the end of 2013, with an interim analysis of the data in mid-2014.

In August 2012, we initiated a multi-center Phase 1/2 clinical trial in Japan of Iclusig in Japanese patients with CML who have failed treatment with dasatinib or nilotinib or who have Ph+ ALL and have failed prior treatment with TKIs. This trial is designed to establish the recommended dose for Iclusig and confirm its anti-leukemic activity in Japanese patients. We expect that this trial should provide the incremental data needed for regulatory approval of Iclusig in resistant or intolerant patients in Japan. The Phase 1 portion of the trial is designed to determine the recommended dose for Japanese patients and is expected to enroll at least 12 patients. The Phase 2 portion of the trial is expected to enroll 25 patients. The

primary endpoint for chronic-phase CML patients is MCyR. The primary endpoint for accelerated and blast phase CML patients and for Ph+ ALL patients is MaHR.

In January 2013, we announced an agreement with Newcastle University, U.K., on behalf of the U.K. National Cancer Research Institute, or NCRI, to collaborate on a multi-center, randomized Phase 3 trial, named SPIRIT 3, to assess the impact of switching patients with CML being treated with a first-line TKI, upon suboptimal response or treatment failure, to Iclusig. The SPIRIT 3 trial is designed as a randomized, two-arm, multi-center trial that compares MMR at three years in newly diagnosed patients treated with imatinib to those treated with nilotinib, when patients are "rescued" with Iclusig upon suboptimal response at three or 12 months or treatment failure. The SPIRIT 3 trial is designed to enroll adult patients with chronic-phase CML diagnosed within three months and previously untreated for CML with any TKI therapy. Approximately 1,000 patients will be randomized 1:1 to standard doses of imatinib (400 mg orally once daily) or nilotinib (300 mg orally twice daily). Patients will be switched to Iclusig (45 mg orally once daily) based on defined criteria of suboptimal response, treatment failure, or intolerance to first-line therapy. The primary endpoint of the trial is the proportion of patients who have achieved MMR at three years on their initially allocated first line of therapy, regardless of switch to Iclusig. The NCRI expects to begin enrollment in the trial in the second quarter of 2013.

In addition, we believe that Iclusig has potential applications beyond CML in other blood cancers and solid tumors, such as gastrointestinal stromal tumors, or GIST, acute myeloid leukemia and certain forms of non-small cell lung cancer, or NSCLC. We plan to initiate additional clinical trials of Iclusig, including a Phase 2 clinical trial in patients with GIST, in 2013, as we continue development of this product candidate.

AP26113

AP26113 is an investigational inhibitor of anaplastic lymphoma kinase, or ALK, epidermal growth factor receptor, or EGFR, and repressor of silencing-1, or ROS1, all of which are clinically validated targets in NSCLC. We initiated patient enrollment in a Phase 1/2 clinical trial of AP26113 in the third quarter of 2011. The protocol is designed to enroll approximately 50 to 60 patients in the Phase 1 portion of the trial and approximately 80 patients in the Phase 2 portion of the trial.

In September 2012, we announced initial clinical results from the Phase 1/2 trial of AP26113. The primary objectives of the Phase 1 portion of the trial are to determine the maximum tolerated dose and the recommended dose for further study of AP26113 and to characterize its safety and preliminary anti-tumor activity. At that time, 34 patients had been enrolled in the study, and 19 remained on study. Safety data showed AP26113 to be generally well tolerated. The most common adverse events were nausea and fatigue. Of the 11 ALK-positive patients evaluable for response, eight patients demonstrated a partial response, or PR, using RECIST criteria. Of the six evaluable patients with EGFR-mutant NSCLC, all of whom had failed other treatments, one patient achieved a partial response and two patients had stable disease. We expect to commence the Phase 2 portion of the trial in the first half of 2013 and, subject to further discussions with the regulatory agencies, commence a pivotal trial of AP26113 in ALK-positive NSCLC patients in mid-2013 in parallel with the Phase 2 portion of the trial. We estimate that currently there are approximately 14,200 ALK-positive, 5,300 ROS1-positive, and 35,400 EGFR-positive patients with advanced and metastatic NSCLC in the United States, Europe and Japan, based on healthcare information providers who would be potentially eligible for treatment with AP26113, if it were approved.

Ridaforolimus

Ridaforolimus is an investigational inhibitor of the mammalian target of rapamycin, or mTOR, that we discovered and developed internally and later licensed in 2010 to Merck. Under the license agreement, Merck is responsible for all activities and funds all of the costs related to the development, manufacturing and commercialization of ridaforolimus in oncology. In the third quarter of 2011, Merck filed in the United States and Europe for regulatory approval of ridaforolimus as a maintenance therapy for patients with metastatic soft-tissue and bone sarcomas who had a favorable response to chemotherapy. In June

2012, the FDA issued a complete response letter regarding the New Drug Application, or NDA, filed by Merck, stating that the FDA could not approve the application in its present form and that additional clinical trial(s) would need to be conducted to further assess safety and efficacy of ridaforolimus in this indication. In November 2012, Merck announced that it had formally notified the EMA of Merck's decision to withdraw the MAA for ridaforolimus, because the data available to date and provided in the MAA were not sufficient to permit licensure of ridaforolimus in the European Union for the maintenance treatment of patients with soft tissue sarcoma or primary malignant bone tumor. In its announcement, Merck stated that it is studying ridaforolimus in combination with other drugs in other tumor types and that it is committed to the ongoing clinical trials of ridaforolimus. Under the license agreement, Merck has agreed to pay us milestone payments based on successful development of ridaforolimus and achievement of specified sales thresholds, as well as tiered, double-digit royalties on global net sales of ridaforolimus. There can be no assurance that we will receive any additional payments under this agreement.

Potential Cardiovascular Indications of Ridaforolimus

As an mTOR inhibitor, ridaforolimus has also been shown in preclinical studies to block the proliferation and migration of vascular smooth muscle cells, the primary cause of narrowing and blockage of injured arteries, and is an analog of sirolimus, another mTOR inhibitor that has been approved for use in drug-eluting stents. Clinical studies have found lower reblockage rates in patients treated with stents that deliver small-molecule drugs, such as sirolimus, everolimus or paclitaxel, a cytotoxic agent, locally to the site of vascular injury. Such stents have become the standard of care for many patients undergoing interventional procedures to open narrowed coronary arteries.

We entered into license agreements with Medinol Ltd., or Medinol, a leading innovator in stent technology, in January 2005, and with ICON Medical Corp., or ICON, an emerging medical device company, in October 2007, to develop and commercialize stents and other medical devices to deliver ridaforolimus to prevent restenosis, or reblockage, of injured vessels following interventions in which stents are used in conjunction with balloon angioplasty. We have retained the right to enter into one additional non-exclusive license agreement, in addition to the licenses granted to Medinol and ICON, to develop and commercialize medical devices delivering ridaforolimus for use in vascular disease. Both companies are still involved in the preclinical stages of development of these medical devices. There can be no assurance that we will receive any additional payments under these agreements.

Our Discovery Programs

Our research and development programs are focused on discovering and developing small-molecule drugs that regulate cell signaling for the treatment of cancer. Many of the critical functions of cells, such as cell growth, differentiation, gene transcription, metabolism, motility and survival, are dependent on signals carried back and forth from the cell surface to the nucleus and within the cell through a system of molecular pathways. When disrupted or over-stimulated, such pathways may trigger diseases such as cancer. Our research focuses on exploring cell-signaling pathways, identifying their role in specific cancers and cancer subtypes, and discovering drug candidates to treat those cancers by interfering with the aberrant signaling pathways of cells. The specific cellular proteins blocked by our product candidates have been well characterized and validated as cancer targets. Iclusig and our product candidates, AP26113 and ridaforolimus, have been developed in-house through the integrated use of structure-based drug design and computational chemistry, and their targets have been validated with techniques such as functional genomics, proteomics, and chemical genetics.

Our Intellectual Property

Patents and other intellectual property rights are essential to our business. In general, we file patent applications to protect our technology, inventions and improvements to our inventions that we consider to be patentable and important to our business.

We solely own the following patents and patent applications for our product candidates:

- Iclusig, our pan BCR-ABL inhibitor, is protected by composition of matter claims of U.S. Patent No. 8,114,874, which expires on December 22, 2026, and corresponding international counterparts;
- AP26113, our dual ALK/EGFR kinase inhibitor, is covered by composition of matter claims of a pending U.S. patent application, which, if granted, is expected to expire in 2029, and corresponding international counterparts; and
- Ridaforolimus, our mTOR inhibitor licensed to Merck, is protected by composition of matter claims of U.S. Patent No. 7,091,213, which expires on February 3, 2023, and corresponding international counterparts.

In addition to the composition of matter patents and patent applications mentioned above, we also own other patents and patent applications covering manufacturing processes, formulations and uses that may provide additional protection of the respective product or product candidate.

The remainder of our patent portfolio is focused primarily on inventions involving additional classes of chemical compounds, the mTOR gene, and the components, configurations and use of our ARGENT regulation technologies, which we out-licensed in 2011 and are no longer pursuing internally.

We also rely on unpatented trade secrets and proprietary know-how, some of which is not believed to be adequately protectable through patents. In order to protect our trade secrets, we enter into confidentiality agreements with our employees, consultants, investigators, clinical trial sites, contractors, collaborators and other third parties to whom we disclose confidential information, although protection of trade secrets is generally recognized as challenging.

Our Licenses to Third Parties

Our Collaboration and License Agreements with Merck

In July 2007, we entered into a collaboration agreement with Merck for the joint global development, manufacture and commercialization of ridaforolimus for use in cancer, referred to as the Collaboration Agreement. In May 2010, we entered into an amended and restated agreement with Merck, referred to as the License Agreement, which replaced the Collaboration Agreement, and a related supply agreement.

Under the terms of the License Agreement, we granted Merck an exclusive license to develop, manufacture and commercialize ridaforolimus in oncology, and Merck assumed responsibility for all activities related to the development, manufacture and commercialization of ridaforolimus and agreed to fund 100 percent of all ridaforolimus costs incurred after January 1, 2010. The License Agreement provides that Merck will develop ridaforolimus in multiple oncology indications. If ridaforolimus receives regulatory approval, Merck will be responsible for selling ridaforolimus worldwide, will record global sales and will pay us tiered double-digit royalties on global net sales. The License Agreement provides us with an option to co-promote ridaforolimus in all indications in the United States and, in such case, we would be compensated by Merck for our sales efforts.

Under the License Agreement, Merck paid us an initial up-front fee of $50 million in the second quarter of 2010 and has agreed to pay us up to $514 million in potential regulatory and sales milestone payments, based on the successful development of ridaforolimus in multiple potential cancer indications or upon achievement of specified product sales thresholds. Through December 31, 2012, Merck has paid us a $25 million milestone payment in the third quarter of 2011, for acceptance of an MAA in Europe, which was subsequently withdrawn by Merck in November 2012. Potential additional milestone payments include up to $289 million associated with potential regulatory filings and approvals for other cancer indications, and up to $200 million associated with the achievement of certain sales thresholds, subject to regulatory approval and commercialization of ridaforolimus.

The term of the License Agreement extends until the expiration of all obligations of Merck to pay royalties or milestones to us with respect to its development and commercialization of a product. There is no specified term for Merck's obligation to pay milestones under the License Agreement, and the term of Merck's obligation to pay royalties extends until the later of the last to expire claim under the patents relating to the licensed rights or a specified number of years after the first commercial sale of a product. The License Agreement may be terminated by either party for material breach following the failure to cure after a 60-day cure period (which period is reduced to 30 days if the breach is due to the failure to make a required payment) or for insolvency or bankruptcy which is not discharged within 60 days of the filing. Merck may terminate the License Agreement on nine months' written notice to us or as a result of a serious safety issue after meeting with us as specified in the agreement. We may terminate the License Agreement immediately upon written notice to Merck in the event that Merck or any of its affiliates challenge any ARIAD patent right or assist a third party in such challenge. We also have the right to terminate the License Agreement in specified circumstances with respect to specific indications if Merck pursues a competing mTOR inhibitor prior to receiving regulatory approval of ridaforolimus.

Our Stent Collaborations

In January 2005, we entered into a license agreement with Medinol and in October 2007 we entered into a license agreement with ICON, to develop and commercialize ridaforolimus-eluting stents and other medical devices to prevent restenosis, or reblockage, of injured vessels following interventions in which stents are used in conjunction with balloon angioplasty. Under these agreements, we granted to each of Medinol and ICON a non-exclusive, world-wide, royalty-bearing license, under our patents and technology relating to ridaforolimus, to develop, manufacture and sell the stents and certain other medical devices that deliver ridaforolimus. We are responsible for supplying Medinol and ICON with, and they have agreed to purchase from us, certain quantities of ridaforolimus for use in its development, manufacture and sale of the stents and other medical devices.

The agreement with Medinol provides for the payment by Medinol to us of up to $39.3 million, which includes an upfront license fee and payments based upon achievement of development, regulatory and commercial milestones, if two products are developed. Through December 31, 2012, we have received $750,000 under the agreement. In addition, we are eligible to receive tiered single-digit royalties based on various minimum levels of stents or other medical devices sold under the agreement. As of December 31, 2012, no products have been approved by regulatory authorities for sale under this agreement.

The agreement with ICON provides for the payment by ICON to us of up to $27.4 million based upon achievement of certain clinical, regulatory and commercial milestones, if two products are developed. Through December 31, 2012, we have received no such payments under the agreement. In addition, we are eligible to receive single-digit royalties based on net sales of stents or other medical devices sold under the agreement. As of December 31, 2012, no products have been approved by regulatory authorities for sale under this agreement. Concurrent with the execution of the license agreement with ICON, we received shares of ICON common stock equal to an ownership interest in ICON of less than 10 percent and certain other rights including, maintenance, anti-dilution and registration rights.

The terms of both the Medinol and ICON agreements extend to the later to occur of the expiration of our patents relating to the rights licensed to Medinol or ICON under the agreement or 15 years after the first commercial sale of a product. The agreements may be terminated by either party for breach following the failure to cure after a 90-day cure period. In addition, Medinol or ICON may terminate their respective agreements upon 30 days' notice to us upon certain events, including if it determines, in its reasonable business judgment, that it is no longer in its business interest to continue the development of a medical device to deliver ridaforolimus. We may terminate the agreements upon 30 days' notice to Medinol or ICON, if we determine that it is no longer in our business interest to continue our development and regulatory approval efforts with respect to ridaforolimus.

Licenses Related to ARGENT Technology

In 2011, we executed three exclusive out-license agreements for separate aspects of our ARGENT cell-signaling regulation technology, which we are no longer pursuing internally. The licenses to these non-core assets provide us with a combination of equity ownership in the licensees, upfront payments, ongoing fees for supply of certain research reagents, and potential milestone and royalty payments linked to clinical, regulatory and sales achievements of the licensees. These out-license arrangements allow us to focus primarily on the development and commercialization of our core compounds, and we do not currently believe that these license agreements are material to our business or that any payments that could be received under these agreements would be material to our results of operations or financial position.

The ARGENT technology platform combines chemistry and genetics to allow specific cell-signaling and gene-expression events to be chemically activated in whole animals and cultured cells. The technology platform includes a portfolio of distinct small-molecule "dimerizer" compounds optimized for specific applications. Dimerizers bring specific proteins together in cells. The technology allows intracellular processes to be controlled with small molecules, which may be useful in the development of therapeutic vaccines and gene and cell therapy products, and which provide versatile tools for applications in cell biology, functional genomics and drug-discovery research. The technology is being developed to treat human disease through cancer vaccines, cell therapy and gene therapy, in each case featuring small-molecule regulation of cellular activation.

Initial clinical proof of concept has already been demonstrated by the licensees for two product candidates, which utilize our small-molecule dimerizer drug AP1903, in patients with prostate cancer and in patients with hematologic malignancies who have undergone hematopoietic stem cell transplants. We expect the licensees to start Phase 2 clinical trials of both product candidates in 2012. AP1903 was discovered and developed by ARIAD scientists.

Research and Development Spending

During each of the three years ended December 31, 2012, 2011 and 2010, we spent approximately $144.7 million, $77.7 million and $58.0 million, respectively, on our research and development activities.

Manufacturing

Iclusig and our drug candidates and preclinical compounds are small molecules that can be readily synthesized by processes that we have developed. We are able to manufacture in-house the quantities of our product candidates necessary for certain preclinical studies. We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of Iclusig or our product candidates. We contract with third-party manufacturers to assist in the development and optimization of our manufacturing processes and methods and to supply our product candidates in sufficient bulk quantities and in suitable dosage forms for use in our clinical trials. We also expect to continue to depend on third-party manufacturers for the supply of our products for commercialization in the United States, Europe and other territories in which we may sell Iclusig.

Iclusig and AP26113 are produced by an established manufacturing process using conventional organic chemical synthesis. The production of Iclusig and AP26113 is based on technology that we believe is proprietary to us. We have established relationships with third parties for the manufacture of Iclusig clinical and commercial supply and have existing agreements for our supply of drug substance, drug product and distribution. We anticipate entering into additional agreements with one or more contract manufacturers for the manufacture of Iclusig in 2013.

Ridaforolimus is produced by an established manufacturing process using conventional synthetic and natural-product fermentation techniques. The production of ridaforolimus is based in part on technology

that we believe is proprietary to us. Pursuant to our License Agreement with Merck, Merck is responsible for supplying the active pharmaceutical ingredient used in ridaforolimus drug product and the finished drug product. Merck may sub-license this technology to contract manufacturers to enable them to manufacture ridaforolimus for Merck's and our use, including use by our medical device collaborators.

Contract manufacturers are subject to extensive governmental regulation and we depend on them to manufacture Iclusig and our product candidates in accordance with the FDA's current good manufacturing practice regulations, or cGMPs. We have an established quality assurance program intended to ensure that our contract manufacturers produce our compounds in accordance with cGMPs, and other applicable domestic and foreign regulations. We believe that our current contractors comply with such regulations.

Competition

The pharmaceutical and biotechnology industries are intensely competitive. We compete directly and indirectly with other pharmaceutical companies, biotechnology companies and academic and research organizations, many of whom have greater resources than us. We compete with companies who have products on the market or in development in the same class or for the same indications as our product candidates. We may also compete with organizations that are developing similar technology platforms.

In the area of oncology, pharmaceutical and biotechnology companies such as Amgen Inc., AstraZeneca PLC, Bristol-Myers Squibb Company, Celgene Corporation, Eli Lilly and Company, the Roche Group, GlaxoSmithKline plc, Johnson & Johnson, Merck, Merck KGaA, Novartis AG, Pfizer, Inc., Sanofi-Aventis, Takeda Pharmaceutical Co., Ltd., and Teva Pharmaceutical Industries Ltd. are developing and marketing drugs to treat cancer.

Bristol-Myers Squibb, Novartis, Pfizer and Teva are currently marketing TKIs for the treatment of patients with CML that compete with Iclusig. Novartis' imatinib is marketed in the first-line setting, and Bristol-Myers Squibb's dasatinib and Novartis' nilotinib are marketed for patients in the first-line setting, as well as in those who have failed imatinib therapy. These drugs generated nearly $5 billion in revenues during 2011, according to reported results from Bristol-Myers Squibb and Novartis. In the resistance/intolerance market, Pfizer's bosutinib and Teva's omacetaxine mepesuccinate were recently approved in the United States and compete with Iclusig. In Asia, Il-Yang Pharmaceutical recently gained approval in South Korea for radotinib, a locally developed TKI for the treatment of CML patients. We cannot be certain that Iclusig will be commercially successful. In addition to the other challenges related to a company launching its first commercial drug, we will face competition from these other TKIs that are currently approved for the treatment of CML patients and any new products that may be approved. While we believe that Iclusig has a competitive commercial profile compared to the existing TKI therapies on the market, our current estimates of the potential competitiveness of Iclusig compared to existing TKI therapies and the revenues that Iclusig could generate in future periods are subject to various risks and uncertainties, including those set forth in "Risk Factors" in Part I, Item 1A of this annual report under the caption "Risks relating to the development and commercialization of our products and product candidates."

Several companies have ALK or EGFR inhibitors in various stages of development that could compete with AP26113. Pfizer has obtained approval for and is currently marketing crizotinib for patients with ALK-positive non-small cell lung cancer. Novartis, Chugai Pharmaceutical Co., Tesaro, Xcovery and Astellas also have ALK inhibitors in early-stage development. In addition, a number of companies have developed or are in various stages of development of second-generation EGFR inhibitors, including Roche/Astellas, Pfizer, Boehringer Ingleheim, Celgene/Avila Therapeutics and Clovis Oncology.

Pfizer and Novartis are developing mTOR inhibitors for use in cancer that could compete with ridaforolimus. Pfizer's mTOR inhibitor, temsirolimus, and Novartis' mTOR inhibitor, everolimus, are both approved to treat patients with advanced kidney cancer. In addition, everolimus has been approved to treat patients with advanced neuroendocrine tumors of pancreatic origin and subependymal giant cell

astrocytoma associated with tuberous sclerosis. Other companies have products on the market or in development against which ridaforolimus, if approved, may compete. Specifically, PharmaMar, a wholly owned subsidiary of Zeltia Group, has a product, trabectedin, approved for the treatment of soft-tissue sarcomas in Europe, and Takeda has mifamurtide, an immunotherapy product approved in Europe for treatment of bone sarcomas. Ziopharm Oncology, Inc. has palifosfamide, a chemotherapeutic agent, used in combination with doxorubicin in Phase 3 development for first-line treatment of metastatic sarcomas.

We may also experience competition from companies that have acquired or may acquire technology from companies, universities, and other research institutions. As these companies develop their technologies, they may develop proprietary positions that may materially and adversely affect us.

Government Regulation and Product Approval

Governmental authorities in the United States, at the federal, state and local level, and in other countries extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, marketing and export and import of products such as Iclusig and those we are developing. Our product candidates must be approved by the FDA through the NDA process before they may be legally marketed in the United States and by the EMA through the MAA process before they may be legally marketed in Europe. Our product candidates will be subject to similar requirements in other countries prior to marketing in those countries. The process of obtaining regulatory approvals in the United States and in foreign countries, along with subsequent compliance with applicable statutes and regulations, requires the expenditure of substantial time and financial resources.

United States Drug Development Process

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and implementing regulations. Failure to comply with the applicable U.S. requirements at any time during the product development process or approval process, or after approval, may subject an applicant to administrative or judicial sanctions, any of which could have a material adverse effect on us. These sanctions could include:

- refusal to approve pending applications;
- withdrawal of an approval;
- imposition of a clinical hold;
- warning letters;
- product seizures;
- total or partial suspension of production or distribution; or
- injunctions, fines, disgorgement, or civil or criminal penalties.

The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests, animal studies and formulation studies according to Good Laboratory Practices, or GLPs, or other applicable regulations;
- submission to the FDA of an Investigational New Drug Application, or IND, which must become effective before human clinical trials may begin;
- performance of adequate and well-controlled human clinical trials according to Good Clinical Practices, or GCPs, and other applicable requirements to establish the safety and efficacy of the proposed drug for its intended use;
- submission to the FDA of an NDA;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug is produced to assess compliance with current Good Manufacturing Practices, or cGMP, to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity; and
- FDA review and approval of the NDA.

As part of the IND, an IND sponsor must submit to the FDA the results of preclinical tests, which may include laboratory evaluations and animal studies, together with manufacturing information and analytical data, and the proposed clinical protocol for the first phase of the clinical trial of the drug. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, places the clinical trial on a "clinical hold" because of safety concerns or perceived procedural deficiencies. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials may begin. A clinical hold may be imposed by the FDA at any time during the life of an IND, and may affect one or more specific studies or all studies conducted under the IND.

All clinical trials must be conducted under the supervision of a qualified investigator in accordance with GCP's. They must be conducted under protocols detailing the objectives of the trial, dosing procedures, research subject selection and exclusion criteria and the safety and effectiveness criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND, and progress reports detailing the status of the clinical trials must be submitted to the FDA annually. Sponsors also must timely report to FDA serious and unexpected adverse reactions, any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigation brochure, or any findings from other studies or animal or in vitro testing that suggest a significant risk in humans exposed to the drug. An institutional review board, or IRB, must also review and approve each new clinical protocol and patient informed consent form prior to commencement of the corresponding clinical trial at each institution where a trial is to be performed. Protocols detail, among other things, the objectives of the study, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor patient safety.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- *Phase 1:* The drug is initially introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, such as cancer, especially when the product may be inherently too toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.

- *Phase 2:* Clinical trials are performed on a limited patient population intended to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.

- *Phase 3:* Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical study sites. These studies are intended to establish the overall risk-benefit ratio of the product and provide, if appropriate, an adequate basis for product labeling.

Human clinical trials are inherently uncertain and Phase 1, Phase 2 and Phase 3 testing may not be successfully completed. The FDA or the sponsor may suspend a clinical trial at any time for a variety of reasons, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients.

During the development of a new drug, sponsors are given an opportunity to meet with the FDA at certain points. These points may be prior to submission of an IND, at the end of Phase 2, and before an NDA is submitted. These meetings can provide an opportunity for the sponsor to share information about the data gathered to date and for the FDA to provide advice on the next phase of development. Sponsors typically use the end-of-Phase 2 meeting to discuss their Phase 2 clinical results and present their plans for the pivotal Phase 3 clinical trial that they believe will support approval of the new drug.

Concurrent with clinical trials, sponsors usually complete additional animal safety studies and also develop additional information about the chemistry and physical characteristics of the drug and finalize a process for manufacturing commercial quantities of the product in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug and the manufacturer must develop methods for testing the quality, purity and potency of the drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its proposed shelf-life.

If a drug is intended to treat a serious or life threatening condition for which there is an unmet medical need, a company may request that the FDA consider the drug for a fast track development program at the time of submitting its IND or at any time prior to receiving marketing approval. The fast track program is designed to facilitate the development and expedite the review of a new drug for the treatment of specific conditions. If the FDA agrees that the drug meets the criteria for fast track development for treatment of one or more conditions, it will grant fast track status.

Orphan Drug Designation and Approval

Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug intended to treat a rare disease or condition which is defined as one affecting fewer than 200,000 individuals in the United States or more than 200,000 individuals where there is no reasonable expectation that the product development cost will be recovered from product sales in the United States. Orphan drug designation must be requested before submitting an NDA and does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

If an orphan drug-designated product subsequently receives the first FDA approval for the disease for which it was designed, the product will be entitled to seven years of product exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication, except in very limited circumstances, for seven years. Early in 2013, we received orphan drug exclusivity approval for the treatment of adult patients with chronic, accelerated or blast phase CML, who are resistant or intolerant to prior TKI therapy, and the treatment of adult patients with Ph+ ALL who are resistant or intolerant to prior TKI therapy. This seven year exclusivity period began on December 14, 2012, the date of approval of our NDA.

United States Drug Review and Approval Processes

The results of product development, preclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the drug, proposed labeling, and other relevant information are submitted to the FDA as part of an NDA requesting approval to market the product.

The FDA reviews all NDAs submitted to ensure that they are sufficiently complete for substantive review before it accepts them for filing. It may request additional information rather than accept an NDA for filing. In this event, the NDA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing.

Once the submission is accepted for filing, the FDA begins an in-depth and substantive review. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant. The FDA may seek advice and a recommendation from an external advisory committee as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. Before approving an NDA, the FDA will inspect the facility or facilities where the product is manufactured and tested. The FDA may refuse to approve an NDA if the applicable regulatory criteria are not satisfied or may require submission of additional clinical or other data and information which, upon agency review and interpretation, may or may not be deemed by the FDA to

satisfy the criteria for approval. The FDA may also issue a "complete response" letter, which may require additional clinical or other data or impose other conditions that must be met in order to secure final approval of the NDA.

NDAs receive either standard or priority review. A drug representing a significant improvement in treatment, prevention or diagnosis of disease may receive priority review. In addition, products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval and may be approved on the basis of adequate and well-controlled clinical trials establishing that the drug product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. In such a situation, a drug may be approved based on a Phase 2 pivotal trial, as was the case with Iclusig. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. Priority review and accelerated approval do not change the standards for approval, but may expedite the approval process.

In the recently enacted Food and Drug Administration Safety and Innovation Act, or FDASIA, Congress encouraged the FDA to utilize innovative and flexible approaches to the assessment of products under accelerated approval. The law requires the FDA to issue related draft guidance within a year after the law's enactment and also promulgate confirming regulatory changes.

If approved by the FDA, the product's use may be limited to specific diseases, dosages or indications. In addition, the FDA may require us to conduct additional testing post-approval, which may involve further nonclinical studies or clinical trials designed to further assess the drug's safety and effectiveness and may require additional testing and surveillance programs to monitor the safety of the drug in the marketplace.

Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of the use of Iclusig and our product candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND, and the submission date of an NDA, plus the time between the submission date of an NDA and the approval of that application. Only one patent applicable to an approved drug is eligible for the extension and the application for extension must be made prior to expiration of the patent. The United States Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we intend to apply for restorations of patent term for some of our currently owned or licensed patents to add patent life beyond their current expiration date, depending on the expected length of clinical trials and other factors involved in the submission of the relevant NDA.

Market exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or

supplement to an approved NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, for new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA; however, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Pediatric Exclusivity and Pediatric Use

Under the Best Pharmaceuticals for Children Act, or BPCA, certain drugs may obtain an additional six months of exclusivity, if the sponsor submits information requested in writing by the FDA, or a Written Request, relating to the use of the active moiety of the drug in children. The FDA may not issue a Written Request for studies on unapproved or approved indications or where it determines that information relating to the use of a drug in a pediatric population, or part of the pediatric population, may not produce health benefits in that population.

We have not received a Written Request for such pediatric studies, although we may ask the FDA to issue a Written Request for such studies in the future. To receive the six-month pediatric market exclusivity, we would have to receive a Written Request from the FDA, conduct the requested studies in accordance with a written agreement with the FDA or, if there is no written agreement, in accordance with commonly accepted scientific principles, and submit reports of the studies. A Written Request may include studies for indications that are not currently in the labeling if the FDA determines that such information will benefit the public health. The FDA will accept the reports upon its determination that the studies were conducted in accordance with and are responsive to the original Written Request or commonly accepted scientific principles, as appropriate, and that the reports comply with the FDA's filing requirements.

In addition, the Pediatric Research Equity Act, or PREA, requires a sponsor to conduct pediatric studies for most drugs and biologicals, for a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration. Under PREA, original NDAs, biologics license application and supplements thereto, must contain a pediatric assessment unless the sponsor has received a deferral or waiver. The required assessment must assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The sponsor or FDA may request a deferral of pediatric studies for some or all of the pediatric subpopulations. A deferral may be granted for several reasons, including a finding that the drug or biologic is ready for approval for use in adults before pediatric studies are complete or that additional safety or effectiveness data needs to be collected before the pediatric studies begin. After April 2013, the FDA must send a non-compliance letter to any sponsor that fails to submit the required assessment, keep a deferral current or fails to submit a request for approval of a pediatric formulation.

As part of the FDASIA, Congress made a few revisions to BPCA and PREA, which were slated to expire on September 30, 2012, and made both laws permanent.

Approval or Clearance of Medical Devices

The basic regulatory requirements that manufacturers of medical devices distributed in the U.S. must comply with are:

- 510(k) premarket notification, unless exempt, or premarket approval application, or PMA
- Establishment registration
- Medical device listing
- Quality system regulation

- Labeling requirements
- Medical Device Reporting

The FDA classifies medical devices into one of three classes based on the perceived level of associated risk. Regulatory control and related requirements increase from Class I to Class III. Before most new devices can be introduced, their manufacturers must obtain marketing clearance through either a premarket notification under Section 510(k) of the FDCA or approval of a PMA.

Drug-eluting stents are classified as Class III devices and must be the subject of an approved PMA before they may be marketed. A PMA must be supported by more detailed scientific evidence including clinical data to demonstrate the safety and efficacy of the device. If the device is determined to present a significant risk, the manufacturer must submit an investigational device exemption, or IDE, prior to commencing clinical trials. If the FDA approves the IDE and the institutional review boards, or IRBs, at the institution at which the clinical trials will be performed approve the clinical protocol and related materials, clinical trials may begin. Upon completion of the clinical trials, and assuming that the results indicate that the product is safe and effective for its intended purpose, the sponsor will then submit a PMA.

PMA approval requires, among other things, the submission of valid scientific evidence in the form of preclinical and clinical data, and a preapproval inspection to determine if the manufacturing facility complies with quality systems/current good manufacturing practices, or QS/cGMP, under the regulation that governs the design and all elements of the manufacture, control and documentation of devices.

Post-Approval Requirements

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further FDA review and approval. In addition, the FDA may require testing and surveillance programs to monitor the effect of approved products that have been commercialized, and the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs.

Any drug products manufactured or distributed by us pursuant to FDA approvals are subject to continuing regulation by the FDA, including, among other things:

- record-keeping requirements;
- reporting of adverse experiences with the drug;
- providing the FDA with updated safety and efficacy information;
- drug sampling and distribution requirements;
- notifying the FDA and gaining its approval of specified manufacturing or labeling changes; and
- complying with FDA promotion and advertising requirements.

Drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and some state agencies for compliance with cGMP and other laws.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products. Future FDA and state inspections may identify compliance issues at the facilities of our contract manufacturers that may disrupt production or distribution, or require substantial resources to correct.

From time to time, legislation is drafted, introduced and passed in Congress that could significantly change the statutory provisions governing the approval, manufacturing and marketing of products regulated by the FDA. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency in ways that may significantly affect our business and our products. It is impossible to predict whether legislative changes will be enacted, or FDA regulations, guidance or interpretations changed or what the impact of such changes, if any, may be.

Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we must obtain approval by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Under European Union regulatory systems, a company may submit marketing authorization applications either under a centralized or decentralized procedure. The centralized procedure, which is compulsory for medicines produced by biotechnology or those medicines intended to treat AIDS, cancer, neurodegenerative disorders or diabetes and optional for those medicines which are highly innovative, provides for the grant of a single marketing authorization that is valid for all European Union member states. The decentralized procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization may submit an application to the remaining member states. Within 90 days of receiving the applications and assessments report, each member state must decide whether to recognize approval. If a member state does not recognize the marketing authorization, the disputed points are eventually referred to the European Commission, whose decision is binding on all member states.

As in the United States, the EMA may grant orphan drug status for specific indications if the request is made before an MAA is made. The EMA considers an orphan medicinal product to be one that affects less than five of every 10,000 people in the European Union. A company whose application for orphan drug designation in the European Union is approved is eligible to receive, among other benefits, regulatory assistance in preparing the marketing application, protocol assistance and reduced application fees. Orphan drugs in the European Union also enjoy economic and marketing benefits, including up to ten years of market exclusivity for the approved indication, unless another applicant can show that its product is safer, more effective or otherwise clinically superior to the orphan designated product.

ATU

Although Iclusig has not been approved by the EMA for commercial sale in the European Union, the French Health Products Safety Agency, or Afssaps, has granted us an Autorisation Temporaire d'Utilisation, or Temporary Authorization for Use, or ATU, in France. Under an ATU, the Afssaps allows the use of a drug in France before marketing approval has been obtained in France in order to treat serious or rare diseases for which no other treatment is available in that country. Afssaps will only grant an ATU where the benefit of the product outweighs the risk. An ATU is granted for one year and may be renewed. As a result of the granting of the ATU, we will be required to gather and analyze data concerning Iclusig's use and submit a periodic report to Afssaps. We also will be responsible for submitting pharmacovigilance reports, as necessary. An ATU may be modified, suspended, or withdrawn for reasons of public health or if the conditions under which the ATU was granted are no longer met.

Reimbursement

Sales of Iclusig and any of our product candidates, if approved, will depend, in part, on the extent to which the costs of the products will be covered by third-party payors, including government health programs such as Medicare and Medicaid, commercial health insurers and managed care organizations. These third-party payors are increasingly challenging the prices charged for medical products and services. Additionally, the containment of healthcare costs has become a priority of federal and state governments, and the prices of drugs have been a focus in this effort. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results. If these third-party payors do not consider our products to be cost-effective compared to other available therapies, they may not cover our products after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products on a profitable basis.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, imposes requirements for the distribution and pricing of prescription drugs for Medicare beneficiaries. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities which will provide coverage of outpatient prescription drugs. Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class. Government payment for some of the costs of prescription drugs may increase demand for products for which we receive marketing approval. However, any negotiated prices for our products covered by a Part D prescription drug plan will likely be lower than the prices we might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA may result in a similar reduction in payments from non-governmental payors.

On February 17, 2009, President Obama signed into law the American Recovery and Reinvestment Act of 2009. This law provides funding for the federal government to compare the effectiveness of different treatments for the same illness. Although the results of the comparative effectiveness studies are not intended to mandate coverage policies for public or private payors, such a result is a likely outcome of the law and thus it is unclear what if any effect the research will have on the sales of our product candidates, if any such product or the condition that it is intended to treat is the subject of a study.

The Patient Protection and Affordable Care Act and the Health Care and Education Affordability Reconciliation Act of 2010, collectively, the Affordable Care Act or ACA, enacted in March 2010, are expected to have a significant impact on the health care industry. ACA is expected to expand coverage for the uninsured while at the same time contain overall healthcare costs. With regard to pharmaceutical products, among other things, ACA is expected to expand and increase industry rebates for drugs covered under Medicaid programs and make changes to the coverage requirements under the Medicare Part D program. We cannot predict the impact of ACA on pharmaceutical companies as many of the ACA reforms require the promulgation of detailed regulations implementing the statutory provisions which are currently being drafted. In addition, although the United States Supreme Court recently upheld the constitutionality of most of the ACA, some states have indicated that they intend to not implement certain sections of the ACA, and some members of the U.S. Congress are still working to repeal the ACA. These challenges add to the uncertainty of the legislative changes enacted as part of ACA.

We expect that there will continue to be a number of federal and state proposals to implement governmental pricing controls and limit the growth of healthcare costs, including the cost of prescription drugs. At the present time, Medicare is prohibited from negotiating directly with pharmaceutical

companies for drugs. The adoption of other legislative or regulatory proposals could have a material adverse effect on our business, financial condition and profitability.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the European Union do not follow price structures of the United States and generally tend to be significantly lower.

Other United States Regulations

Pharmaceutical companies also are subject to various federal and state laws pertaining to health care "fraud and abuse," including anti-kickback laws and false claims laws, and the reporting of payments to physicians and teaching hospitals.

Anti-Kickback Laws

U.S. federal laws prohibit fraud and abuse involving state and federal health care programs, such as Medicare and Medicaid. These laws are interpreted broadly and enforced aggressively by various state and federal agencies, including the Centers for Medicare & Medicaid Services, or CMS, the Department of Justice, the Office of Inspector General for the Department of Health and Human Services and various state agencies. These anti-kickback laws prohibit, among other things, knowingly and willfully offering, paying, soliciting, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing, arranging for or recommending of an item or service that is reimbursable, in whole or in part, by a federal health care program. Remuneration is broadly defined to include anything of value, such as, cash payments, gifts or gift certificates, discounts, or the furnishing of services, supplies or equipment. The anti-kickback laws are broad and prohibit many arrangements and practices that are lawful in businesses outside of the health care industry.

The penalties for violating the anti-kickback laws can be severe. The sanctions include criminal and civil penalties, and possible exclusion from the federal health care programs. Many states have adopted laws similar to the federal anti-kickback laws, and some apply to items and services reimbursable by any payor, including third-party payors.

State and Federal Prohibitions on False Claims

The federal False Claims Act imposes liability on any person or entity that, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment to the federal government. Under the False Claims Act, a person acts knowingly if he has actual knowledge of the information or acts in deliberate ignorance or in reckless disregard of the truth or falsity of the information. Specific intent to defraud is not required. Provisions of the False Claims Act allow a private individual to bring an action on behalf of the federal government and to share in any amounts paid by the defendant to the government in connection with the action. The number of filings under these provisions has increased significantly in recent years. When an entity is determined to have violated the False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties for each false claim. Conduct that violates the False Claims Act may also lead to exclusion from the federal health care programs. Given the number of claims likely to be at issue, potential damages under the False Claims Act for even a single inappropriate arrangement could be significant. In addition, various states have enacted similar laws modeled after the False Claims Act that apply to items and services reimbursed under

Medicaid and other state health care programs, and, in several states, such laws apply to claims submitted to all payors.

Federal Prohibitions on Health Care Fraud and False Statements Related to Health Care Matters

Under the administrative simplification provisions of the Health Insurance Portability and Accountability Act of 1996, or HIPAA, and state laws there are numerous regulations for protecting the privacy and security of protected health information. Additional administrative simplification provisions created the following new federal crimes: health care fraud, false statements relating to health care matters, theft or embezzlement in connection with a health benefit program and obstruction of criminal investigation of health care offenses. The health care fraud statute prohibits knowingly and willfully executing a scheme to defraud any health care benefit program, including a private insurer. The false statements statute prohibits knowingly and willfully falsifying, concealing, or covering up a material fact or making any materially false, fictitious, or fraudulent statement in connection with the delivery of or payment for health care benefits, items, or services. The theft or embezzlement statute prohibits knowingly and willfully embezzling, stealing or otherwise converting or misapplying the money or property of a health care benefit program. The obstruction of criminal investigations of health care offenses statute prohibits willfully preventing, obstructing, misleading or delaying the communication of information and records relating to a violation of a federal health care offense to a criminal investigator. A violation of any of these laws is a felony and may result in fines, or exclusion from the federal health care programs.

The Physician Payment Sunshine Act

The Physician Payment Sunshine Act, or Sunshine Act, which was enacted as part of ACA, requires applicable manufacturers of drugs, devices, biologicals, or medical supplies covered under Medicare, Medicaid or the Children's Health Insurance Program, to report annually to the Secretary of the Department of Health and Human Services payments or other transfers of value made by that entity, or by a third party as directed by that entity, to physicians and teaching hospitals, or to third parties on behalf of physicians or teaching hospitals, during the course of the preceding calendar year. The Final Rule implementing the Sunshine Act, published on February 8, 2013, requires data collection on payments to begin on August 1, 2013. The first annual report, comprised of data collected from August 1, 2013 to December 31, 2013, is due March 31, 2014. Failure to comply with the reporting requirements can result in significant civil monetary penalties ranging from $1,000 to $10,000 for each payment or other transfer of value that is not reported (up to a maximum per annual report of $150,000) and from $10,000 to $100,000 for each knowing failure to report (up to a maximum per annual report of $1 million). We will be required to collect data on these payments and report such payments.

Our Employees

As of December 31, 2012, we had approximately 300 employees, of whom more than half held post-graduate professional, medical or science degrees. The number of our employees increased by approximately 114 percent during 2012 from approximately 140 employees on December 31, 2011 and we are likely to further increase our headcount in 2013. Of these employees, approximately 295 were based in the United States and 5 were based in Europe. Our employees in the commercial organization are engaged in selling and marketing Iclusig and our scientific and clinical development personnel are engaged in research and development of future products. We have entered into confidentiality, assignment of inventions and non-disclosure agreements with all of our employees and non-competition agreements with all of our senior level employees. None of our employees are covered by a collective bargaining agreement, and we consider relations with our employees to be good.

Our Company

ARIAD was organized as a Delaware corporation in April 1991. Our principal executive offices are located at 26 Landsdowne Street, Cambridge, Massachusetts 02139-4234, and our telephone number is (617) 494-0400. We maintain an internet website at http://www.ariad.com, the contents of which are not incorporated herein. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and all amendments to such reports are made available free of charge through www.sec.gov and the Investor Relations section of our website as soon as reasonably practicable after they have been electronically filed with or furnished to the United States Securities and Exchange Commission, or SEC.

ARIAD and the ARIAD logo are our registered trademarks. Iclusig and ARGENT are our trademarks. Other service marks, trademarks and trade names appearing in this report are the property of their respective owners.

ITEM 1A: RISK FACTORS

THE RISKS AND UNCERTAINTIES DESCRIBED BELOW ARE THOSE THAT WE CURRENTLY BELIEVE MAY MATERIALLY AFFECT OUR COMPANY. IF ANY OF THE FOLLOWING RISKS ACTUALLY OCCUR, THEY MAY MATERIALLY HARM OUR BUSINESS, OUR FINANCIAL CONDITION AND OUR RESULTS OF OPERATIONS.

Risks relating to the development and commercialization of our products and product candidates

We will depend heavily on the commercial success of our lead product, Iclusig™ (ponatinib), which was recently approved by the FDA for sale in the United States. If we do not achieve commercial success with Iclusig, our business will suffer and our stock price will likely decline.

We obtained approval from the U.S. Food and Drug Administration, or FDA, on December 14, 2012, to sell our first new cancer medicine, Iclusig (*ponatinib*). We have commenced sales and marketing of Iclusig, and the medicine is now available for patients in the United States through specialty pharmacies and specialty distributors. Iclusig is a tyrosine kinase inhibitor, or TKI, that has been approved in the United States for the treatment of adult patients with chronic, accelerated or blast phase chronic myeloid leukemia, or CML, who are resistant or intolerant to prior TKI therapy, and the treatment of adult patients with Philadelphia chromosome-positive acute lymphoblastic leukemia, or Ph+ ALL, who are resistant or intolerant to prior TKI therapy.

Prior to the approval of Iclusig, we had not marketed a therapeutic product. As a result, we had no significant revenues from product sales in 2012 and we expect that a majority of our total revenues in 2013 and the next several years will be attributable to sales of Iclusig.

We cannot be certain that Iclusig will be commercially successful. In addition to the other challenges related to a company launching its first commercial drug, we will face competition from other TKIs that are currently approved for the treatment of patients with CML who are resistant or intolerant to prior TKI therapies, such as nilotinib marketed by Novartis, dasatinib marketed by Bristol-Myers Squibb, bosutinib marketed by Pfizer and omacetaxine mepesuccinate marketed by Teva Pharmaceutical Industries. In addition, we are conducting clinical trials and plan to seek regulatory approval of Iclusig for the treatment of newly diagnosed CML patients who have not previously received any TKI therapy and for patients who have had a suboptimal response or who have failed to respond to prior TKI therapy. If we are able to successfully develop and obtain approval of Iclusig for these patients, we would compete with existing TKIs.

Our future sales of Iclusig depend on numerous factors, including:

- the number of patients with CML and Ph+ ALL who do not respond to one of the existing TKI therapies or are intolerant to them, as well as the number of newly diagnosed CML patients and the number of patients who have had a suboptimal response or who have failed to respond to prior TKI therapy, assuming we are successful in obtaining regulatory approval for these patient populations;
- competition from other TKIs, which compete with Iclusig on the basis of, among other things, efficacy, cost, breadth of approved use and side-effect profile;
- competition from any additional products for the treatment of CML that are approved by the FDA in the future;
- the safety profile of Iclusig, including whether previously unknown side-effects or increased incidence or severity of known side-effects as compared to those seen during development are identified with the increased use of Iclusig after approval;
- the effectiveness of our commercial strategy for marketing Iclusig and our execution of that strategy, including our pricing strategy and the effectiveness of our efforts to obtain adequate third-party reimbursements;

- receipt of regulatory approvals for Iclusig, and any applicable pricing and reimbursement approvals, in Europe, Japan and other countries or territories outside of the United States;
- the acceptance of Iclusig by patients, the medical community and third-party payors;
- results from clinical trials and the receipt of regulatory approvals in newly diagnosed CML patients and in patients who have had a suboptimal response or who have failed to respond to prior TKI therapy;
- results from clinical trials and the receipt of regulatory approvals in any other indications that we may decide to pursue in blood cancers and solid tumors; and
- our ability to meet the demand for commercial supplies of Iclusig and to maintain and successfully monitor commercial manufacturing arrangements for Iclusig with third-party manufacturers to ensure they meet our standards and those of regulatory authorities, including the FDA, which extensively regulate and monitor pharmaceutical manufacturing facilities.

While we believe that Iclusig has a competitive commercial profile, our current estimates of the revenues that Iclusig could generate in future periods may change based upon the above factors, and could be wrong. If our revenues, market share and/or other indicators of market acceptance of Iclusig do not meet the expectations of investors or public market analysts, the market price of our common stock would likely decline. In addition, if one or more of the factors above negatively affects Iclusig sales, our business and financial condition could be materially harmed.

We have never marketed a drug before, and if we are unable to establish and maintain an effective and specialized sales force and marketing infrastructure, we will not be able to commercialize Iclusig successfully.

In order to successfully commercialize Iclusig, we have built a marketing organization and a specialized sales force for Iclusig and have completed preparations for the commercial launch of Iclusig in the United States. We are finalizing our preparations in Europe, including efforts to expand our marketing and sales teams. In addition, we have established a European headquarters in Switzerland to lead our commercial operations in Europe, in anticipation of the approval of the marketing authorization application for Iclusig. In order to support an effective launch of any product, we have had to make and will need to continue to make significant financial commitments and devote significant effort, in particular, to recruiting individuals with experience in the sales and marketing of pharmaceutical products.

We have no prior experience in building and maintaining a commercialization infrastructure in the United States or internationally. Factors that may hinder our efforts to establish and maintain a U.S. presence and develop an international sales, marketing and distribution infrastructure include:

- inability to recruit, retain and effectively manage adequate numbers of effective sales and marketing personnel;
- inability to establish or maintain relationships with specialty pharmacies, wholesalers and distributors;
- inability to establish or implement internal controls and procedures required in connection with sales of pharmaceutical products;
- inability of sales personnel to obtain access to or convince adequate numbers of physicians to prescribe our products;
- lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen delays, costs and expenses associated with creating international capabilities, including an international sales and marketing organization and international supply chain and reimbursement capabilities.

If we are unable to establish and sustain our sales force and marketing capability for Iclusig, we may not be able to generate any product revenue, may generate increased expenses and may never become profitable.

We will need to continue to expend significant time and resources to train our Iclusig sales force to be credible, persuasive and compliant in discussing Iclusig with the specialists treating the patients indicated under label. We will also need to continue to train our sales force to ensure that a consistent and appropriate message about Iclusig is being delivered to our potential customers. In addition, if we are unable to effectively train our sales force and equip them with effective materials, including medical and sales literature to help them inform and educate potential customers about the benefits and risks of Iclusig and its proper administration, our ability to successfully commercialize Iclusig could be diminished, which could have a material adverse effect on our financial condition, stock price and operations.

We may also maintain high inventory levels to mitigate risks such as variability in product demand, long lead times for manufacturing, supply interruptions of raw materials and production disruptions at our approved manufacturing sites due to contamination, equipment failure or other facility-related issues. The capital required to maintain our desired inventory levels may impact our liquidity and cash flows, and may also heighten the risk of inventory obsolescence and write-offs.

If Iclusig and any of our product candidates are not accepted by patients, physicians and third-party payors, we will not be successful.

Our success is dependent on the commercial acceptance of Iclusig and any other product candidates that may be approved. Iclusig and any other approved product candidates may not achieve market acceptance among patients, physicians or third-party payors, even if we have obtained necessary regulatory and any applicable pricing and reimbursement approvals. Physicians and health care payors may conclude that Iclusig or our product candidates are not as safe and/or effective as competing therapies or are not as attractive based on a cost/benefit analysis as alternative treatments. For example, physicians may elect not to prescribe our drugs, and patients may elect not to request or take them for a variety of reasons, including lower demonstrated or perceived clinical safety and efficacy compared to other drugs; prevalence and severity of adverse events or other side effects; lack of cost-effectiveness; lack of reimbursement availability from third-party payors; a decision to wait for the approval of other therapies that are believed to have significant advantages over our drugs and drug candidates; convenience and ease of administration; other potential advantages of alternative treatment methods; or ineffective marketing and distribution support.

In addition, physicians and other health care providers may restrict their use of Iclusig due to the inclusion of a warning which is not present in some other competitive products. The full prescribing information for Iclusig includes a boxed warning specifying that arterial thrombosis and hepatotoxicity have occurred in some patients during our clinical trials of Iclusig. Cardiovascular, cerebrovascular, and peripheral vascular thrombosis, including fatal myocardial infarction and stroke, have occurred in Iclusig-treated patients. Serious arterial thrombosis occurred in 8 percent of Iclusig-treated patients. In addition, hepatotoxicity, liver failure and death have occurred in Iclusig-treated patients.

Failure to achieve significant market acceptance of Iclusig or any future approved product candidates or to be paid an adequate amount for our products will harm our business. We believe that recommendations by physicians and acceptance by health care payors will be essential for market acceptance of Iclusig and our product candidates. If Iclusig fails to achieve market acceptance, or our product candidates are approved and fail to achieve market acceptance, we will not be able to generate revenues sufficient to be successful.

Competing drugs or technologies may render some or all of our products or future products noncompetitive or obsolete.

Many well-known pharmaceutical, healthcare and biotechnology companies, which have substantially greater capital, research and development capabilities and experience, are presently engaged in one or more of the following activities:

- developing products based on computational and structure-based drug design;
- conducting research and development programs focused on the same biological targets or for the treatment of the various disease indications on which we are focused; and
- manufacturing, marketing and selling pharmaceutical or medical device products for treatment of diseases in all of the various disease indications in which we or our current or possible future collaborators are focused.

Some of these entities already have competitive products on the market or product candidates in clinical trials or in more advanced preclinical studies than we do. Many of these entities also have substantially greater research, development, manufacturing and marketing resources and experience than us.

For example, Iclusig currently competes with existing CML therapies. In addition, we are conducting clinical trials and plan to seek regulatory approval of Iclusig for the treatment of newly diagnosed CML patients and of patients who have had a suboptimal response or who have failed to respond to prior TKI therapy. If we are able to successfully develop and obtain approval of Iclusig for these CML patients, we would compete with existing CML therapies.

Competing drugs or technologies may render some or all of our products or future products noncompetitive or obsolete, and we may not be able to make the enhancements to our products necessary to compete successfully with newly emerging drug products. Competing products on the market or in development may also lead us and our collaborators to revise or cease development of our product candidates in one or more indications for commercial reasons, even where clinical data may be promising. If we are unable to successfully compete in our chosen markets, we will not become profitable.

In order to execute our business plan and achieve the full commercial potential of Iclusig, we intend to seek regulatory approval to commercialize Iclusig outside of the United States and to seek approval of additional therapeutic indications and lines of therapy.

Based on sales of existing TKIs for the treatment of CML, we believe that there are significant commercial opportunities for the use of Iclusig globally in additional therapeutic indications and in additional lines of therapy, and we are actively pursuing these opportunities. In August 2012, we filed for marketing approval of ponatinib with the EMA for patients with CML and Ph+ ALL who have become resistant or intolerant to prior TKI therapy, and we currently anticipate approval in the third quarter of 2013. In August 2012, we also initiated a multicenter Phase 1/2 clinical trial in Japan of Iclusig in Japanese patients with CML who have failed treatment with dasatinib or nilotinib or who have Ph+ ALL and have failed prior treatment with TKIs. We expect that this trial should provide the incremental data needed to initiate pivotal trials to obtain regulatory approval of Iclusig in resistant or intolerant patients in Japan. In July 2012, we initiated a randomized Phase 3 clinical trial of ponatinib, referred to as the EPIC trial, in adult patients with newly diagnosed CML in the chronic phase. The trial is designed to provide definitive clinical data to support regulatory approval of ponatinib in patients who have not previously received treatment for CML. We also plan to initiate additional clinical trials of Iclusig in other indications as we continue development of this product candidate.

If we are not successful in obtaining regulatory approval of ponatinib in Europe or Japan or for other indications and additional lines of therapy, the market price of our common stock could decline and our business and financial condition could be materially harmed.

We may not succeed in developing expanded or additional marketable products, receiving regulatory approval or generating product revenues.

In addition to the successful commercialization of Iclusig, our success is also dependent on our ability to successfully complete development and obtain marketing approval for Icusig in additional indications, AP26113 and our other product candidates.

As with all scientific endeavors, we face much trial and error, and we and our collaborators may fail at numerous stages along the way, which could prevent us and our collaborators from successfully developing, obtaining approval for and marketing our drug candidates. Factors that could affect the timing and the ability to obtain regulatory approval and to achieve market acceptance and gain market share for Iclusig, AP26113 and any other product candidate include, among others, product formulation, dose, dosage regimen, the ability to obtain timely and sufficient patient enrollment in clinical trials, the risk of occurrence of adverse events and other side effects in patients participating in clinical trials, the attainment of clinical data that is sufficient to support regulatory approval, the ability to manufacture sufficient quantities of product candidates at commercially reasonable costs, the ability to fund commercial development and to build or access a sales force in the marketplace, the ability to successfully differentiate product candidates from competitive products, the ability to educate physicians and build awareness about our product candidates, and the ability to sell, market and distribute such product candidates.

We may not receive regulatory approvals within the timeframes we anticipate, or at all, and ultimately we may not succeed in developing or commercializing additional products which will generate revenues for our company. If we are not successful in developing our product candidates and marketing any approved products, our business and financial condition could be materially harmed.

Positive results from earlier stage clinical trials may not be replicated in later-stage clinical trials, or regulatory authorities may conclude that clinical data from later-stage clinical trials are not sufficient to support approval.

A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials even after achieving promising results in earlier-stage development. Accordingly, the results to date from preclinical studies and clinical trials for Iclusig and AP26113 may not be predictive of the results to be obtained from ongoing or future clinical trials. In addition, regulatory authorities may conclude that data generated from later-stage clinical trials are not sufficient to support approval. For example, although we were able to file an NDA and obtain regulatory approval for Iclusig on the basis of data from our pivotal Phase 2 PACE trial without conducting a Phase 3 trial, and we believe that a similar regulatory approval pathway could exist for AP26113, we may be required to conduct more clinical trials for AP26113 than we currently expect. If positive results from earlier stage trials are not replicated in later-stage trials, or we or our collaborators are required to conduct additional clinical trials or other testing of our product candidates beyond those currently contemplated, we or our collaborators may be delayed in obtaining, or may not be able to obtain, marketing approval for these product candidates, and we may lose the opportunity to generate product revenues or to earn additional development or regulatory milestones or royalties. Furthermore, potential competitive commercial factors may influence future decisions and directions by us or our collaborators on which clinical indications to pursue and when.

Risks relating to our financial position and capital requirements

We have incurred significant losses to date and may never be profitable.

Although we had net income in 2010 of $85.2 million, primarily attributable to our license agreement with Merck, we have incurred significant losses since our formation in 1991, and had an accumulated deficit of $777.8 million at December 31, 2012. Our losses have resulted principally from costs incurred in research and development of our product candidates, including clinical development of Iclusig, AP26113 and ridaforolimus (prior to our license with Merck), and from general and administrative costs, including costs incurred to prosecute and protect our intellectual property. In addition, we have incurred significant expenses in building a commercial organization to market, sell and distribute our products upon regulatory approval in the United States, Europe and other select markets, worldwide. It is likely that we will incur significant operating losses for the foreseeable future, as we continue our research and development activities and continue to build a sales and marketing organization to market Iclusig and in

anticipation of obtaining regulatory approval to market additional product candidates, which approval may never occur. If our losses continue and we and our existing collaborators or potential future collaborators are unable to successfully develop, commercialize, manufacture and market Iclusig and any other approved product candidates and/or we are unable to enter into additional collaboration agreements or licenses for our intellectual property, we may never generate sufficient revenues to achieve profitability. Even if we and our collaborators are able to commercialize products and we are able to enter into collaboration agreements or licenses in the future, we may never generate sufficient revenues to have profitable operations.

Insufficient funding may jeopardize our research and development programs and may require us to reduce our operations or prevent commercialization of our products and technologies.

We have funded our operations to date through sales of equity securities, the incurrence of debt from commercial lenders, the receipt of upfront and milestone payments from Merck since July 2007, and, to a limited extent, other operating revenues. Most of our operating revenue to date has been generated through previous collaborative research and development agreements and existing licenses.

As of December 31, 2012, we had cash, cash equivalents and marketable securities totaling $164.4 million. On January 29, 2013, we completed a public offering of 16,489,893 shares of our common stock for net proceeds of approximately $309.8 million. After giving effect to the net proceeds from this offering, our cash, cash equivalents and marketable securities at December 31, 2012 would have been $474.2 million. We expect that our cash, cash equivalents and marketable securities as of December 31, 2012 and the net proceeds from the public offering in January 2013 will be sufficient to fund our operations into the fourth quarter of 2014. We will, however, require substantial additional funding for our research and development programs (including pre-clinical development and clinical trials), for the pursuit of regulatory approvals and for establishing or accessing manufacturing, marketing and sales capabilities related to Iclusig and any other approved products. We will also require funding for our operating expenses (including intellectual property protection and enforcement) as well as capital expenditures to maintain and improve our facilities, equipment and systems and provide for growth and expansion of our business.

We may from time to time access funding by issuing common stock or other securities in private placements or public offerings. We are currently a "well-known seasoned issuer" pursuant to rules of the U.S. Securities and Exchange Commission, or SEC, and have an active registration statement that allows us to sell additional shares of our common stock and other securities. We may also from time to time seek additional funding from technology licensing, or the issuance of debt or other structured funding alternatives. However, such additional funding may not be available at all, or on terms acceptable to us.

If we are not able to secure the significant funding which is required to maintain our operations or continue to fund current or future research and development programs at their current levels or at levels that may be required in the future, we may be required to reduce our operations or to delay, scale back, eliminate or terminate clinical trials for one or more of our product candidates. In addition, we may be required to enter into licenses, settlements or other arrangements with third parties on terms that may be unfavorable to us or to sell, license or relinquish rights to develop or commercialize our product candidates, approved products, technologies or intellectual property.

Raising additional capital by issuing securities or through collaboration and licensing arrangements may cause dilution to existing stockholders, restrict our operations or require us to relinquish proprietary rights.

We may seek to raise the additional capital necessary to fund our operations through public or private equity offerings, debt financings, and collaboration and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, our stockholders' ownership interest will be diluted, and the terms of such securities may include liquidation or other preferences that adversely affect our stockholders' rights or, in the case of debt securities, require us to pay

interest that would reduce our cash flows from operations or comply with certain covenants that could restrict our operations. If we raise additional funds through collaboration and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms that are not favorable to us.

Forecasting sales of Iclusig may be difficult and revenue recognition may be deferred. If our revenue projections are inaccurate or revenue is deferred and our business forecasting and planning decisions are not reflected in our actual results, our business may be harmed and our future prospects may be adversely affected.

Iclusig may not be adopted rapidly, or at all, by physicians. Factors that can affect the rate of adoption and that can increase the difficulty of forecasting sales include the following:

- physician and patient unfamiliarity with Iclusig;
- cautionary prescribing behavior due to concerns regarding the safety and risk-benefit of Iclusig;
- cautionary prescribing behavior due to lack of reimbursement history for Iclusig;
- confusion and questions relating to the prescribing information;
- difficulty in identifying appropriate patients for treatment with Iclusig;
- the cost and availability of reimbursement for the product;
- other aspects of physician education;
- treatment guidelines issued by government and non-government agencies;
- types of cancer for which the product is approved;
- timing of market entry relative to competitive products;
- availability of alternative therapies;
- price of our product relative to alternative therapies, including generic versions of our product, or generic versions of innovative products that compete with our product;
- patients' reliance on patient assistance programs, under which we provide free drug;
- rates of returns and rebates;
- uncertainty of launch trajectory;
- the ability of our third-party manufacturers to manufacture and deliver Iclusig in commercially sufficient quantities;
- extent of marketing efforts by us and any third-party distributors or agents retained by us; and
- side effects or unfavorable publicity concerning our products or similar products.

The extent to which any of these or other factors individually or in the aggregate may impact future sales of Iclusig is uncertain and difficult to predict. Our management must make forecasting decisions regarding future revenue in the course of business planning despite this uncertainty, and actual results of operations may deviate materially from projected results. This may lead to inefficiencies and increased difficulties in operational planning. If our revenues from Iclusig sales are lower than we anticipate or revenue is deferred, we will incur costs in the short term that will result in losses that are unavoidable. A shortfall in our revenue would have a direct impact on our cash flow and on our business generally. In addition, fluctuations in our quarterly results can adversely and significantly affect the market price of our common stock.

Our financial results depend on management's selection of accounting methods and certain assumptions and estimates.

Our accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. Our management must exercise judgment in selecting and applying many of these accounting policies and methods so they comply with generally accepted accounting principles and reflect management's judgment of the most appropriate manner to report our financial condition and results. In some cases, management must select the accounting policy or method to apply

from two or more alternatives, any of which may be reasonable under the circumstances, yet may result in our reporting materially different results than would have been reported under a different alternative.

Certain accounting policies are critical to the presentation of our financial condition and results of operations. The preparation of our financial statements requires us to make significant estimates, assumptions and judgments that affect the amounts of assets, liabilities, revenues and expenses and related disclosures. Significant estimates that may be made by us include assumptions used in the determination of revenue recognition, fair value measurement of tangible and intangible assets, research and development expenses and stock-based compensation. Although we base our estimates and judgments on historical experience, our interpretation of existing accounting literature and on various other assumptions that we believe to be reasonable under the circumstances, if our assumptions prove to be materially incorrect, actual results may differ materially from these estimates.

Significant additional losses or insufficient funding may cause us to default on certain covenants of our loan documents.

At December 31, 2012, we had $11.2 million outstanding under a term loan agreement with a bank. Pursuant to this loan agreement, we are required to maintain certain financial and non-financial covenants, including minimum cash, cash equivalents and investments of $15 million, a default of any of which would allow the bank to demand payment of its loan. We currently have sufficient liquidity to fund payment of this loan if demand for payment were made. However, if we do not receive sufficient revenues from our collaborations and licenses or from any sales of our products, or if we are unable to raise adequate financing to fund continuing operations or otherwise to refinance our loan, we may not be able to maintain compliance with loan covenants, may be required to pay off the loan and may be required to reduce our spending on operations.

Risks relating to our reliance on third parties

We depend on third-party manufacturers, including sole source suppliers, to manufacture Iclusig and our product candidates and the materials we require for our clinical trials. We may not be able to maintain these relationships and could experience supply disruptions outside of our control.

We rely on a network of third-party manufacturers to manufacture and supply Iclusig for commercial sale and post-approval clinical trials, and our drug candidates for clinical trials and any commercial sales if they are approved. As a result of our reliance on these third-party manufacturers and suppliers, including sole source suppliers of certain components of Iclusig and our product candidates, we could be subject to significant supply disruptions. Our supply chain for sourcing raw materials and manufacturing drug product ready for distribution is a multi-step endeavor. Third-party contract manufacturers supply us with raw materials, and contract manufacturers in the United States convert these raw materials into drug substance and convert the drug substance into final dosage form. Establishing and managing this supply chain requires a significant financial commitment and the creation and maintenance of numerous third-party contractual relationships. Although we attempt to effectively manage the business relationships with companies in our supply chain, we do not have control over their operations.

We require a supply of Iclusig for sale in the United States, and we will require a supply of Iclusig for sale in international markets if we obtain marketing approvals outside of the United States. We currently rely, and expect to continue to rely, on sole source third-party manufacturers to produce starting materials, drug substance, and final drug product, and to package and label Iclusig and our product candidates, until we enter into arrangements with additional or alternative suppliers. While we have identified and expect to qualify and engage back-up third-party manufacturers as additional or alternative suppliers for the commercial supply of Iclusig, we currently do not have such arrangements in place. Moreover, some of these alternative manufacturers will have to be approved by the FDA before we can use them for manufacturing Iclusig. It is also possible that supplies of materials that cannot be second-sourced can be managed with inventory planning. There can be no assurance, however, that failure of any of our original

sole source third party manufacturers to meet our commercial demands for Iclusig in a timely manner, or our failure to engage qualified additional or back-up suppliers for the commercial supply of Iclusig, would not have a material adverse effect on commercialization of Iclusig and our business.

Supply disruptions may result from a number of factors, including shortages in product raw materials, labor or technical difficulties, regulatory inspections or restrictions, shipping or customs delays or any other performance failure by any third-party manufacturer on which we rely. Any supply disruptions could disrupt sales of Iclusig and/or the timing of our clinical trials, which could have a material adverse impact on our business. Furthermore, we may be required to modify our production methods to permit us to economically manufacture our drugs for sale and our drug candidates for clinical trials. These modifications may require us to re-evaluate our resources and the resources of our third-party manufacturers, which could result in abrupt changes in our production methods and supplies.

In the course of providing its services, a contract manufacturer may develop process technology related to the manufacture of our products or drug candidates that the manufacturer owns, either independently or jointly with us. This would increase our reliance on that manufacturer or require us to obtain a license from that manufacturer in order to have Iclusig or our drug candidates manufactured by other suppliers utilizing the same process.

The failure of our third party manufacturers to meet our commercial demands for Iclusig in a timely manner, or our failure to engage qualified additional or back-up suppliers for the commercial supply of Iclusig, would have a material adverse effect on our business, results of operations and financial position.

We rely on a network of specialty pharmacies and distributors for Iclusig.

A specialty pharmacy is a pharmacy that specializes in the dispensing of medications for complex or chronic conditions, which often require a high level of patient education and ongoing management. The use of specialty pharmacies and distributors involves certain risks, including, but not limited to, risks that these specialty pharmacies and distributors will:

- not provide us accurate or timely information regarding their inventories, the number of patients who are using our products or complaints about our products;
- reduce their efforts or discontinue to sell or support or otherwise not effectively sell or support our products;
- not devote the resources necessary to sell our products in the volumes and within the time frames that we expect;
- be unable to satisfy financial obligations to us or others; or
- cease operations.

We have limited experience in conducting clinical trials and are dependent upon the ability of third parties, including contract research organizations, collaborative academic groups, clinical trial sites and investigators, to conduct or to assist us in conducting clinical trials for our product candidates.

Notwithstanding our successful development of Iclusig to date, we have limited experience compared to many other biopharmaceutical companies in designing, initiating, conducting and monitoring the clinical trials necessary to obtain regulatory approval of our product candidates. We are currently conducting clinical trials of Iclusig and of AP26113. We are dependent upon our ability and/or the ability of our collaborators, licensees, contract research organizations, clinical trial sites and investigators to successfully design, initiate, conduct and monitor clinical trials. Failure by us or any of these parties to timely and effectively initiate, conduct and monitor our clinical trials could significantly delay or materially impair our ability to complete clinical trials and/or obtain regulatory approval of our product candidates and, consequently, could delay or materially impair our ability to generate revenues from them.

Because we have licensed ridaforolimus to Merck, we have no control over its development and commercialization.

We have entered into a license agreement with Merck for the development and commercialization of ridaforolimus. Among other provisions, Merck is responsible for the development of ridaforolimus in multiple oncology indications. There can be no assurance that Merck will satisfy its obligations to develop ridaforolimus in multiple oncology indications or that it will be successful in developing and commercializing ridaforolimus. Merck's failure to devote sufficient financial and other resources to the development plan may delay the clinical development of ridaforolimus, which could lead to the delay in payment of clinical and regulatory milestones under our agreements and may delay eventual commercialization of a product candidate and any royalties we could receive on commercial sales. If Merck is not able to develop ridaforolimus successfully in one or more oncology indications, we will not receive any additional clinical and regulatory milestones or receive any royalties under the license agreement.

If any collaborator or licensee terminates its agreement with us or fails to perform its obligations under its agreement with us, or fails to comply with applicable law, the development and commercialization of our product candidates could be delayed or terminated.

Our current or future collaborations and licenses may not result in product candidates that are scientifically or commercially successful or result in the development or commercialization of any product candidates. In addition, disputes may arise in the future with respect to the ownership of rights to technology or product candidates developed with collaborators and licensees, which could have an adverse effect on our ability to develop and commercialize any affected product candidate.

Our current collaboration and license agreements allow, and we expect that any future collaborations and licenses will allow, either party to terminate the agreement for specified material breaches by the other party. If a collaborator or licensee terminates its agreement with us, for breach or otherwise, it may be difficult for us to attract new collaborators or licensees and could adversely affect how we are perceived in the business and financial communities. In addition, a collaborator or licensee could determine that it is in its financial interest to:

- pursue alternative technologies or develop alternative products, either on its own or jointly with others, that may be competitive with the products on which it is collaborating with us or has licensed from us, which could affect its commitment to us;
- pursue higher-priority programs or change the focus of its development programs, which could affect the collaborator's or licensee's commitment to us; or
- choose to devote fewer resources to the marketing of our product candidates, if any are approved for marketing, than it does for product candidates of its own development.

If any of these events occur, the development and commercialization of one or more of our product candidates could be delayed, curtailed or terminated because we may not have sufficient financial resources or capabilities to continue such development and commercialization on our own.

Risks relating to our intellectual property

If our patents do not protect Iclusig or our product candidates, our exclusive commercial rights in the product or product candidate could be compromised, and if any of our approved drugs or product candidates infringe third-party patents, we could be subject to litigation and substantial liabilities.

We have numerous issued patents and patent applications pending in the United States, as well as counterparts in other countries. Our success will depend, in significant part, on our ability to obtain and maintain United States and foreign patent protection for Iclusig and our product candidates, their manufacture and uses; to preserve our trade secrets; and to operate without infringing the proprietary rights of third parties. In particular, we believe that composition-of-matter claims are the most significant

patent claims for companies in our segment of the pharmaceutical industry that focus on small molecule drug candidates that are new chemical compounds. While we have patents or patent applications with composition-of-matter claims for Iclusig and each of our product candidates, only a portion of these patents have been granted to date. We cannot be certain that any patents will issue from our patent applications or, even if patents issue or have issued, that the issued claims will provide us with any significant protection against competitive products or otherwise be valuable commercially.

Due to evolving legal standards relating to the patentability, validity and enforceability of patents covering pharmaceutical inventions and the scope of claims made under these patents, our ability to maintain, obtain and enforce patents is uncertain and involves complex legal and factual questions. U.S. and foreign patent applications typically are maintained in confidence for a period of time after they initially are filed with the applicable patent office. Similarly, publication of discoveries in the scientific literature often lag behind actual discoveries. Consequently, we cannot be certain that we or our licensors were the first to invent, or the first to file patent applications covering Iclusig, our product candidates or their manufacture or use.

Third parties, including a number of our competitors, have developed competing and/or complementary technologies upon which patent applications have been filed and patents have been granted. These third-party technologies concern in part compounds, compositions, methods of use and production of such compounds and compositions, targets, genes and gene mutations, and the use of such targets, genes and gene mutations to identify drug candidates and develop companion diagnostic methods and corresponding kits. Third-party intellectual property protecting such technologies that are related to our business may cover or conflict with our patent applications, technologies or product candidates as well as those of complementary businesses which our business relies upon. Such conflicts could limit the scope of the patents that we may be able to obtain or may result in the denial of our patent applications. If a third party were to obtain intellectual property protection for any of the foregoing, we may be required to challenge such protection, terminate or modify our programs impacted by such protection or obtain licenses from such third parties, which might not be available on acceptable terms. Also, if a third party were to introduce a product into the market which we believe infringes our patents, we may be required to enforce our patent rights or seek to obtain an injunction or other relief, which could be time-consuming and expensive.

Our patents may be challenged by third parties, in connection with a third party's Abbreviated New Drug Application, or ANDA, or otherwise, resulting in the patent being deemed invalid, unenforceable or narrowed in scope, which could compromise the scope or duration of our exclusive rights in the relevant product. An ANDA can be filed as early as four years after FDA approval of a drug. Other challenges to a patent may be mounted without regard to the date of an FDA approval. Also, our pending patent applications may not issue, and we may not receive any additional patents. Our patents as issued or as subsequently limited by any litigation might not contain claims that are sufficiently broad to prevent others from circumventing our patent protection and utilizing our technologies. For instance, the issued patents relating to Iclusig and our product candidates may be limited to a particular molecule or molecules and may not cover similar molecules that have similar clinical properties. Consequently, our competitors may independently develop competing products that do not infringe our patents or other intellectual property.

The laws of some foreign jurisdictions do not protect intellectual property rights to the same extent as in the United States and other companies have encountered significant difficulties in protecting and defending such rights in foreign jurisdictions. If we encounter such difficulties or are otherwise precluded from effectively protecting our intellectual property rights in foreign jurisdictions, our business could be substantially harmed.

Because of the extensive time required for development, testing and regulatory review of a drug candidate, it is possible that, before any of our drug candidates can be commercialized, any related patent

may expire or remain in force for only a short period following commercialization of our drug candidates, thereby reducing any advantages of the patent. To the extent our approved drugs or drug candidates are not commercialized significantly ahead of the expiration date of any applicable patent, or to the extent we have no other patent protection on such approved drugs or drug candidates, those drugs and drug candidates would not be protected by patents, and we would then need to rely solely on other types of exclusivity, such as orphan drug exclusivity and other types of regulatory exclusivity available under the Food, Drug and Cosmetic Act.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position could be harmed.

In addition to seeking patents for some of our technology and products, we also rely on trade secrets, including unpatented know-how, technology, and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties that have access to them, such as our employees, collaborators, outside scientific collaborators, sponsored researchers, contract manufacturers, consultants, advisors and other third parties. We also have entered into confidentiality and invention or patent assignment agreements with our employees and our consultants. Any of these parties may breach the agreements and disclose our proprietary information, and we may not have adequate remedies for any such breach. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them from using that technology or information to compete with us. If any our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position could be harmed.

Risks relating to our operations

If we fail to manage our growth effectively, our business may suffer.

The number of our employees increased by 114 percent in 2012, and we expect to experience additional growth in 2013. We have built out the commercial organization that is responsible for the commercial launch of Iclusig in the United States and are building out our sales capabilities in Europe to prepare for the commercial launch of Iclusig there if it receives marketing approval. However, we have no prior experience in launching a drug product, and we may experience delays or other difficulties in commencing and conducting sales and marketing activities for Iclusig, including implementing required internal controls and procedures, that would negatively impact our commercialization efforts. In addition, because our drug discovery and development activities are highly technical in nature, we require the services of highly qualified and trained scientists who have the skills necessary to conduct these activities. We need to attract and retain employees with experience in these fields. We face intense competition for our personnel from our competitors, our collaborators and other companies throughout our industry. Moreover, the growth of local biotechnology companies and the expansion of major pharmaceutical companies into the Cambridge, Massachusetts area have increased competition for the available pool of skilled employees, especially in technical fields, and the high cost of living in the Cambridge area makes it difficult to attract employees from other parts of the country to these areas. Any inability to manage growth could delay the implementation of our business plans or disrupt our operations. For example, on January 4, 2013, we entered into a new lease to move our corporate headquarters and laboratory facilities to two buildings to be constructed by the landlord at 75 Binney Street and 125 Binney Street in Cambridge, Massachusetts, which will be known as the Alexandria Center at Kendall Square. We intend to move to the new buildings once they are completed, which is currently expected to occur in early 2015. Our ability to commercialize Iclusig and achieve our research and development objectives depends on our ability to respond effectively to these demands and expand our internal organization to accommodate additional anticipated growth. If we are unable to hire qualified personnel or manage our growth effectively, there could be a material adverse effect on our business.

Our business has a substantial risk of product liability claims. If we are unable to obtain appropriate levels of insurance, product liability claims could adversely affect our business.

Our business exposes us to potential product liability risks inherent in the testing, manufacturing, marketing and sale of pharmaceutical products. Prior to obtaining regulatory approval to market our products, we or our collaborators are required to test such products in human clinical trials at health care institutions pursuant to agreements which indemnify such institutions in case of harm caused to patients by our products. We may not be able to avoid significant product liability exposure resulting from use of our products. We have product liability insurance and clinical trial insurance in amounts that we believe are adequate to cover this risk. However, our insurance may not provide adequate coverage against potential liabilities. If a claim is brought against us, we might be required to pay legal and other expenses to defend the claim, as well as pay uncovered damages awards resulting from a claim brought successfully against us and these damages could be significant and have a material adverse effect on our financial condition. Furthermore, whether or not we are ultimately successful in defending any such claims, we might be required to direct significant financial and managerial resources to such defense, and adverse publicity is likely to result.

Risks associated with operating in foreign countries could materially adversely affect our business.

We have expanded our operations into Europe in order to market Iclusig internationally, if approved. In addition, we have manufacturing, collaborative and clinical trial relationships outside the United States. Consequently, we are, and will continue to be, subject to risks related to operating in foreign countries. Risks associated with conducting operations in foreign countries include:

- differing regulatory requirements for drug approvals and regulation of approved drugs in foreign countries;
- changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses or reduced revenues, and other obligations incident to doing business or operating in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geo-political actions, including war and terrorism.

These and other risks associated with our international operations could materially adversely affect our business.

In addition, our international operations are subject to regulation under United States law. For example, the Foreign Corrupt Practices Act prohibits United States companies and their representatives from offering, promising, authorizing or making payments to foreign officials for the purpose of obtaining or retaining business abroad. In many countries, the health care professionals we regularly interact with may meet the definition of a foreign government official for purposes of the Foreign Corrupt Practices Act. We also are subject to import and export control laws. Failure to comply with domestic or foreign laws could result in various adverse consequences, including the possible delay in approval or refusal to approve a product, recalls, seizures, withdrawal of an approved product from the market, the imposition of civil or criminal sanctions, the prosecution of executives overseeing our international operations and corresponding adverse publicity and negative perception of our company in foreign countries.

The loss of key members of our scientific and management staff could delay and may prevent the achievement of our research, development and business objectives.

We are substantially dependent on our key officers and members of our staff responsible for areas such as drug development, clinical trials, regulatory affairs, drug discovery, manufacturing, commercial operations, business development and intellectual property protection and licensing. As we continue to expand our capabilities in connection with the launch of Iclusig and in anticipation of the possible launch of any additional commercial products, a loss of key personnel or a failure to properly integrate new personnel could be disruptive. While we have entered into employment agreements with all of our executive officers, these officers may terminate their employment with us at any time. The value to employees of stock-related benefits that vest over time, such as options and restricted stock units, will be significantly affected by movements in our stock price that we cannot control, and may at any point in time be insufficient to counteract more lucrative offers from other companies. The loss of, and failure to promptly replace, any member of our management team could significantly delay and may prevent the achievement of our research, development and business objectives.

If we do not comply with laws regulating the protection of the environment and health and human safety, our business could be adversely affected.

Our research and development efforts involve the controlled use of hazardous materials, chemicals and various radioactive compounds. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards prescribed by state, federal and foreign regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We also are subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of biohazardous materials. Although we maintain workers' compensation insurance to cover us for costs we may incur due to injuries to our employees resulting from the use of these materials, this insurance may not provide adequate coverage against potential liabilities. We maintain insurance to cover pollution conditions or other extraordinary or unanticipated events relating to our use and disposal of hazardous materials that we believe is appropriate based on the small amount of hazardous materials we generate. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties if we violate, any of these laws or regulations.

A breakdown or breach of our information technology systems could subject us to liability or interrupt the operation of our business.

We rely upon our information technology systems and infrastructure for our business. The size and complexity of our computer systems make them potentially vulnerable to breakdown, malicious intrusion and random attack. Likewise, data privacy breaches by employees and others who access our systems may pose a risk that sensitive data may be exposed to unauthorized persons or to the public. There can be no assurance that our management or diligence efforts will prevent breakdowns or breaches in our systems that could adversely affect our business.

Risks relating to regulatory approvals, pricing and reimbursement

Clinical trials for our product candidates are expensive and time consuming, may take longer than we expect or may not be completed at all, and their outcome is uncertain.

We and our collaborators are currently conducting multiple clinical trials for our clinical product candidates, and we and our collaborators expect to commence additional trials of Iclusig and our product candidates in the future. Each of our clinical trials requires the investment of substantial expense and time and the timing of the commencement, continuation and completion of these clinical trials may be subject

to significant delays attributable to various causes, including scheduling conflicts with participating clinicians and clinical institutions, difficulties in identifying and enrolling patients who meet trial eligibility criteria, failure of patients to complete the clinical trial, delay in or failure to obtain IRB approval to conduct a clinical trial at a prospective site, and shortages of available drug supply. Patient enrollment is a function of many factors, including the size of the target patient population, the proximity of patients to clinical sites, the eligibility criteria for the trial, the existence of competing clinical trials and the availability of alternative established or investigational treatments.

We depend on medical institutions and clinical research organizations, or CROs, to conduct our clinical trials in compliance with FDA and other applicable requirements and guidelines, often referred to as Good Clinical Practices, and to the extent they fail to enroll patients for our clinical trials, are delayed for a significant time in achieving full enrollment, or fail to follow proper procedures, we may be affected by increased costs, program delays or both, which may harm our business. In addition, we conduct clinical trials in foreign countries which may subject us to further delays and expenses as a result of increased drug shipment costs, additional regulatory requirements and the need to engage foreign CROs, as well as expose us to risks associated with less experienced clinical investigators who are unknown to the FDA, different standards of medical care, and fluctuating foreign currency exchange rates.

Clinical trials must be conducted in accordance with Good Clinical Practices and are subject to oversight by the FDA, other foreign governmental agencies and IRBs at the medical institutions where the clinical trials are conducted. In addition, clinical trials must be conducted with product candidates produced under current Good Manufacturing Practices, or cGMP, conditions. We, the FDA or other foreign governmental agencies could delay, suspend or halt our clinical trials of a product candidate for numerous reasons, including:

- deficiencies in the conduct of the clinical trial, including failure to conduct the clinical trial in accordance with regulatory requirements or clinical protocols;
- the product candidate may have unforeseen adverse side effects, including fatalities, or a determination may be made that a clinical trial presents unacceptable health risks;
- the time required to determine whether the product candidate is effective may be longer than expected;
- the product candidate may not be more effective than current therapies;
- the quality or stability of the product candidate may fall below acceptable standards;
- our inability to produce or obtain sufficient quantities of the product candidate to complete the trials;
- our inability to obtain IRB approval to conduct a clinical trial at a prospective site;
- lack of adequate funding to continue the clinical trial, including the incurrence of unforeseen costs due to enrollment delays, requirements to conduct additional trials and studies and increased expenses associated with the services of our CROs and other third parties;
- our inability to recruit and enroll patients to participate in clinical trials for reasons including competition from other clinical trial programs for the same or similar indications; or
- our inability to retain 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.

In addition, clinical trial results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. Negative or inconclusive results or adverse medical events, including patient fatalities that may be attributable to our product candidates, during a clinical trial could cause it to be redone or terminated. Further, some of our clinical trials may be overseen by an independent data monitoring committee, or DMC, and a DMC may recommend a delay or suspension in one or more of these trials due to safety or futility findings based on events occurring during a clinical trial.

If clinical trials of any of our product candidates fail, we or our collaborators may not be able to obtain marketing approval for the product candidate that is the subject of the failed clinical trials. The FDA and foreign regulatory agencies could also require additional clinical trials before or after granting of marketing approval for any products, which could result in increased costs and significant delays in the

development and commercialization of such products and could result in the withdrawal of such products from the market after initially obtaining marketing approval. Our failure, or the failure of our collaborators, to adequately demonstrate the safety and efficacy of a product candidate in clinical development could delay or prevent obtaining marketing approval of the product candidate and, after obtaining marketing approval, data from post-approval studies could result in the product being withdrawn from the market, either of which would likely have a material adverse effect on our business.

We may not be able to obtain government regulatory approval to market our product candidates.

Other than Iclusig, which has been approved in the United States for the treatment of adult patients with chronic, accelerated or blast phase CML who are resistant or intolerant to prior TKI therapy and the treatment of adult patients with Ph+ ALL who are resistant or intolerant to prior TKI therapy, none of our product candidates has been approved for commercialization in any country. Prior to commercialization, each product candidate will be subject to an extensive and lengthy review process in the United States and in other countries. We or our collaborators may not be able to obtain regulatory approval for any product candidates, or even if approval is obtained, the labeling for such products may place restrictions on their use that could materially impact the marketability and profitability of those products. Satisfaction of regulatory requirements, which includes satisfying the FDA and foreign regulatory authorities that the product is both safe and effective for its intended uses, typically takes several years or more depending upon the type, complexity, novelty and safety profile of the product and requires the expenditure of substantial resources. Uncertainty with respect to meeting the regulatory requirements governing our product candidates may result in excessive costs or extensive delays in the regulatory review process.

We will not be able to sell our product candidates if we or our third-party manufacturers fail to comply with current good manufacturing practice requirements.

Before approving any of our product candidates, the FDA will inspect the facility or facilities at which the drug product is manufactured and will not approve the drug candidate unless it is satisfied with our or our third-party manufacturer's compliance with cGMPs. The manufacturing of our product candidates must comply with cGMP requirements of the FDA and similar requirements of regulatory agencies in other countries. These requirements govern, among other things, manufacturing, quality control and documentation procedures. We, or any third-party manufacturer of our product candidates, may not be able to comply with these requirements, which would prevent us from obtaining approval for commercialization of our products. Material changes to the manufacturing processes or a change in manufacturer of products after approvals have been granted are also subject to review and approval by the FDA or other regulatory agencies. Following approval, such facilities are subject to continuing FDA and foreign regulatory requirements including inspections and failure to comply with cGMPs or similar regulations could result in regulatory action including market withdrawals and recalls.

Iclusig and each of our product candidates will remain subject to ongoing regulatory review even if they receive marketing approval. If we or our collaborators or contractors fail to comply with applicable regulations, we or they may be subject to enforcement action that could adversely affect us.

We and our collaborators and contractors will continue to be subject to extensive regulation by the FDA and other regulatory authorities even after our product candidates are approved. We and our collaborators and contractors will continue to be subject to FDA requirements governing, among other things, the manufacture, packaging, sale, promotion, adverse event reporting, storage and recordkeeping of our approved products. The Commissioner of the FDA has put FDA-regulated entities on notice that they should expect to see more enforcement actions in all areas regulated by the FDA. Although we have not received any notice that we are the subject of any investigations or enforcement actions, it is possible that we may be in the future and that could have a material adverse effect on our business. We or any applicable collaborator of ours may be slow to adapt, or may never adapt, to changes in existing regulatory requirements or adoption of new regulatory requirements.

If we or any applicable collaborator of ours fails to comply with the requirements of the FDA and other U.S. or foreign governmental or regulatory authorities with jurisdiction over our products or operations or previously unknown problems with our products, manufacturers or manufacturing processes are discovered, we or our collaborator could be subject to administrative or judicially imposed sanctions, including warning letters; civil or criminal penalties; fines; injunctions; product seizures or detentions; import bans; voluntary or mandatory product recalls; suspension or withdrawal of regulatory approvals; total or partial suspension of production; and refusal to approve pending applications for marketing approval of new drugs or supplements to approved applications.

Government and other third-party payors seek to contain costs of health care through legislative and other means. If they fail to provide coverage and adequate reimbursement rates for our products, our revenues will be harmed.

In both domestic and foreign markets, sales of products depend in part upon the availability of reimbursement from third-party payors. Third-party payors include government health programs such as Medicare and Medicaid, managed care providers, and private health insurers. Governments and other third-party payors continually try to contain or reduce the costs of health care through various means. For example, in certain foreign markets, pricing of pharmaceutical products is subject to governmental control. In the United States, there have been, and we expect that there will continue to be, a number of federal and state proposals to implement similar governmental control. The Patient Protection and Affordable Care Act and the Health Care and Education Affordability Reconciliation Act of 2010, collectively, the Affordable Care Act or ACA, will require discounts under the Medicare drug benefit program and increases the rebates paid by pharmaceutical companies on drugs covered by Medicaid. In addition, the ACA imposes an annual fee, which will increase annually, on sales by branded pharmaceutical manufacturers. The financial impact of these discounts, increased rebates and fees and the other provisions of the ACA on our business is unclear, and there can be no assurance that our business will not be materially harmed by future implementation of the ACA.

In addition, third-party payors are increasingly attempting to contain health care costs by demanding price discounts or rebates and limiting both the types and variety of drugs that they will cover and the amounts that they will pay for drugs. As a result, they may not cover or provide adequate payment for our products. We may have to conduct post-marketing studies in order to demonstrate the cost-effectiveness of Iclusig or any other of our future drugs to such payors' satisfaction.

Such studies might require us to commit a significant amount of management's time and financial and other resources. Our products might not ultimately be considered cost-effective. Adequate third-party reimbursement might not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on payments allowed for lower-cost products that already are reimbursed, may be incorporated into existing payments for other products or services, and may reflect budgetary constraints and/or imperfections in Medicare or Medicaid data used to calculate these rates. Net prices for products are often reduced by mandatory discounts or rebates required by government health care programs or by privately-negotiated discounts. Moreover, the United States federal government, state governments and private payors frequently pursue actions against pharmaceutical companies alleging that the companies have overstated prices in order to inflate reimbursement rates. Any such action could adversely affect the pricing of and the commercial success of our products.

Any legislation or regulatory changes or relaxation of laws that restrict imports of drugs from other countries also could reduce the net price we receive for our products.

If we market any of our products in a manner that violates federal or state health care laws, including fraud and abuse laws, laws prohibiting off-label promotion, disclosure laws or other similar laws, we may be subject to civil or criminal penalties.

We are subject to health care "fraud and abuse" laws, such as the federal False Claims Act and the anti-kickback provisions of the federal Social Security Act, laws prohibiting off-label product promotion and other similar state and federal laws and regulations. While we have a corporate compliance program designed to actively identify, prevent and mitigate risk through the implementation of compliance policies and systems and the promotion of a culture of compliance, if we are found not to be in full compliance with these laws our business could be materially harmed.

The federal anti-kickback law prohibits knowingly and willfully offering, paying, soliciting, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the ordering, furnishing, arranging for or recommending of an item or service that is reimbursable, in whole or in part, by a federal health care program, such as Medicare or Medicaid. The federal statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, patients, purchasers and formulary managers on the other hand, and therefore constrains our marketing practices and our various service arrangements with physicians, including physicians who make clinical decisions to use our products. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchasing, or recommending may be subject to scrutiny or penalty if they do not qualify for an exemption or safe harbor.

Federal false claims laws prohibit any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government, or knowingly making, or causing to be made, a false statement to get a false claim paid. Pharmaceutical companies have been prosecuted under these laws for a variety of alleged promotional and marketing activities, such as providing free product to customers with the expectation that the customers would bill federal programs for the product; reporting to pricing services inflated average wholesale prices that were then used by federal programs to set reimbursement rates; engaging in promotion for uses that the FDA has not approved, known as "off-label" uses, that caused claims to be submitted to Medicaid for non-covered off-label uses; and submitting inflated "best price" information to the Medicaid Rebate Program.

Although physicians are permitted to, based on their medical judgment, prescribe products for indications other than those cleared or approved by the FDA, manufacturers are prohibited from promoting their products for such off-label uses. We market Iclusig for the treatment of adult patients with chronic, accelerated or blast phase CML who are resistant or intolerant to prior TKI therapy and adult patients with Ph+ ALL who are resistant or intolerant to prior TKI therapy, and provide promotional materials to physicians regarding the use of Iclusig in these patient populations. If the FDA determines that our promotional materials or other activities constitute off-label promotion, it could request that we modify our promotional materials or other activities or subject us to regulatory enforcement actions, including the issuance of a warning letter, injunction, seizure, civil fine and criminal penalties. It also is possible that other federal, state or foreign enforcement authorities might take action if they believe that the alleged improper promotion led to the submission and payment of claims for an off-label use, which could result in significant fines or penalties under other statutory authorities, such as laws prohibiting false claims for reimbursement. Even if it is later determined we were not in violation of these laws, we may be faced with negative publicity, incur significant expenses defending our actions and have to divert significant management resources from other matters.

Also applicable to some of our practices is the Health Insurance Portability and Accountability Act of 1996, or HIPAA, and its implementing regulations, which created federal criminal laws that prohibit executing a scheme to defraud any health care benefit program or making false statements relating to health care

matters and which also imposes certain regulatory and contractual requirements regarding the privacy, security and transmission of individually identifiable health information.

The majority of states also have statutes or regulations similar to the federal anti-kickback law and false claims laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. In addition, certain states have laws governing the privacy of certain health information, which may differ from each other in significant ways and often are not preempted by HIPAA, complicating compliance efforts. Sanctions under these federal and state laws may include civil monetary penalties, exclusion of a pharmaceutical manufacturer's products from reimbursement under government programs and criminal fines. Even if we are not determined to have violated these laws, government investigations into these issues typically require the expenditure of significant resources and generate negative publicity, which could harm our business.

In recent years, several states and localities, including California, the District of Columbia, Maine, Minnesota, Nevada, New Mexico, Vermont and West Virginia, have enacted legislation requiring pharmaceutical companies to establish marketing compliance programs, file periodic reports with the state or make periodic public disclosures on sales, marketing, pricing, clinical trials, health care provider, or HCP payments and other activities. Similar legislation is being considered in other states. Additionally, as part of the ACA, the federal government has enacted the Physician Payment Sunshine provisions. The Physician Payment Sunshine provisions which were enacted in February 2013 and require pharmaceutical manufacturers to publicly report gifts and payments made to physicians and teaching hospitals beginning in March 2014. Many of these requirements are new and the penalties for failure to comply with these requirements will be significant. If we are found not to be in full compliance with these laws, we could face enforcement action, fines and other penalties, and could receive adverse publicity.

The ACA also includes various provisions designed to strengthen significantly fraud and abuse enforcement, such as increased funding for enforcement efforts and the lowering of the intent requirement of the federal anti-kickback statute and criminal health care fraud statute such that a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it.

If our past or present operations are found to be in violation of any such laws or any other governmental regulations that may apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from federal health care programs and/or the curtailment or restructuring of our operations. The risk of our being found in violation of these laws is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are subject to a variety of interpretations. Any action against us for violation of these laws, even if we successfully defend against them, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business.

The sales and marketing practices of our industry have been the subject of increased scrutiny from federal and state government agencies, and we believe that this trend will continue. Any action against us for violation of these laws, even if we successfully defend against them, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business.

Future health care reform measures could hinder or prevent commercial success of our drugs and drug candidates.

The United States federal government and other governments have shown significant interest in pursuing health care reform. Any government-adopted reform measures could adversely affect the pricing of health care products, including our approved product and/or any future product candidates approved for sale. The continuing efforts of governments, insurance companies, managed care organizations and other payors for health care products to contain or reduce health care costs may adversely affect our ability to set prices we believe are fair for our products or any drugs we may develop and commercialize.

New laws, regulations and judicial decisions, or new interpretations of existing laws, regulations and decisions, relating to health care availability, methods of delivery or payment for drugs, or sales, marketing or pricing, may limit our potential revenues, and we may need to revise our research and development or commercialization programs. The pricing and reimbursement environment may change in the future and become more challenging for any of several reasons, including policies advanced by the U.S. government, new health care legislation or fiscal challenges faced by government health administration authorities. Specifically, in the United States and some foreign jurisdictions, there have been a number of legislative and regulatory proposals and initiatives to change the health care system in ways that could affect our ability to sell products. Some of these proposed and implemented reforms could result in reduced reimbursement rates for our current or future products, which would adversely affect our business, operations and financial results. As discussed above, the recently enacted ACA may have far reaching consequences for companies like us. As a result of this new legislation, substantial changes could be made to the current system for paying for health care in the United States, including changes made in order to extend medical benefits to those who currently lack health insurance coverage. Extending coverage to a large population could substantially change the structure of the health insurance system and the methodology for reimbursement. If reimbursement for our products is substantially less than we expect in the future, or rebate obligations associated with them are substantially increased, our business could be materially and adversely affected.

Further federal and state proposals and health care reforms in and outside of the United States could limit the prices that can be charged for our products and may further limit our commercial opportunity. Our results of operations could be materially adversely affected by the ACA, by the Medicare prescription drug coverage legislation, by the possible effect of such current or future legislation on amounts that private insurers will pay and by other health care reforms that may be enacted or adopted in the future.

Risks relating to our common stock

Results of our operations, general market conditions for biotechnology stocks and other factors could result in a sudden change in the value of our stock.

As a biopharmaceutical company which has just received regulatory approval for its first drug product, we continue to experience significant volatility in the price of our common stock. In 2012, our stock price ranged from a high of $25.40 to a low of $12.26. Some of the many factors that could contribute to such volatility include:

- our success in commercializing Iclusig;
- announcements regarding results and timing of preclinical studies and clinical trials for our product candidates;
- our plans for seeking marketing approval and the expected timing of any regulatory approvals of our product candidates, including approval of Iclusig outside of the United States;
- announcements of financial results and other operating performance measures, including product revenues during the initial period after Iclusig's commercial launch;
- our funding resources and requirements, including announcements of new equity or debt financings;
- evidence of the safety or efficacy of our product candidates;
- decisions by regulatory agencies that may impact our product candidates;
- the timing of our receipt of, or our failure to receive, future milestones under our license agreement with Merck;
- announcements regarding existing collaborations or new collaborations or our failure to enter into collaborations;
- announcements regarding product developments or regulatory approvals obtained by companies developing competing products;
- announcements of technological innovations or new therapeutic product candidates;
- developments relating to intellectual property rights, including licensing, litigation and governmental regulation;

- healthcare or cost-containment legislation and public policy pronouncements;
- sales of our common stock by us, our insiders or our other stockholders;
- market conditions for biopharmaceutical stocks in general; and
- general economic and market conditions.

The stock markets, and the markets for biotechnology stocks in particular, have experienced volatility that has often been unrelated to the operating performance of particular companies. These broad market fluctuations may adversely affect the trading price of our common stock. Investors may not be able to sell when they desire due to insufficient buyer demand and may realize less than, or lose all of, their investment.

Anti-takeover provisions of Delaware law and provisions in our charter and bylaws could delay, discourage or make more difficult a third-party acquisition of control of us.

Because we are a Delaware corporation, the certain provisions of Delaware law could delay, discourage or make more difficult a third-party acquisition of control of us, even if the change in control would be beneficial to stockholders or the stockholders regard it as such. We are subject to the provisions of Section 203 of the Delaware General Corporation Law, or DGCL, which prohibits certain "business combination" transactions (as defined in Section 203) with an "interested stockholder" (defined in Section 203 as a 15 percent or greater stockholder) for a period of three years after a stockholder becomes an "interested stockholder", unless the attaining of "interested stockholder" status or the transaction is pre-approved by our board of directors, the transaction results in the attainment of at least an 85 percent ownership level by an acquirer or the transaction is later approved by our board of directors and by our stockholders by at least a 66 2/3 percent vote of our stockholders other than the "interested stockholder", each as specifically provided in Section 203.

In addition, because our board of directors is a classified board, as described below, Section 141(k)(1) of the DGCL provides that directors may only be removed by the stockholders and then only for "cause". Further, Section 242(b)(1) of the DGCL provides that amendment of our certificate of incorporation requires that the amendment be determined by the board of directors to be advisable and be submitted by our board of directors to our stockholders for action by them and then approved by our stockholders holding a majority of the outstanding shares of our common stock.

Our certificate of incorporation and our bylaws, each as currently in effect, also contain certain provisions that may delay, discourage or make more difficult a third-party acquisition of control of us:

- a classified board of directors, with three classes of directors, each serving for a staggered three-year term, such that not all members of the board of directors may be elected at one time;
- the authorized number of directors may be changed only by resolution of the board of directors;
- any vacancies on the board of directors may only be filled by a majority of the directors then serving, although not a quorum, and not by the stockholders;
- the ability of the board of directors to issue preferred stock that could dilute the stock ownership of a potential unsolicited acquirer and so possibly hinder an acquisition of control of us that is not approved by our board of directors, including through the use of preferred stock in connection with a shareholder rights plan which we could adopt by action of the board of directors;
- record date-setting provisions for annual and special meetings of stockholders and actions by written consent, provisions regulating the conduct of meetings of stockholders and action by written consent, and "advance notice" timing and informational requirements for stockholder nominations to our board of directors at stockholder meetings or for stockholder proposals that can be acted on at stockholder meetings or by written consent; and
- the inability of our stockholders to call a special meeting of stockholders, the limitation of matters to be acted upon at an annual meeting of stockholders to those matters proposed by the Company or properly brought before the meeting and the limitation of matters to be acted upon at a special meeting of stockholders to matters which we place on the agenda for the meeting.

These provisions of the DGCL and our certificate of incorporation and our bylaws may delay, discourage or make more difficult certain types of transactions in which our stockholders might otherwise receive a premium for their shares over the current market price, and might limit the ability of our stockholders to approve transactions that they think may be in their best interest.

ITEM 1B: UNRESOLVED STAFF COMMENTS

None.

ITEM 2: PROPERTIES

We have leased approximately 100,000 square feet of laboratory and office space at 26 Landsdowne Street, Cambridge, Massachusetts through July 2019, with two five-year renewal options. In May 2012, we entered into a three-year operating lease agreement for an additional 26,000 square feet of office space in Cambridge, Massachusetts. We also have a short-term lease for approximately 4,500 square feet of office space in Lausanne, Switzerland. We have entered into a long-term lease for approximately 244,000 square feet of laboratory and office space in two adjacent, connected buildings under construction in Cambridge, Massachusetts, which is expected to be available for occupancy in early 2015 and will serve as our corporate headquarters. The lease has a term of 15 years with options to renew for three terms of five years each. We have also entered into a long-term lease for approximately 22,000 square feet of office space in a building under construction in Lausanne, Switzerland, which is expected to be available for occupancy in early 2014 and will serve as our European headquarters. We believe that any additional space we may require will be available on commercially reasonable terms.

ITEM 3. LEGAL PROCEEDINGS

None.

ITEM 4: MINE SAFETY DISCLOSURES

None.

PART II

ITEM 5: MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Effective January 3, 2012, our common stock is traded on the NASDAQ Global Select Market under the symbol "ARIA". Previously, it was traded on the NASDAQ Global Market. The following table sets forth the high and low sales prices of our common stock as quoted on these markets for the periods indicated.

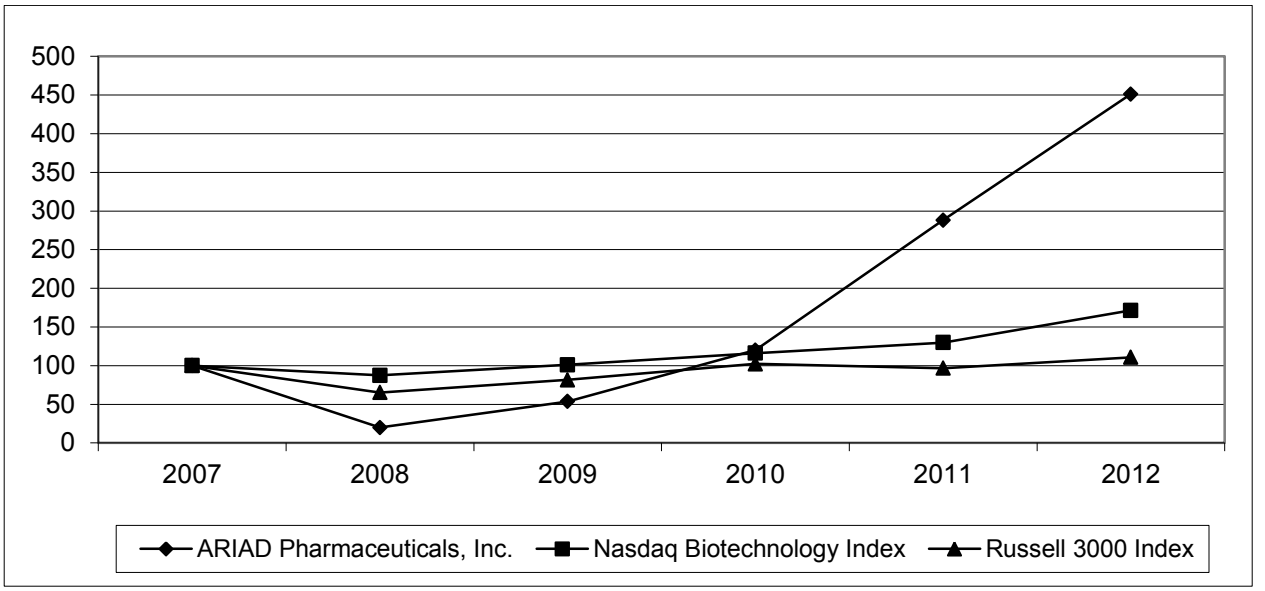
2012:	**High**	**Low**
First Quarter	$ 16.76	$ 12.26
Second Quarter	18.10	14.10
Third Quarter	24.36	16.61
Fourth Quarter	25.40	18.83
2011:		
First Quarter	$ 7.69	$ 5.04
Second Quarter	11.94	7.50
Third Quarter	13.50	7.55
Fourth Quarter	12.66	7.72

On February 22, 2013, the last reported sale price of our common stock was $21.21.

Stock Performance Graph

The following graph compares the yearly percentage change in the cumulative total stockholder return on our common stock since December 31, 2007, with the total cumulative return of the NASDAQ Biotechnology Index and the Russell 3000® Index, in each of which ARIAD is listed. The Russell 3000 Index measures the stock performance of the largest 3,000 U.S. companies representing approximately 98 percent of the investable U.S. equity market. Since the Russell 3000 Index is specifically designed to provide a comprehensive, unbiased and stable barometer of the broad stock market, we believe it is a meaningful index against which to compare our stock price performance.

The price of a share of common stock is based upon the closing price per share as quoted on the NASDAQ Global Market or the NASDAQ Global Select Market on the last trading day of the year shown. The graph lines merely connect year-end values and do not reflect fluctuations between those dates. The comparison assumes $100 was invested on December 31, 2007 in our common stock and in each of the foregoing indices. We did not declare or pay any dividends during the comparison period. The stock price performance as shown in the graph below is not necessarily indicative of future stock price performance.



	2007	***2008***	***2009***	***2010***	***2011***	***2012***
ARIAD Pharmaceuticals, Inc.	100.00	20.00	53.65	120.00	288.24	451.29
Nasdaq Biotechnology Index	100.00	87.37	101.03	116.19	129.91	171.36
Russell 3000 Index	100.00	61.30	76.91	88.26	87.44	99.57

The performance graph shall not be deemed to be incorporated by reference by means of any general statement incorporating by reference this Form 10-K into any filing under the Securities Act of 1933, as amended or the Securities Exchange Act of 1934, as amended, except to the extent that we specifically incorporate such information by reference, and shall not otherwise be deemed filed under such acts.

Stockholders

As of February 22, 2013, the approximate number of holders of record of our common stock was 350, and the approximate total number of beneficial holders of our common stock was 59,000.

Dividends

We have not declared or paid dividends on our common stock in the past and do not intend to declare or pay such dividends in the foreseeable future. Our long-term debt agreement prohibits the payment of cash dividends.

Unregistered Sales of Securities

Not applicable.

Issuer Purchases of Equity Securities

Not applicable.

ITEM 6: SELECTED FINANCIAL DATA

The selected financial data set forth below as of December 31, 2012, 2011, 2010, 2009 and 2008 and for each of the years then ended have been derived from the audited consolidated financial statements of the Company, of which the financial statements as of December 31, 2012 and 2011 and for the years ended December 31, 2012, 2011 and 2010 are included elsewhere in this Annual Report on Form 10-K. The information set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the audited consolidated financial statements, and the notes thereto, and other financial information included herein.

	Years Ended December 31,				
In thousands, except per share data	**2012**	**2011**	**2010**	**2009**	**2008**
Consolidated Statements of Operations Data:					
Revenue:					
License and collaboration revenue [1]	$ 514	$ 25,189	$ 174,460	$ 8,302	$ 7,082
Service revenue [1]	44	111	4,520	---	---
Total revenue	558	25,300	178,980	8,302	7,082
Operating expenses:					
Research and development	144,709	77,743	57,985	63,447	50,841
General and administrative	60,909	24,380	16,095	16,888	28,092
Total operating expenses	205,618	102,123	74,080	80,335	78,933
Income (loss) from operations	(205,060)	(76,823)	104,900	(72,033)	(71,851)
Other income (expense):					
Interest income (expense), net	41	(65)	(120)	(171)	799
Revaluation of warrant liability [2]	(15,924)	(46,715)	(19,532)	(7,804)	---
Foreign exchange gain	71	---	---	---	---
Other income (expense), net	(15,812)	(46,780)	(19,652)	(7,975)	799
Net income (loss)	$ (220,872)	$ (123,603)	$ 85,248	$ (80,008)	$ (71,052)
Net income (loss) per share – basic	$ (1.34)	$ (0.93)	$ 0.75	$ (0.86)	$ (1.02)
– diluted	$ (1.34)	$ (0.93)	$ 0.74	$ (0.86)	$ (1.02)
Weighted average number of shares of common stock outstanding – basic	164,964	132,375	113,020	93,330	69,791
– diluted	164,964	132,375	114,734	93,330	69,791

	As of December 31,				
In thousands	**2012**	**2011**	**2010**	**2009**	**2008**
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities	$ 164,414	$ 306,256	$ 103,630	$ 40,362	$ 38,369
Working capital	119,484	282,195	88,775	8,212	13,475
Total assets	180,193	320,712	120,030	65,010	68,188
Long-term debt and capital lease obligations	9,100	11,215	8,294	142	11,622
Warrant liability [2]	---	58,639	28,815	11,363	---
Accumulated deficit	(777,835)	(556,963)	(433,360)	(518,608)	(438,600)
Stockholders' equity (deficit)	112,851	220,141	64,076	(89,016)	(69,198)

[1] During 2010, we modified our collaboration agreement with Merck and entered into a license agreement. As a result of this modification, additional payments were received and deferred revenue was recognized, as further discussed in Note 2 to the consolidated financial statements. Pursuant to the license agreement, we provided services to Merck, recognized as service revenue.

[2] In 2009, we issued warrants that are accounted for as a derivative liability. The change in fair value of outstanding warrants is recorded in our consolidated statements of operations. Upon exercise of all remaining warrants in January and February 2012, the balance of the warrant liability was credited to stockholders' equity and the liability was eliminated. See Note 9 to the consolidated financial statements.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The information set forth below should be read in conjunction with the audited consolidated financial statements, and the notes thereto, and other financial information included herein.

Overview

ARIAD is a global oncology company whose vision is to transform the lives of cancer patients with breakthrough medicines. Our mission is to discover, develop and commercialize small-molecule drugs to treat cancer in patients with the greatest and most urgent unmet medical need – aggressive cancers where current therapies are inadequate. We are focused on commercializing our first approved cancer medicine, Iclusig™ (*ponatinib*), and developing additional molecularly targeted therapies to treat patients with blood cancers and solid tumors.

Iclusig and our product candidates, AP26113 and ridaforolimus, were discovered internally by our scientists based on our expertise in computational and structure-based drug design. Ridaforolimus is being developed by Merck & Co., Inc., or Merck, pursuant to a license agreement we entered into with Merck in 2010.

Iclusig (ponatinib)

On December 14, 2012, we obtained accelerated approval from the U.S. Food and Drug Administration, or FDA, to sell our first new cancer medicine, Iclusig. Iclusig is a tyrosine kinase inhibitor, or TKI, that is approved in the United States for the treatment of adult patients with chronic, accelerated or blast phase chronic myeloid leukemia, or CML, who are resistant or intolerant to prior TKI therapy, and the treatment of adult patients with Philadelphia chromosome-positive acute lymphoblastic leukemia, or Ph+ ALL, who are resistant or intolerant to prior TKI therapy.

We have commenced sales and marketing of Iclusig, and the medicine is now available for patients in the United States through specialty pharmacies and specialty distributors. We currently charge approximately $115,000, on a wholesale basis, for an annual supply of the recommended dose of Iclusig.

We have also filed for marketing authorization for Iclusig with the European Medicines Authority, or EMA, and we currently anticipate approval in the third quarter of 2013. We will need to obtain pricing and reimbursement approval in certain countries in Europe before it will be widely available for use, which approvals we anticipate obtaining beginning in 2014. We also plan to file for marketing authorization for Iclusig with regulatory authorities in other selected territories around the world, including Switzerland, Canada and Australia in the second half of 2013 and Japan in mid-2014. Each of these regulatory authorities has its own processes and timelines for the review and approval of marketing authorization applications.

We plan to commercialize Iclusig on our own in the United States and, subject to obtaining regulatory approval, in Europe and other selected territories worldwide. During the past year, we have been actively focused on preparing for the commercial launch of Iclusig in the United States, including establishing an experienced and trained sales force and other professional staff necessary for an effective launch, implementing systems and processes to support launch, developing tools and materials to be utilized during the commercialization of Iclusig and other activities, and arranging for Iclusig to be provided to patients through a network of specialty pharmacies and specialty distributors. We have also initiated operations in Europe, with headquarters in Switzerland, in preparation for potential EMA approval of Iclusig. We have hired management and other key personnel in Switzerland who are building our business infrastructure and capabilities in Europe.

We are also developing Iclusig for expanded indications in CML and in additional cancer indications. In July 2012, we initiated a randomized Phase 3 clinical trial of ponatinib, referred to as the EPIC (**E**valuation of **P**onatinib versus **I**matinib in **C**hronic Myeloid Leukemia) trial, in adult patients with newly diagnosed CML in the chronic phase. We currently anticipate completion of enrollment by the end of 2013, with an interim analysis of the data in mid-2014. In August 2012, we initiated a multicenter Phase 1/2 clinical trial in Japan of Iclusig in Japanese patients with CML who have failed treatment with dasatinib or nilotinib or who have Ph+ ALL and have failed prior treatment with TKIs. This trial is designed to establish the recommended dose for Iclusig and confirm its anti-leukemic activity in Japanese patients. In January 2013, we announced an agreement with Newcastle University, U.K., on behalf of the U.K. National Cancer Research Institute, or NCRI, to collaborate on a multi-center, randomized Phase 3 trial, named SPIRIT 3, to assess the impact of switching patients with CML being treated with a first-line TKI, upon suboptimal response or treatment failure, to Iclusig. We expect that a total of approximately 1,000 patients will be enrolled in this trial, with enrollments beginning in the second quarter of 2013.

We believe that Iclusig has potential applications beyond CML in other blood cancers and solid tumors, such as gastrointestinal stromal tumors, or GIST, acute myeloid leukemia and certain forms of non-small cell lung cancer, or NSCLC. We plan to initiate additional clinical trials of Iclusig as we continue development of this product candidate.

AP26113

AP26113 is an investigational inhibitor of anaplastic lymphoma kinase, or ALK, epidermal growth factor receptor, or EGFR, and repressor of silencing-1, or ROS1, which are clinically validated targets in NSCLC. We initiated patient enrollment in a Phase 1/2 clinical trial of AP26113 in the third quarter of 2011. The protocol is designed to enroll approximately 50 to 60 patients in the Phase 1 portion of the trial and approximately 80 patients in the Phase 2 portion of the trial. We expect to commence the Phase 2 portion of the trial in the first half of 2013 and, subject to further discussions with the regulatory agencies, commence a pivotal trial of AP26113 in ALK-positive NSCLC patients in mid-2013 in parallel with the four cohorts of the Phase 2 portion of the trial.

Ridaforolimus

Ridaforolimus is an investigational inhibitor of the mammalian target of rapamycin, or mTOR, that we discovered and developed internally and later licensed in 2010 to Merck. Under the license agreement, Merck has assumed responsibility for all activities related to the development, manufacture and commercialization of ridaforolimus and funds 100 percent of all ridaforolimus costs incurred after January 1, 2010. The agreement provides that Merck will develop ridaforolimus in multiple oncology indications. We received an up-front payment of $50 million in 2010 and a $25 million milestone payment in 2011. Potential additional milestone payments to us include up to $289 million associated with potential regulatory filings and approvals for additional cancer indications and up to $200 million associated with the achievement of certain sales thresholds, although there can be no assurance that any future payments will be received under the agreement.

Critical Accounting Policies and Estimates

Our financial position and results of operations are affected by subjective and complex judgments, particularly in the areas of revenue recognition, the carrying value of intangible assets, accrued product development expenses, the fair value of warrants to purchase our common stock, and inventory valuation.

Revenue Recognition

Revenue is recognized when there is persuasive evidence that an arrangement exists, delivery has occurred, the price is fixed and determinable and collection is reasonably assured.

License and Collaboration Revenue

We have historically generated revenue from license and collaboration agreements with third parties related to use of our technology and/or development and commercialization of product candidates. Such agreements may provide for payment to us of up-front payments, periodic license payments, milestone payments and royalties. We also generated revenue from services provided under license agreements.

Revenue arrangements with multiple elements are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer and is based on the selling price of the deliverables. When deliverables are separable, consideration received is allocated to the separate units of accounting based on the relative selling price of the elements and the appropriate revenue recognition principles are applied to each unit.

The assessment of multiple element arrangements requires judgment in order to determine the appropriate units of accounting and the points in time that, or periods over which, revenue should be recognized. Regarding our Collaboration Agreement with Merck for the development, manufacture and commercialization of ridaforolimus, in effect from July 2007 to May 2010, we determined the license and development deliverables constituted one unit of accounting and, therefore, the up-front and milestone payments were deferred and recognized over the performance period. Regarding our License Agreement with Merck entered into in May 2010 that replaced the Collaboration Agreement, we determined that the license and the services were separate units of accounting, and because the fair value of the undelivered services was known, the amounts received related to the license and the services are recognized in the period in which they are received or the services are rendered. Milestone payments under the License Agreement are recognized when earned. In the year ended December 31, 2010, the Company recognized $179 million under this arrangement, which reflected the receipt of a $50 million up-front payment and a $12.8 million payment for our share of ridaforolimus costs incurred from January 1, 2010 to May 4, 2010 from Merck pursuant to the terms of the License Agreement. License and collaboration revenue in 2010 also included $111.5 million representing the recognition in 2010 of revenue deferred as of December 31, 2009, which was recognized upon execution of the License Agreement. In the year ended December 31, 2011, the Company received and recorded as revenue a $25 million milestone payment. No milestone payments were received under the agreement in the year end December 31, 2012.

Net Product Revenues

Product sales of Iclusig are recorded net of estimated government-mandated rebates and chargebacks, distribution fees, copay assistance programs, product returns and other deductions. We reflect these estimated adjustments as either a reduction in the related account receivable from the specialty pharmacy or specialty distributor, or as an accrued liability depending on the nature of the sales deduction. We began shipping Iclusig in January 2013, and therefore we recognized no product revenues from the sale of Iclusig in the United States in the year ended December 31, 2012.

Although Iclusig has not been approved for commercial sale in the European Union by the EMA, patients are being treated with Iclusig both in the framework of our clinical trials and related studies and in named patient programs. The French regulatory authority had granted an *Autorisation Temporaire d'Utilisation* (ATU), or Temporary Authorization for Use, for Iclusig for the treatment of CML and Ph+ ALL under a nominative program on a patient-by-patient basis. The Company began shipping product under this program during the year ended December 31, 2012. Until all revenue recognition criteria are met, all amounts received by or due to the Company under this program (approximately $1.1 million as of December 31, 2012) have not been recorded as revenue.

Intangible Assets

At December 31, 2012, we reported $993,000 of intangible assets, consisting of capitalized costs related primarily to purchased and issued patents and patent applications, net of accumulated amortization. The

carrying value of these intangible assets is evaluated for possible impairment, and losses are recorded when the evaluation indicates that the carrying value is not recoverable. This evaluation involves estimates of future net cash flows expected to be generated by the asset. Such estimates require judgment regarding future events and expected cash flows. Changes in these estimates, including decisions to discontinue using the technologies, could result in material changes to our balance sheet and charges to our consolidated statements of operations. If we were to abandon the ongoing development of the underlying product candidates or technologies or terminate our efforts to pursue collaborations or license agreements, or if our estimates of future net cash flows expected to be generated by the asset change, we may be required to write down or write off a portion of the carrying value of our intangible assets. In 2012, we recorded charges to operating expenses of $4.8 million in our consolidated statements of operations to reflect impairment of the intangible assets associated with ridaforolimus, our investigational oral mTOR inhibitor being developed by Merck for oncology indications pursuant to a license with the Company, following the decision in June 2012 by the FDA not to approve the NDA filed by Merck for ridaforolimus for the treatment of patients with soft tissue or bone sarcomas, stating that additional clinical trial(s) would need to be conducted to further assess safety and efficacy of ridaforolimus in this indication. In 2010, we recorded charges of $2.4 million in our consolidated statements of operations related to the discontinuation of efforts to pursue our NF-κB technology and to the assessment of the recoverability of our ARGENT technology and certain other technologies.

Accrued Product Development Expenses

We accrue expenses for our product development activities based on our estimates of services performed or progress achieved pursuant to contracts and agreements with multiple vendors including research laboratories, contract manufacturers, contract research organizations and clinical sites. These estimates are recorded in research and development expenses in our consolidated statements of operations and are reflected in accrued product development expenses on our balance sheet. At December 31, 2012, we reported accrued product development expenses of $14.1 million on our balance sheet.

Our estimates of services performed or progress achieved are based on all available information we have from reports, correspondence and discussions with our vendors. Our estimates of accrued expenses based on such information require judgment. Actual costs may vary from such estimates. When such variances become known, we adjust our expenses accordingly.

Fair Value of Warrants

Warrants outstanding at December 31, 2011 to purchase 5,805,843 shares of our common stock, issued on February 25, 2009 in connection with a registered direct offering of our common stock, were classified as a derivative liability. Accordingly, the fair value of the warrants was recorded on our balance sheet as a liability, and such fair value was adjusted in each financial reporting period with the adjustment to fair value reflected in our consolidated statements of operations. At December 31, 2011, we reported a warrant liability of $58.6 million on our balance sheet.

During the three-month period ended March 31, 2012, all 5,805,843 warrants that were outstanding at December 31, 2011 were exercised for proceeds to us of approximately $12.5 million. Upon the exercise of these remaining warrants, the balance of the warrant liability and the proceeds received upon exercise were credited to stockholders' equity and the liability was eliminated.

The fair value of the warrants was determined using the Black-Scholes option valuation model. Fluctuations in the assumptions and factors used in the Black-Scholes model resulted in adjustments to the fair value of the warrants recorded on our balance sheet reflected through charges or credits in our consolidated statements of operations. The primary factor in the Black-Scholes model that impacted the fair value of the warrants was the market value of our common stock on the date of the valuation.

Inventory

Inventory costs include the costs related to the manufacturing of Iclusig, including costs of contract manufacturing, quality control costs and shipping costs from the manufacturers to the final distribution warehouse. We value our inventories at the lower of cost or market. We determine the cost of our inventories on a first-in, first-out basis. If we identify excess, obsolete or unsalable items, inventories are written down to their realizable value in the period in which the impairment is identified. Estimates of excess inventory consider our projected sales of the product and the remaining shelf lives of the product.

Prior to receiving approval from the FDA in December 2012 to sell Iclusig, we expensed all costs incurred related to the manufacture of Iclusig as research and development costs because of the inherent risks associated with the development of a drug candidate, the uncertainty about the regulatory approval process and the lack of history for our Company of regulatory approval of drug candidates.

Much of the product produced prior to FDA approval is expected to be available for commercial or clinical use. Accordingly, we expect the manufacturing costs for Iclusig included in our future cost of sales to initially be insignificant, as most of these costs will have been recorded as research and development expenses in prior periods, and to increase as we begin to sell inventory that is produced after we began capitalizing Iclusig commercial inventory. We expect this lower cost to occur during the first six to twelve months of commercial sales of Iclusig; however, the time period over which this reduced-cost inventory is consumed will depend on a number of factors, including the amount of future sales, the ultimate use of this inventory in either commercial sales, clinical development or other research activities and the ability to utilize inventory prior to its expiration date. We expect that as this reduced-cost inventory is used, the cost of product sales, before consideration of any required inventory reserves, will be in the single digits as a percentage of net revenues. In addition, we may need to establish reserves for inventory in excess of our projected sales within the product's expiration period, which may impact the cost of product sales as a percentage of net revenues.

Results of Operations

Years Ended December 31, 2012 and 2011

Revenue

We recorded total revenue of $558,000 for the year ended December 31, 2012, compared to $25.3 million for the year ended December 31, 2011. Total revenue in 2012 consisted primarily of license revenue pursuant to a license agreement related to our ARGENT technology. Total revenue in 2011 consisted primarily of a $25 million milestone payment received pursuant to our license agreement with Merck for the acceptance of an application for regulatory approval in Europe of ridaforolimus for the treatment of patients with sarcoma, which was subsequently withdrawn by Merck in November 2012.

We expect that our revenue in 2013 will increase substantially due primarily to anticipated product sales of Iclusig in the U.S. and to a much lesser degree due to an increase in license revenue pursuant to license agreements related to our ARGENT technology. Product sales of Iclusig in 2013 are dependent in part on the success of our commercialization efforts in the United States and on the status of regulatory approval for Iclusig in Europe, which we currently anticipate in the third quarter of 2013. If applicable regulatory criteria are not met, the EMA could refuse to approve our application or delay the approval of Iclusig. In addition, we will need to obtain pricing and reimbursement approval in certain countries in Europe before it will be widely available for use. We currently anticipate receiving pricing and reimbursement approvals in Europe commencing in 2014. There can be no assurance that we will be successful in commercializing Iclusig in the United States or that Iclusig will receive marketing authorization approval in the European Union.

Operating Expenses

Research and Development Expenses

Research and development expenses increased by $67.0 million, or 86 percent, to $144.7 million in 2012, compared to $77.7 million in 2011. The research and development process necessary to develop a pharmaceutical product for commercialization is subject to extensive regulation by numerous governmental authorities in the United States and other countries. This process typically takes years to complete and requires the expenditure of substantial resources. Current requirements include:

- preclinical toxicology, pharmacology and metabolism studies, as well as *in vivo* efficacy studies in relevant animal models of disease;

- manufacturing of drug product for preclinical studies and clinical trials and ultimately for commercial supply;

- submission of the results of preclinical studies and information regarding manufacturing and control and proposed clinical protocol to the U.S. Food and Drug Administration, or FDA, in an Investigational New Drug application, or IND (or similar filings with regulatory agencies outside the United States);

- conduct of clinical trials designed to provide data and information regarding the safety and efficacy of the product candidate in humans; and

- submission of all the results of testing to the FDA in a New Drug Application, or NDA (or similar filings with regulatory agencies outside the United States).

Upon approval by the appropriate regulatory authorities, including in some countries approval of product pricing, we may commence commercial marketing and distribution of the product.

We group our research and development, or R&D, expenses into two major categories: direct external expenses and all other R&D expenses. Direct external expenses consist of costs of outside parties to conduct laboratory studies, to develop manufacturing processes and manufacture product candidates, to conduct and manage clinical trials and similar costs related to our clinical and preclinical studies. These costs are accumulated and tracked by product candidate. All other R&D expenses consist of costs to compensate personnel, to purchase lab supplies and services, to lease, operate and maintain our facility, equipment and overhead and similar costs of our research and development efforts. These costs apply to our clinical and preclinical candidates as well as our discovery research efforts. Direct external expenses are further categorized as costs for clinical programs and costs for preclinical programs. Preclinical programs include product candidates undergoing toxicology, pharmacology, metabolism and efficacy studies and manufacturing process development required before testing in humans can begin. Product candidates are designated as clinical programs once we have filed an IND with the FDA, or a similar filing with regulatory agencies outside the United States, for the purpose of commencing clinical trials in humans.

Our R&D expenses for 2012 as compared to 2011 were as follows:

	Year ended December 31,		Increase /
In thousands	**2012**	**2011**	**(decrease)**
Direct external expenses:			
Clinical programs	$ 60,622	$ 34,612	$ 26,010
Preclinical programs	---	1,900	(1,900)
All other R&D expenses	84,087	41,231	42,856
	$ 144,709	$ 77,743	$ 66,966

In 2012 and 2011, our clinical programs consisted of (i) Iclusig (ponatinib), our pan BCR-ABL inhibitor, and (ii) AP26113, our ALK, EGFR and ROS1 inhibitor for which we filed an IND in June 2011 and commenced a Phase 1/2 clinical trial in the third quarter of 2011.

Direct external expenses for Iclusig were $54.6 million in 2012, an increase of $22.2 million, or 69 percent, compared to 2011 expenses of $32.4 million. The increase is due to an increase in clinical trial costs of $13.3 million, contract manufacturing costs of $3.3 million and supporting non-clinical costs of $5.6 million. Clinical trial costs increased primarily due to ongoing treatment of patients in our pivotal Phase 2 PACE clinical trial and increased enrollment and treatment of patients in our Phase 3 EPIC clinical trial in newly diagnosed CML patients, including purchases of the comparator drug, imatinib, for use in this trial, as well as costs related to initiation of a Phase 1/2 clinical trial of Iclusig in Japan, offset in part by a decrease in costs of our on-going Phase 1 clinical trial as treatment of patients and other activities in this trial have decreased over this time period. Contract manufacturing costs increased due primarily to the conduct of product and process development and qualification initiatives to support regulatory filings for Iclusig, as well as the production of Iclusig for use in our clinical trials and to provide for initial commercial supply in anticipation of regulatory approval of Iclusig. Supporting non-clinical costs increased due primarily to increased quality and stability studies and initiatives to develop and commercialize a companion diagnostic test to identify patients with the T315I mutation of the BCR-ABL gene. We collaborated with MolecularMD Corp. to establish this companion diagnostic test and MolecularMD had filed a PreMarketing Approval (PMA) application with the FDA. In September 2012, we and MolecularMD announced the voluntary withdrawal of the PMA following advice from the FDA that the FDA no longer considered this test to be a companion diagnostic test for ponatinib. We expect that our direct external expenses for Iclusig will increase in 2013 as we continue to treat more patients in our ongoing clinical trials, initiate additional clinical trials and conduct additional studies to support continued development of Iclusig.

Direct external expenses for AP26113 were $6.0 million for 2012, an increase of $1.9 million, or 46 percent, compared to 2011 expenses of $4.1 million, of which $2.2 million were included in clinical programs and $1.9 million were included in preclinical programs. The increase in expenses for AP26113 was due to an increase in clinical trial costs of $0.5 million and an increase of $2.0 million in contract manufacturing cost, offset in part by a decrease in supporting non-clinical costs of $0.6 million. The increase in clinical trial costs was due to costs of the Phase 1/2 clinical trial initiated in the third quarter of 2011. The increase in contract manufacturing costs was due to the manufacture of additional material to supply the phase 1/2 clinical trial and investment in product and process development. The decrease in supporting non-clinical costs was due primarily to the completion in 2011 of toxicology studies required for filing of the IND. We expect that our direct external expenses for AP26113 will increase in 2013 as we continue to enroll patients in our on-going clinical trial of this product candidate and conduct additional studies to support continued development and potential regulatory approval of AP26113.

All other R&D expenses increased by $42.9 million, or 104 percent, to $84.1 million in 2012, as compared to $41.2 million in 2011. This increase was primarily due to an increase in personnel costs of $19.8 million related primarily to an increase in the number of employees to support expanding R&D activities, overall increases in compensation for existing employees and an increase in recruiting costs; an increase in professional services of $6.2 million due primarily to initiatives to upgrade systems and technology used in our business; an increase in stock-based compensation expense of $6.1 million as a result of the impact of a significant increase in the market value of our common stock on the value of stock-based compensation awards in 2011 and 2012 as well as the vesting of previously awarded performance share units triggered by the approval of Iclusig by the FDA in December 2012; an impairment charge related to ridaforolimus intangible assets of $4.8 million; an increase in rent expense of $2.2 million as a result of an amendment to our existing building lease and a new lease agreement for additional space; an increase in general expenses of $2.6 million, including technology support costs and travel costs associated with our expanded R&D workforce; and an increase in lab expenses of $1.6 million. We expect that all other R&D expenses will increase in 2013 to support the expanding development of Iclusig and AP26113 and our ongoing discovery research efforts.

The successful commercialization of Iclusig and development of our product candidates is uncertain and subject to a number of risks. We cannot be certain that Iclusig will be accepted in the marketplace, as it competes against existing therapies, or any of our product candidates will prove to be safe and effective or will meet all of the applicable regulatory requirements needed to receive and maintain marketing approval. Data from preclinical studies and clinical trials are susceptible to varying interpretations that could delay, limit or prevent regulatory approval or could result in label warnings related to or recalls of approved products. We, the FDA or other regulatory authorities may suspend clinical trials at any time if we or they believe that the subjects participating in such trials are being exposed to unacceptable risks or if such regulatory agencies find deficiencies in the conduct of the trials or other problems with our products under development. Other risks associated with the commercialization of Iclusig and our product development programs are described in the section entitled "Risk Factors" in Part I, Item 1A of this annual report.

General and Administrative Expenses

General and administrative expenses increased by $36.5 million, or 150 percent, to $60.9 million in 2012, compared to $24.4 million in 2011. This increase was due primarily to an increase in personnel costs of $15.7 million related primarily to an increase in the number of employees, including sales related personnel to support expanding business activities and to prepare for commercial launch of Iclusig, overall increases in compensation for existing employees and an increase in recruiting costs; an increase in professional services of $10.2 million as a result of an increase in corporate and commercial development initiatives to plan and prepare for the commercial launch of Iclusig; an increase in stock-based compensation expense of $6.6 million due to the impact of a significant increase in the market value of our common stock on the value of stock-based compensation awards in 2011 and 2012 as well as the vesting of previously awarded performance share units triggered by the approval of Iclusig by the FDA in December 2012; an increase in general expenses of $2.4 million primarily related to increased travel costs as we prepared for regulatory approval and commercial launch of Iclusig; and an increase in overhead and other expenses of $1.8 million primarily related to insurance costs, taxes and other miscellaneous costs. We expect that general and administrative expenses will continue to increase in 2013 as we commercialize Iclusig in the United States and prepare for commercial launch of Iclusig in Europe, including the hiring of sales, marketing and commercial operations personnel, to support the expansion of our European operations and ongoing research and development activities.

We expect that our operating expenses in total will increase substantially in 2013 for the reasons described above. Operating expenses may fluctuate from quarter to quarter. The actual amount of any increase in operating expenses will depend on, among other things, the status of regulatory review and timing of potential regulatory approval of Iclusig in Europe, the costs for commercial launch of Iclusig in the United States and potential commercial launch in Europe, the progress of our product development programs, including on-going and planned clinical trials, results of continuing non-clinical studies and the costs of product and process development activities and product manufacturing.

Other Income/Expense

Interest Income

Interest income increased by 44 percent to $240,000 in 2012 from $167,000 in 2011, as a result of a higher average balance of funds invested in 2012.

Interest Expense

Interest expense decreased by 14 percent to $199,000 in 2012 from $232,000 in 2011, as a result of lower average borrowings in 2012.

Revaluation of Warrant Liability

In the first quarter of 2012, all 5,805,843 warrants that were outstanding at December 31, 2011 were exercised for proceeds to us of approximately $12.5 million. During the first quarter of 2012, the value of the warrant liability on our balance sheet was adjusted, resulting in a non-cash charge of $15.9 million for the year ended December 31, 2012, due primarily to the increase in the market price of our common stock from December 31, 2011 to the dates the warrants were exercised. The revaluation of our warrant liability in 2011 resulted in a non-cash charge of $46.7 million. Upon exercise of those remaining warrants, the balance of the warrant liability and the associated exercise proceeds were credited to stockholders' equity and the liability was eliminated.

Operating Results

We reported a loss from operations of $205.1 million in 2012 compared to a loss from operations of $76.8 million in 2011, an increase of $128.3 million, or 167 percent. We also reported a net loss of $220.9 million in 2012, compared to a net loss of $123.6 million in the corresponding period in 2011, an increase in net loss of $97.3 million or 79 percent, and a net loss per share of $1.34 for 2012 compared to $0.93 for 2011. The increase in net loss is largely due to the decrease in revenue and the increase in our operating expenses described above, offset in part by the decrease in charges related to the revaluation of our warrant liability of $30.8 million in 2012, as compared to 2011. Although we expect to record revenue from sales of Iclusig during 2013, we expect that we will continue to incur a net loss in 2013 due to the costs associated with the initial commercialization of Iclusig in the United States and potentially in Europe and the continued development of our product candidates.

Years Ended December 31, 2011 and 2010

Revenue

We recorded total revenue of $25.3 million for the year ended December 31, 2011, compared to $179.0 million for the year ended December 31, 2010. Total revenue in 2011 consisted primarily of a $25 million milestone payment received pursuant to our license agreement with Merck for the acceptance of an application for regulatory approval in Europe of ridaforolimus for the treatment of patients with sarcoma, which was subsequently withdrawn by Merck in November 2012. Total revenue in 2010 consisted of license and collaboration revenue of $174.5 million and service revenue of $4.5 million. License and collaboration revenue in 2010 included the $50 million up-front payment and a $12.8 million payment for our share of ridaforolimus costs incurred from January 1, 2010 to May 4, 2010 from Merck pursuant to the terms of the license agreement. License and collaboration revenue in 2010 also included $111.5 million, representing the recognition in 2010 of revenue deferred as of December 31, 2009 under our accounting for the prior collaboration agreement with Merck, which was recognized upon execution of the license agreement. Service revenue of $4.5 million in the year ended December 31, 2010 consisted of transition services that we provided to Merck pursuant to the license agreement.

Operating Expenses

Research and Development Expenses

Research and development expenses increased by $19.7 million, or 34 percent, to $77.7 million in 2011, compared to $58.0 million in 2010, as follows:

	Year ended December 31,		Increase /
In thousands	**2011**	**2010**	**(decrease)**
Direct external expenses:			
Clinical programs	$ 34,612	$ 21,721	$ 12,891
Preclinical programs	1,900	1,048	852
All other R&D expenses	41,231	35,216	6,015
	$ 77,743	$ 57,985	$ 19,758

In 2011, our clinical programs consisted of ponatinib and AP26113, for which we filed an IND in June 2011 and commenced a Phase 1/2 clinical trial in the third quarter of 2011. In 2010, our clinical programs consisted of ponatinib and ridaforolimus, which we licensed to Merck in May 2010. The direct external expenses for ridaforolimus in 2010 reflect our share of the global development costs of ridaforolimus, including our share of Merck's costs, pursuant to the cost-sharing arrangement of our collaboration with Merck in effect through May 4, 2010.

Direct external expenses for ponatinib were $32.4 million in 2011, an increase of $19.2 million, as compared to 2010. The increase is due to an increase in clinical trial costs of $10.1 million, contract manufacturing costs of $5.4 million, and supporting non-clinical costs of $3.7 million. Clinical trials costs increased primarily due to increased enrollment and treatment of patients in our pivotal Phase 2 clinical trial, offset in part by a decrease in costs of our Phase 1 clinical trial, as treatment of patients and other activities in this trial decreased over this time period. Contract manufacturing costs increased due primarily to the conduct of product and process development and qualification initiatives to support regulatory filings for this product candidate, as well as the production of ponatinib for use in our clinical trials. Supporting non-clinical costs increased due primarily to increased quality and stability studies and initiatives to develop and commercialize a companion diagnostic test to identify the T315I mutation of the BCR-ABL gene.

Direct external expenses for AP26113 were $4.1 million for the year ended December 31, 2011, of which $2.2 million were included in clinical programs and $1.9 million were included in preclinical programs in the table above, reflecting the transfer of this program to a clinical development status in the third quarter of 2011. Direct external expenses for AP26113 were $1.0 million for the year ended December 31, 2010, which were entirely included in preclinical programs. The increase in expenses for AP26113 was due primarily to the initiation of our Phase 1/2 clinical trial for this product candidate in the third quarter of 2011 as well as on-going product and process development initiatives and production of AP26113 for use in clinical trials.

We incurred no expenses for the development of ridaforolimus in the year ended December 31, 2011, because Merck agreed to fund 100 percent of such costs pursuant to the license agreement entered into in May 2010. Direct external expenses for ridaforolimus amounted to $8.5 million in 2010, reflecting our share of the costs of global development of this product candidate with Merck, including our share of Merck's costs, pursuant to the cost-sharing arrangement of our collaboration with Merck in effect through May 4, 2010.

All other R&D expenses increased by $6.0 million in 2011 compared to 2010. This increase was primarily due to a decrease of $3.3 million in Merck's reimbursement to us for our services pursuant to our collaboration agreement in effect until May 2010, an increase in professional services of $1.3 million due primarily to initiatives to upgrade systems and technology used in our business, an increase in stock-based compensation expense of $1.4 million as a result of the impact of a significant increase in the market value of our common stock on the value of stock-based awards in 2011, an increase in rent

expense of $1.6 million as a result of our amendment to our building lease and an increase in other expenses as a result of a one-time credit received in 2010 of $733,000 related to grants awarded to us by the Internal Revenue Service under the Qualified Therapeutic Discovery Project, or QTDP, program established by the U.S. Congress in March 2010 as part of the Patient Protection and Affordable Care Act. These increases were offset in part by a decrease in other personnel costs of $1.1 million due to a lower average number of employees in 2011 as compared to 2010 and a decrease in expenses related to our intellectual property, primarily due to a decrease in impairment charges of $2.1 million as we reserved or wrote off the carrying value of patents related to our NF-κB and ARGENT technologies in 2010.

General and Administrative Expenses

General and administrative expenses increased by $8.3 million, or 52 percent, from $16.1 million in 2010 to $24.4 million in 2011. This increase was due primarily to an increase in professional services of $5.3 million as a result of an increase in corporate and commercial development initiatives to plan and prepare for the potential commercial launch of ridaforolimus and ponatinib, an increase in stock-based compensation expense of $1.4 million due to the impact of a significant increase in the market value of our common stock on the value of stock-based compensation awards in 2011, a decrease of $452,000 in Merck's reimbursement to us for our services pursuant to the Collaboration Agreement in effect until May 2010, as well as an increase in costs to recruit personnel, travel costs and other miscellaneous costs.

Other Income/Expense

Interest Income

Interest income increased by 94 percent to $167,000 in 2011 from $86,000 in 2010, as a result of a higher average balance of funds invested in 2011.

Interest Expense

Interest expense increased by 13 percent to $232,000 in 2011 from $206,000 in 2010, due to higher average borrowings in 2011.

Revaluation of Warrant Liability

The fair value of our warrant liability at December 31, 2011 was $29.8 million higher than its fair value at December 31, 2010, due to the net impact of the exercise of warrants to purchase 3,757,767 shares of our common stock during 2011 and the revaluation of our warrant liability at December 31, 2011. The revaluation of our warrant liability resulted in a non-cash charge of $46.7 million for the year ended December 31, 2011 and was due primarily to the increase in the market price of our common stock from $5.10 per share at December 31, 2010, to $12.25 per share at December 31, 2011. The revaluation of our warrant liability in 2010 resulted in a non-cash charge of $19.5 million for the year ended December 31, 2010.

Operating Results

We reported a loss from operations of $76.8 million in 2011 compared to income from operations of $104.9 million in 2010, an increase in loss of $181.7 million. This change is due primarily to the decrease in revenue as a result of the accounting impact of the license agreement entered into with Merck in May 2010 and the increase in operating expenses discussed above. We also reported a net loss of $123.6 million in 2011 compared to net income of $85.2 million in 2010, an increase in net loss of $208.8 million reflecting the change in loss from operations noted above plus the revaluation of the warrant liability.

Selected Quarterly Financial Data

Summarized unaudited quarterly financial data are as follows:

	2012			
In thousands, except per share amounts	First	Second	Third	Fourth
Total revenue	$ 81	$ 318	$ 85	$ 74
Net loss	(55,894)	(51,312)	(53,213)	(60,453)
Net loss per share – basic	(0.35)	(0.31)	(0.32)	(0.36)
– diluted	(0.35)	(0.31)	(0.32)	(0.36)

	2011			
In thousands, except per share amounts	First	Second	Third	Fourth
Total revenue [1]	$ 56	$ 66	$ 25,101	$ 78
Net income (loss)	(37,949)	(47,762)	13,910	(51,802)
Net income (loss) per share – basic	(0.29)	(0.36)	0.10	(0.38)
– diluted	(0.29)	(0.36)	0.10	(0.38)

[1] In the third quarter of 2011, we earned a $25 million milestone payment from Merck as described in Note 2 to the consolidated financial statements.

Liquidity and Capital Resources

We have financed our operations and investments to date primarily through sales of our common stock in public offerings, through the receipt of up-front and milestone payments from collaborations and licenses with pharmaceutical and biotechnology companies and, to a lesser extent, through issuances of our common stock pursuant to our stock option and employee stock purchase plans, supplemented by the borrowing of long-term debt from commercial lenders. We sell securities and incur debt when the terms of such transactions are deemed favorable to us and as necessary to fund our current and projected cash needs. We seek to balance the level of cash, cash equivalents and marketable securities on hand with our projected needs and to allow us to withstand periods of uncertainty relative to the availability of funding on favorable terms.

For the purpose of the following discussion, our funds consist of cash, cash equivalents and marketable securities as follows:

In thousands	2012	2011
Cash and cash equivalents	$ 119,379	$ 306,256
Marketable securities	45,035	---
	$ 164,414	$ 306,256

Subsequent to December 31, 2012, on January 29, 2013, we received net proceeds of approximately $309.8 million from the sale of our common stock in an underwritten public offering. After giving effect to the net proceeds from this offering, our cash, cash equivalents and marketable securities at December 31, 2012 would have been $474.2 million.

We manage our marketable securities portfolio to maintain liquidity for payment of our obligations and to enhance yields. We purchase marketable securities to enhance our yield on invested funds and when such amounts are not needed for near-term payment of obligations. Although our investments are available for sale to fund current requirements, we generally hold our marketable securities to maturity. Upon maturity of such marketable securities, a portion may be retained as cash to provide for payment of current obligations while the remainder will be reinvested in accordance with our investment policy. In

2012, we made purchases of marketable securities in the amount of $89.6 million. In 2011, there were no purchases or sales of marketable securities. During 2012, proceeds from maturities of marketable securities were $44.5 million. During 2011, there were no proceeds from maturities of marketable securities. A total of $69.6 million of our cash and cash equivalents as of December 31, 2012 is held by various international subsidiaries.

Sources of Funds

During the years ended December 31, 2012, 2011 and 2010, our sources of funds were as follows:

In thousands	2012	2011	2010
Sales/issuances of common stock:			
In common stock offerings	$ ---	$ 243,058	$ 57,515
Upon exercise of warrants	12,483	8,080	2,624
Pursuant to stock option and employee stock purchase plans	10,511	4,791	789
Proceeds from long-term borrowings	---	4,375	---
Up-front and milestone payments from Merck, included in cash provided by (used in) operating activities	---	25,000	50,000
	$ 22,994	$ 285,304	$ 110,928

Our up-front and milestone payments from Merck were received pursuant to the license agreement entered into in May 2010. These payments are included in cash provided by (used in) operating activities in our consolidated statements of cash flows for the years ended December 31, 2011 and 2010 but are presented separately in this analysis due to the non-recurring nature of these payments.

The amount of funding we seek to raise through sales of our common stock or other securities depends on many factors, including, but not limited to, our plans for and the expected costs of commercialization of Iclusig and the potential commercialization of our other product candidates, the status and progress of our product development programs and potential regulatory approvals, the expansion of our operations to support commercialization and ongoing research and development activities in the United States, Europe and other selected territories worldwide, the receipt of potential milestone payments and royalties from Merck, projected cash needs, availability of funding from other sources, our stock price and the status of the capital markets.

On October 29, 2010, we sold 16,000,000 shares of our common stock in an underwritten public offering at a purchase price of $3.70 per share. Net proceeds of this offering, after underwriting discounts and commissions and expenses, were approximately $57.5 million.

On December 20, 2011, we sold 24,725,000 shares of our common stock in an underwritten public offering at a purchase price of $10.42 per share. Net proceeds of this offering, after underwriting discounts and commissions and expenses, were approximately $243.1 million.

Subsequent to December 31, 2012, on January 29, 2013, we sold 16,489,893 shares of our common stock in an underwritten public offering at a purchase price of $19.60 per share. Net proceeds of this offering, after underwriting discounts and commissions and expenses, were approximately $309.8 million.

We have filed shelf registration statements with the U.S. Securities and Exchange Commission, or SEC, from time to time, to register shares of our common stock or other securities for sale, giving us the opportunity to raise funding when needed or otherwise considered appropriate. Under SEC rules, we currently qualify as a "well-known seasoned issuer," which allows us to file shelf registration statements to register an unspecified amount of securities that are effective upon filing. On December 14, 2011, we filed such a shelf registration statement with the SEC for the issuance of an unspecified amount of common stock, preferred stock, various series of debt securities and/or warrants to purchase any of such

securities, either individually or in units, from time to time at prices and on terms to be determined at the time of any such offering. This registration statement was effective upon filing and will remain in effect for up to three years from filing.

In January 2011, we amended our existing term loan with a bank. The amendment increased the outstanding balance of the loan from $9.6 million at December 31, 2010 to $14.0 million, extended the maturity date from March 31, 2013 to December 31, 2015, and re-set the quarterly repayment provisions, with payments increasing from 2.5 percent of the principal amount in the first quarter, commencing on March 31, 2011, to 8.75 percent of the principal amount in the final quarter, together with interest throughout the term of the loan. All other provisions of our existing loan remain in full force and effect.

Uses of Funds

The primary uses of our funds are to fund our operations and working capital requirements and, to a lesser degree, to repay our long-term debt, to invest in intellectual property and to invest in property and equipment as needed for our business. Our uses of cash during the years ended December 31, 2012, 2011 and 2010 were as follows:

In thousands	2012	2011	2010
Net cash used in (provided by) operating activities	$ 153,681	$ 53,262	$ (6,418)
Adjusted for up-front and milestone payments from Merck	---	25,000	50,000
Adjusted net cash used in operating activities	153,681	78,262	43,582
Repayment of long-term borrowings and capital leases	1,454	1,466	2,043
Change in restricted cash	289	---	---
Investment in intangible assets	633	671	691
Investment in property and equipment	4,424	1,452	1,344
Payment of tax withholding obligations related to stock compensation	4,336	827	---
	$ 164,817	$ 82,678	$ 47,660

The net cash used in operating activities is comprised of our net losses adjusted for non-cash expenses, changes in deferred revenue and working capital requirements. As noted above, our net loss for 2012 increased by $97.3 million, as compared to 2011, due primarily to the overall decrease in revenue and increases in operating expenses, offset in part by decreases in charges related to the revaluation of our warrant liability. After adjusting for the $25 million milestone payment from Merck in 2011, our net cash used in operating activities increased by $75.4 million in 2012, as compared to 2011, reflecting overall increases in operating expenses and changes in working capital. As noted above, we expect that we will incur a net loss in 2013 due to the commercialization of Iclusig in the United States and potentially in Europe and continued development of our product candidates; and that our investment in property and equipment will increase in 2013 to support growth of our R&D and general and administrative functions.

Off-Balance Sheet Arrangements

As part of our ongoing business, we do not participate in transactions that generate relationships with unconsolidated entities for financial partnerships, such as entities often referred to as structured finance or special purpose entities which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As of December 31, 2012, we maintained outstanding letters of credit and collateral balances of $1.0 million in accordance with the terms of our long-term leases for our office and laboratory facility and for other purposes. In January 2013, we entered into a lease agreement for laboratory and office space requiring us to establish a letter of credit as security for the lease of approximately $5.8 million upon signing of the lease.

Contractual Obligations

We have substantial fixed contractual obligations under our long-term debt agreement, operating and capital lease agreements, employment agreements and benefit plans. These non-cancelable contractual obligations were comprised of the following as of December 31, 2012:

		Payments Due By Period			
In thousands	Total	In 2013	2014 through 2016	2017 through 2018	After 2018
Long-term debt	$ 11,200	$ 2,100	$ 9,100	$ ---	$ ---
Leases agreements	50,913	6,686	21,663	13,461	9,103
Employment agreements	5,698	5,698	---	---	---
Purchase commitments	36,743	2,291	19,585	6,070	8,797
Other long-term obligations	8,327	3,882	4,445	---	---
	$ 112,881	$ 20,657	$ 54,793	$ 19,531	$ 17,900

Long-term debt consists of scheduled principal payments on such debt. Interest on our long-term debt is based on variable interest rates. Assuming a constant interest rate of 1.46 percent, our average interest rate on our debt at December 31, 2012, over the remaining term of the debt, our interest expense would total approximately $150,000 in 2013 and $152,000 in the period 2014 through 2015, when the debt matures.

Leases consist of payments to be made on our lease for our office and laboratory facility, the term of which extends to July 2019, and on agreements for certain assets acquired under a capital lease which expires in 2013. In January 2013, we entered into a lease agreement for laboratory and office space in buildings under construction and expected to be available for occupancy in early 2015. Future minimum annual lease payments beginning in 2015 through 2030 under this lease which are not included in the table above are $5.2 million in 2015, $6.3 million in 2016, $16.9 million in 2017, $19.3 million in 2018 and $239.9 million thereafter. Employment agreements represent base salary payments under agreements with officers that extend for terms ranging to the end of 2013. Purchase commitments represent contractual commitments for research and development entered into in the normal course of business. Other long-term obligations are comprised primarily of our obligations under our executive deferred compensation plan and potential obligations related to uncertain tax benefits.

Liquidity

At December 31, 2012, we had cash, cash equivalents and marketable securities totaling $164.4 million and working capital of $119.5 million, compared to cash and cash equivalents totaling $306.3 million and working capital of $282.2 million at December 31, 2011. For the year ended December 31, 2012, we reported a net loss of $220.9 million and cash used in operating activities of $153.7 million. In January 2013, we sold 16,489,893 shares of our common stock in an underwritten public offering at a purchase price of $19.60 per share for net proceeds of approximately $309.8 million. After giving effect to the net proceeds from this offering, our cash, cash equivalents and marketable securities at December 31, 2012 would have been $474.2 million. Based on our current operating plan, we believe that our cash, cash equivalents and marketable securities at December 31, 2012, together with the net proceeds from our January 2013 stock offering, will be sufficient to fund our operations into the fourth quarter of 2014.

On December 14, 2012, we obtained accelerated approval from the FDA to sell Iclusig in the United States, and we commenced sales in the United States in January 2013. We have filed for marketing approval of Iclusig in Europe and expect potential approval in the third quarter of 2013. We are selling Iclusig on our own in the United States and plan to do so in Europe and other selected markets worldwide, subject to obtaining regulatory approval in such territories. During the past year, we have been preparing for commercial launch of Iclusig in the United States, including the hiring and training of an experienced sales force and other professional staff necessary for an effective launch, the implementation of systems and processes to support the launch, the development of tools and materials being used in the launch and

other activities. In Europe, we are also planning for potential marketing approval and preparing for launch of Iclusig, including the hiring of personnel to build our infrastructure and capabilities in Europe. These activities will require increased spending as we launch Iclusig in these markets. There can be no assurance that Iclusig will be commercially successful in the United States, where we are currently selling the product, or in other territories, where we await regulatory approval or have yet to file for regulatory approval. If we are not successful in generating the levels of sales we expect from Iclusig and or obtaining additional regulatory approvals, we may need to revise our operating plans in order to conserve cash to fund our operations.

We have historically incurred operating losses and net losses related to our research and development activities. We expect to continue to incur significant research and development expenses and that such expenses will increase substantially in 2013. We plan to expand our development of Iclusig and AP26113, and to conduct additional clinical trials, including the Phase 3 EPIC clinical trial of Iclusig in newly diagnosed CML patients that we initiated in 2012, and continue product and process development, manufacturing and other activities in support of these efforts. We also plan to continue to invest in discovery research and add to our pipeline of product candidates through these activities. There are many factors that will affect our level of spending on these activities, including the number, size and complexity of, and rate of enrollment of patients in, our clinical trials for Iclusig and AP26113, the extent of other development activities for Iclusig and AP26113, the progress of our preclinical and discovery research programs, the status of regulatory reviews and timing of potential regulatory approvals and commercial launch of Iclusig in Europe and other markets and of our other product candidates, the size of the workforce and required systems and infrastructure necessary to support commercialization of Iclusig and our product candidates in multiple markets and other factors.

Under our license agreement with Merck, we are eligible to receive milestone payments for specified regulatory filings and approvals to sell ridaforolimus in multiple cancer indications. In addition to milestone payments, if ridaforolimus receives regulatory approval, Merck has agreed to pay us tiered double-digit royalties on global net sales of ridaforolimus. There can be no assurance that such regulatory approvals will be obtained or that we will receive any additional milestone or other payments under our license agreement with Merck.

In addition to the license agreement with Merck, we also have existing license agreements with two companies, Medinol Ltd. and ICON Medical Corporation, for the development and commercialization of ridaforolimus-eluting stents, and other licenses of our ARGENT technology. If Medinol, ICON or the other licensees are successful in the development or commercialization of potential products or otherwise generate revenue from these licenses, we will be eligible to receive milestone payments and/or royalties on sales of products.

Until such time, if ever, that we generate revenues from sales of Iclusig and our product candidate sufficient to fund operations, we plan to continue to fund our operations by issuing common stock, debt or other securities in one or more public or private offerings, as market conditions permit, through the incurrence of additional debt from commercial lenders or through the potential receipt of milestone payments and/or royalties under our existing license agreements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our existing stockholders will be diluted, and the terms may include liquidation or other preferences that adversely affect the rights of our stockholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring debt, making capital expenditures or declaring dividends.

There can be no assurance that additional funds will be available when we need them on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to: (1) delay, limit, reduce or terminate preclinical studies, clinical trials or other clinical development activities for one or more of our approved products or product candidates; (2) delay, limit, reduce or terminate our discovery research or preclinical development activities; or (3) enter into licenses or other

arrangements with third parties on terms that may be unfavorable to us or sell, license or relinquish rights to develop or commercialize our product candidates, approved products, technologies or intellectual property.

Recently Adopted or Issued Accounting Pronouncements

In June 2011, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2011-05, *Presentation of Comprehensive Income*, which requires the presentation of comprehensive income in either a continuous statement of comprehensive income or in two separate but consecutive statements. ASU No. 2011-05 is effective for fiscal years and interim periods within those fiscal years, beginning on or after December 15, 2011 and requires retrospective application. We adopted this ASU on January 1, 2012, and included separate consolidated statements of comprehensive income (loss).

ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We invest our available funds in accordance with our investment policy to preserve principal, maintain proper liquidity to meet operating needs and maximize yields. Our investment policy specifies credit quality standards for our investments and limits the amount of credit exposure to any single issue, issuer or type of investment.

We invest cash balances in excess of operating requirements first in short-term, highly liquid securities, and money market accounts. Depending on our level of available funds and our expected cash requirements, we may invest a portion of our funds in marketable securities, consisting generally of corporate debt and U.S. government and agency securities. Maturities of our marketable securities are generally limited to periods necessary to fund our liquidity needs and may not in any case exceed three years. These securities are classified as available-for-sale.

Available-for-sale securities are recorded on the balance sheet at fair value with unrealized gains or losses reported as a separate component of stockholders' equity (accumulated other comprehensive income).

Our investments are sensitive to interest rate risk. We believe, however, that the effect, if any, of reasonable possible near-term changes in interest rates on our financial position, results of operations and cash flows generally would not be material due to the short-term nature and high credit quality of these investments. In particular, at December 31, 2012, because our available funds are invested solely in securities with remaining maturities of 12 months or less, we believe that our risk of loss due to changes in interest rates is not material.

At December 31, 2012, we had $11.2 million outstanding under a bank term note which bears interest at prime or, alternatively, LIBOR + 1.25 percent to 2.25 percent. This note is sensitive to interest rate risk. In the event of a hypothetical 10 percent increase in the interest rate on which the loan is based (15 basis points at December 31, 2012), we would incur approximately $15,000 of additional interest expense per year based on expected balances over the next twelve months.

Certain Factors That May Affect Future Results of Operations

The SEC encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions. This Annual Report on Form 10-K contains such "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements may be made directly in this Annual Report, and they may also be made a part of this Annual Report by reference to other documents filed with the SEC, which is known as "incorporation by reference." Such statements in connection with any discussion of future operating or financial performance are identified by use of words such as "may," "anticipate," "estimate," "expect," "project," "intend," "plan," "believe," and other words and terms of similar meaning. Such statements are based on management's expectations and are subject to certain factors, risks and

uncertainties that may cause actual results, outcome of events, timing and performance to differ materially from those expressed or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, our ability to successfully launch, commercialize and generate profits from sales of Iclusig; competition from alternative therapies and the acceptance of Iclusig by patients, physicians and third-party payors; our ability to obtain approval for Iclusig outside of the United States and in additional indications; difficulties in forecasting sales or recognizing revenues for Iclusig; our reliance on third-party manufacturers, including sole-source suppliers, and on specialty pharmacies and specialty distributors for the distribution of Iclusig; preclinical data and early-stage clinical data that may not be replicated in later-stage clinical studies; the costs associated with our research, development, manufacturing and other activities; the conduct and results of preclinical and clinical studies of our product candidates; difficulties or delays in obtaining regulatory approvals to market products; the timing of development and potential market opportunity for our product candidates; our reliance on our strategic partners, licensees and other key parties for the successful development, manufacturing and commercialization of our product candidates; the adequacy of our capital resources and the availability of additional funding; patent protection and third-party intellectual property claims; our failure to comply with extensive regulatory requirements; the occurrence of serious adverse events in patients being treated with Iclusig or our product candidates; the ability to manage our growth effectively; product liability claims; our operations in foreign countries; future capital needs; risks related to key employees, markets, economic conditions, health care reform, prices and reimbursement rates; and other factors. Please also see the discussion under "Risk Factors" in Part I, Item 1A appearing elsewhere in this Annual Report on Form 10-K for more details regarding these and other risks.

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this Annual Report or in any document incorporated by reference might not occur. Stockholders are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this report or the date of the document incorporated by reference in this Annual Report. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to us or to any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
ARIAD Pharmaceuticals, Inc.
Cambridge, Massachusetts

We have audited the accompanying consolidated balance sheets of ARIAD Pharmaceuticals, Inc. and subsidiaries (the "Company") as of December 31, 2012 and 2011, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 2012. 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 includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of ARIAD Pharmaceuticals, Inc. and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2012, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 1, 2013 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 1, 2013

ARIAD PHARMACEUTICALS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

In thousands, except share and per share data	December 31, 2012	December 31, 2011
ASSETS		
Current assets:		
Cash and cash equivalents	$ 119,379	$ 306,256
Marketable securities	45,035	---
Other current assets	3,835	1,277
Amounts due under license agreements (Note 2)	101	34
Total current assets	168,350	307,567
Restricted cash	1,038	749
Property and equipment, net (Note 4)	7,681	6,611
Intangible and other assets, net (Note 5)	3,124	5,785
Total assets	$ 180,193	$ 320,712
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 8,267	$ 5,728
Current portion of long-term debt and capital lease obligations (Note 6)	2,115	1,454
Accrued compensation and benefits	11,865	1,209
Accrued product development expenses	14,061	11,948
Other accrued expenses	8,096	3,634
Current portion of deferred executive compensation (Note 7)	3,533	1,032
Current portion of deferred revenue	231	231
Other current liabilities	698	136
Total current liabilities	48,866	25,372
Long-term debt and capital lease obligations (Note 6)	9,100	11,215
Other long-term liabilities	6,870	1,854
Deferred revenue	538	768
Deferred executive compensation (Note 7)	1,968	2,723
Warrant liability (Note 9)	---	58,639
Commitments (Note 8)		
Stockholders' equity (Notes 9 and 11):		
Preferred stock, $.01 par value, authorized 10,000,000 shares, none issued and outstanding		
Common stock, $.001 par value, authorized 240,000,000 shares in 2012 and 2011; shares issued and outstanding 167,075,758 shares in 2012, 157,608,702 shares in 2011	167	158
Additional paid-in capital	890,499	776,946
Accumulated other comprehensive income	20	---
Accumulated deficit	(777,835)	(556,963)
Total stockholders' equity	112,851	220,141
Total liabilities and stockholders' equity	$ 180,193	$ 320,712

See notes to consolidated financial statements.

ARIAD PHARMACEUTICALS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

In thousands, except per share data	Years Ended December 31, 2012	2011	2010
Revenue:			
License and collaboration revenue (Note 2)	$ 514	$ 25,189	$ 174,460
Service revenue	44	111	4,520
Total revenue	558	25,300	178,980
Operating expenses:			
Research and development	144,709	77,743	57,985
General and administrative	60,909	24,380	16,095
Total operating expenses	205,618	102,123	74,080
Income (loss) from operations	(205,060)	(76,823)	104,900
Other income (expense):			
Interest income	240	167	86
Interest expense	(199)	(232)	(206)
Revaluation of warrant liability	(15,924)	(46,715)	(19,532)
Foreign exchange gain	71	---	---
Other expense, net	(15,812)	(46,780)	(19,652)
Net income (loss)	$ (220,872)	$ (123,603)	$ 85,248
Net income (loss) per share – basic	$ (1.34)	$ (0.93)	$ 0.75
– diluted	$ (1.34)	$ (0.93)	$ 0.74
Weighted-average number of shares of common stock outstanding – basic	164,964	132,375	113,020
– diluted	164,964	132,375	114,734

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

In thousands	Years Ended December 31, 2012	2011	2010
Net income (loss)	$ (220,872)	$ (123,603)	$ 85,248
Other comprehensive income:			
Net unrealized gains on marketable securities	20	---	---
Other comprehensive income	20	---	---
Comprehensive income (loss)	$ (220,852)	$ (123,603)	$ 85,248

See notes to consolidated financial statements.

ARIAD PHARMACEUTICALS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

In thousands, except share data	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Stockholders' Equity (Deficit)
Balance, January 1, 2010	109,042,782	$ 109	$ 429,483	$ ---	$ (518,608)	$ (89,016)
Issuance of shares pursuant to ARIAD stock plans	679,235	1	788			789
Issuance of common stock, net of issuance costs	16,000,000	16	57,499			57,515
Issuance of common stock from warrant exercise	1,220,414	1	4,703			4,704
Stock-based compensation			4,836			4,836
Net income					85,248	85,248
Balance, December 31, 2010	126,942,431	127	497,309	---	(433,360)	64,076
Issuance of shares pursuant to ARIAD stock plans	2,183,504	2	4,789			4,791
Issuance of common stock, net of issuance costs	24,725,000	25	243,033			243,058
Issuance of common stock from warrant exercise	3,757,767	4	24,967			24,971
Stock-based compensation			7,675			7,675
Payments of tax withholding obligations related to stock compensation			(827)			(827)
Net loss					(123,603)	(123,603)
Balance, December 31, 2011	157,608,702	158	776,946	---	(556,963)	220,141
Issuance of shares pursuant to ARIAD stock plans	3,661,213	3	10,508			10,511
Issuance of common stock from warrant exercise	5,805,843	6	87,040			87,046
Stock-based compensation			20,341			20,341
Payments of tax withholding obligations related to stock compensation			(4,336)			(4,336)
Net loss					(220,872)	(220,872)
Unrealized gains on marketable securities				20		20
Balance, December 31, 2012	167,075,758	$ 167	$ 890,499	$ 20	$ (777,835)	$ 112,851

See notes to consolidated financial statements.

ARIAD PHARMACEUTICALS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

In thousands	Years Ended December 31, 2012	2011	2010
Cash flows from operating activities:			
Net income (loss)	$ (220,872)	$ (123,603)	$ 85,248
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation, amortization and impairment charges	8,307	4,614	6,147
Stock-based compensation	20,341	7,675	4,836
Deferred executive compensation expense	2,810	1,719	1,477
Revaluation of warrant liability	15,924	46,715	19,532
Increase (decrease) from:			
Other assets	(4,647)	(145)	814
Amounts due under license and collaboration agreements	(67)	373	3,176
Accounts payable	2,664	2,394	(1,684)
Accrued compensation and benefits	10,656	82	76
Accrued product development expenses	2,113	3,759	117
Other accrued expenses	4,669	1,271	(1,043)
Other liabilities	5,714	1,660	18
Deferred revenue	(230)	999	(111,611)
Deferred executive compensation paid	(1,063)	(775)	(685)
Net cash provided by (used in) operating activities	(153,681)	(53,262)	6,418
Cash flows from investing activities:			
Acquisitions of marketable securities	(89,554)	---	---
Proceeds from maturities of marketable securities	44,500	---	---
Change in restricted cash	(289)	---	---
Investment in property and equipment	(4,424)	(1,452)	(1,344)
Investment in intangible assets	(633)	(671)	(691)
Net cash used in investing activities	(50,400)	(2,123)	(2,035)
Cash flows from financing activities:			
Proceeds from long-term borrowings	---	4,375	---
Repayment of long-term borrowings	(1,400)	(1,400)	(1,925)
Principal payments under capital lease obligations	(54)	(66)	(118)
Proceeds from issuance of common stock, net of issuance costs	---	243,058	57,515
Proceeds from issuance of common stock pursuant to warrants	12,483	8,080	2,624
Proceeds from issuance of common stock pursuant to stock option and purchase plans	10,511	4,791	789
Payment of tax withholding obligations related to stock compensation	(4,336)	(827)	---
Net cash provided by financing activities	17,204	258,011	58,885
Net increase (decrease) in cash and cash equivalents	(186,877)	202,626	63,268
Cash and cash equivalents, beginning of year	306,256	103,630	40,362
Cash and cash equivalents, end of year	$ 119,379	$ 306,256	$ 103,630
Supplemental disclosures:			
Interest paid	$ 206	$ 230	$ 182
Property and equipment acquired through capital lease	$ ---	$ ---	$ 19
Non-cash transaction – property and equipment included in accounts payable or accruals	$ 579	$ 911	$ ---

See notes to consolidated financial statements.

ARIAD PHARMACEUTICALS, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Nature of Business and Summary of Significant Accounting Policies

Nature of Business

ARIAD is a global oncology company whose vision is to transform the lives of cancer patients with breakthrough medicines. The Company's mission is to discover, develop and commercialize small-molecule drugs to treat cancer in patients with the greatest and most urgent unmet medical need – aggressive cancers where current therapies are inadequate. The Company is focused on the commercialization of its first approved cancer medicine, Iclusig™ (ponatinib), a tyrosine kinase inhibitor ("TKI") approved by the U.S. Food and Drug Administration ("FDA") on December 14, 2012 for the treatment of patients with chronic myeloid leukemia ("CML") or Philadelphia chromosome-positive acute lymphoblastic leukemia (Ph+ ALL) who are resistant or intolerant to other TKI therapies, as well as developing additional novel, molecularly targeted therapies to treat patients with blood cancers and solid tumors. The Company began shipping Iclusig in January 2013, and therefore recognized no product revenues from the sale of Iclusig in the United States in the year ended December 31, 2012.

In addition to commercializing Iclusig, the Company is developing Iclusig for approval in additional countries and cancer indications and has two other product candidates in development, AP26113 and ridaforolimus. AP26113 is being studied in a Phase 1/2 clinical trial in patients with advanced solid tumors including non-small cell lung cancer ("NSCLC"). The Company expects to commence the Phase 2 portion of the trial in the first half of 2013 and, subject to further discussions with the regulatory agencies, commence a pivotal trial of AP26113 in ALK-positive NSCLC patients in mid-2013 in parallel with the four cohorts of the Phase 2 portion of the trial. Ridaforolimus is being studied in multiple clinical trials in patients with various types of cancers by Merck & Co., Inc. ("Merck") under a license agreement the Company entered into with Merck in 2010. Under the terms of the license agreement, Merck is responsible for all activities related to the development, manufacture, and commercialization of ridaforolimus and the Company is eligible to receive milestone and royalty payments. See Note 2. In addition to its clinical development programs, the Company has a focused drug discovery program centered on small-molecule therapies that are molecularly targeted to cell-signaling pathways implicated in cancer.

Principles of Consolidation

The consolidated financial statements include the accounts of ARIAD Pharmaceuticals, Inc. and its wholly-owned subsidiaries. Intercompany accounts and transactions have been eliminated in consolidation.

Foreign Currency

A subsidiary's functional currency is the currency of the primary economic environment in which the subsidiary operates; normally, that is the currency of the environment in which a subsidiary primarily generates and expends cash. For subsidiaries that are primarily a direct and integral component or extension of the parent entity's operations, the U.S. dollar is the functional currency.

For foreign subsidiaries where the functional currency is the U.S. dollar, monetary assets and liabilities are remeasured into U.S. dollars at the current exchange rate on the balance sheet date. Nonmonetary assets and liabilities are remeasured into U.S. dollars at historical exchange rates. Revenue and expense items are translated at average rates of exchange prevailing during each period. The Company has established the U.S. dollar as the functional currency of subsidiaries that are holding companies and its primary European operating entity. Through December 31, 2012, the Company does not have significant subsidiary operations with the functional currency denominated as the local currency.

Accounting Estimates

The preparation of the consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts and disclosure of assets and liabilities at the date of the consolidated financial statements and the reported amounts and disclosure of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Cash Equivalents

Cash equivalents include short-term, highly liquid investments, which consist principally of United States government and agency securities, with remaining maturities at the date of purchase of 90 days or less, and money market accounts.

Restricted Cash

Restricted cash consists of cash balances held as collateral for outstanding letters of credit related to the lease of the Company's laboratory and office facilities and other purposes.

Marketable Securities

Marketable debt securities consist of United States government and agency backed securities. The Company classifies these marketable debt securities as available-for-sale at fair value. The Company records the amortization of premium and accretion of discounts on marketable debt securities in the results of operations. The Company uses the specific identification method as a basis for determining cost and calculating realized gains and losses with respect to marketable debt securities.

Inventory

Inventory costs include the costs related to the manufacturing of drug product for Iclusig, including costs of contract manufacturing, quality control costs and shipping costs from the manufacturers to the final distribution warehouse. The Company values its inventories at the lower of cost or market. The Company determines the cost of its inventories on a first-in, first-out basis. If the Company identifies excess, obsolete or unsalable items, it writes down its inventory to its net realizable value in the period in which the impairment is first identified. Estimates of excess inventory consider the Company's projected sales of the product and the remaining shelf lives of product. On December 14, 2012, the Company began capitalizing inventory costs for Iclusig being manufactured for commercial sale. At December 31, 2012, other current assets on the balance sheet includes capitalized inventory costs of $6,000.

Prior to receiving approval from the FDA to sell its first new cancer medicine, Iclusig, on December 14, 2012, the Company expensed all costs incurred related to the manufacture of Iclusig as research and development expense because of the inherent risks associated with the development of a drug candidate, the uncertainty about the regulatory approval process and the lack of history for the Company of regulatory approval of drug candidates.

Property and Equipment

Property and equipment are recorded at cost. Depreciation is recorded using the straight-line method over the estimated useful lives of the assets (3 to 10 years). Leasehold improvements and assets under capital leases are amortized over the shorter of their useful lives or lease term using the straight-line method.

Intangible and Other Assets

Intangible and other assets consist primarily of purchased technology and capitalized patent and license costs. The cost of purchased technology, patents and patent applications, costs incurred in filing patents and certain license fees are capitalized when recovery of the costs is probable. Capitalized costs related to purchased technology are amortized over the estimated useful life of the technology. Capitalized costs related to issued patents are amortized over a period not to exceed seventeen years or the remaining life of the patent, whichever is shorter, using the straight-line method. Capitalized license fees are amortized over the periods to which they relate. In addition, capitalized costs are expensed when it becomes determinable that the related patents, patent applications or technology will not be pursued.

Impairment of Long-Lived Assets

The Company reviews its long-lived assets, including the above-mentioned intangible assets, for impairment when events or changes in circumstances indicate that the carrying amount of a long-lived asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets.

Accrued Rent

The Company recognizes rent expense for leases with increasing annual rents on a straight-line basis over the term of the lease. The amount of rent expense in excess of cash payments is classified as accrued rent. Any lease incentives received are deferred and amortized over the term of the lease. At December 31, 2012 and 2011, the amount of accrued rent is $5.0 million and $1.7 million, respectively. Of these amounts, at December 31, 2012 and 2011, $4.7 million and $1.7 million, respectively, are included in other long-term liabilities, with the remaining $0.3 million as of December 31, 2012 included in other current liabilities.

Revenue Recognition

Revenue is recognized when there is persuasive evidence that an arrangement exists, delivery has occurred, the price is fixed and determinable and collection is reasonably assured. Revenue arrangements with multiple elements are divided into separate units of accounting if certain criteria are met, including whether the delivered element has stand-alone value to the customer. When deliverables are separable, consideration received is allocated to the separate units of accounting based on the relative selling price of each deliverable and the appropriate revenue recognition principles are applied to each unit.

License and Collaboration Revenue

The Company has historically generated revenue from license and collaboration agreements with third parties related to use of the Company's technology and/or development and commercialization of product candidates. Such agreements may provide for payment to the Company of up-front payments, periodic license payments, milestone payments and royalties. The Company also generates service revenue from license agreements with third parties related to internal services provided under such agreements. Service revenue is recognized as the services are delivered.

Product Revenue

On December 14, 2012, the Company obtained accelerated approval from the FDA to sell its first new cancer medicine, Iclusig. In January 2013, the Company commenced sales and marketing of Iclusig, and the medicine is now available to patients in the United States through specialty pharmacies and specialty distributors. Product sales are recorded net of estimated government-mandated rebates and chargebacks,

distribution fees, copay assistance programs, product returns and other deductions. The Company reflects these estimated adjustments as either a reduction in the related accounts receivable from the specialty pharmacy or specialty distributor, or as an accrued liability depending on the nature of the sales deduction. The Company began shipping Iclusig in January 2013, and therefore recognized no product revenues in the year ended December 31, 2012.

Although Iclusig has not been approved for commercial sale in the European Union by the European Medicines Agency, patients are being treated with Iclusig both in the framework of the Company's clinical trials and related studies and in named patient programs. The French regulatory authority had granted an *Autorisation Temporaire d'Utilisation* (ATU), or Temporary Authorization for Use, for Iclusig for the treatment of patients with CML and Ph+ ALL under a nominative program on a patient-by-patient basis. The Company began shipping product under this program during the year ended December 31, 2012. Until all revenue recognition criteria are met, all amounts received by or due to the Company under this program (approximately $1.1 million as of December 31, 2012) have not been recognized as revenue.

Income Taxes

The Company accounts for income taxes using an asset and liability approach to financial accounting and reporting for income taxes. Deferred income tax assets and liabilities are computed annually for differences between the financial statement basis and the income tax basis of assets and liabilities that will result in taxable or deductible amounts in the future. Such deferred income tax computations are based on enacted tax laws and rates applicable to the years in which the differences are expected to affect taxable income. A valuation allowance is established when it is necessary to reduce deferred income tax assets to the amount that is considered to be more-likely-than-not realizable.

The Company does not recognize a tax benefit unless it is more likely than not that the tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The tax benefit that is recorded for these positions is measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon ultimate settlement. Any interest and penalties on uncertain tax benefits are included within the tax provision.

Segment Reporting

The Company organizes itself into one operating segment reporting to the chief executive officer.

Stock-Based Compensation

The Company awards stock options and other equity-based instruments to its employees, directors and consultants and provides employees the right to purchase common stock (collectively "share-based payments"), pursuant to stockholder approved plans. Compensation cost related to such awards is measured based on the fair value of the instrument on the grant date and is recognized on a straight-line basis over the requisite service period, which generally equals the vesting period.

Executive Compensation Plan

The Company has an unfunded deferred executive compensation plan that defers the payment of annual bonus awards to officers to future periods as specified in each award. The value of the awards is indexed to the value of specified mutual funds. The Company accrues a liability based on the value of the awards ratably over the vesting period. The recorded balances of such awards are increased or decreased based on the actual total return and quoted market prices of the specified mutual funds.

Subsequent Events

The Company considers events or transactions that occur after the balance sheet date but before the financial statements are issued to provide additional evidence relative to certain estimates or to identify matters that require additional disclosure.

Recent Accounting Pronouncements

In June 2011, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2011-05, *Presentation of Comprehensive Income*, which requires the presentation of comprehensive income in either a continuous statement of comprehensive income or in two separate but consecutive statements. ASU No. 2011-05 is effective for fiscal years and interim periods within those fiscal years, beginning on or after December 15, 2011 and requires retrospective application. The Company adopted this ASU on January 1, 2012, and included separate consolidated statements of comprehensive income (loss).

2. Collaboration and License Agreements with Merck & Co., Inc.

In July 2007, the Company entered into a collaboration agreement with Merck for the joint global development, manufacture and commercialization of ridaforolimus, for use in cancer (the "Collaboration Agreement"). In May 2010, the Company entered into an amended and restated agreement with Merck for ridaforolimus (the "License Agreement"), which replaced the Collaboration Agreement. These agreements are described below.

The Collaboration Agreement (July 2007 to May 2010)

Under the terms of the Collaboration Agreement, as in effect until May 4, 2010, Merck and the Company were conducting a broad-based development program for the use of ridaforolimus in multiple types of cancer. Each party funded 50 percent of global development costs incurred. Under the terms of the Collaboration Agreement, Merck paid the Company an initial up-front payment of $75 million in July 2007 and milestone payments of $53.5 million through May 4, 2010, based on the achievement of specified clinical and regulatory events.

In accordance with the Company's accounting policy, the up-front and milestone payments received were deferred and were being recognized as revenue through 2023, the estimated expiration of the patents related to the underlying technology, which was determined to be the performance period. Development costs under the Collaboration Agreement were aggregated and split between the Company and Merck in accordance with the terms of the agreement. The Company's share of such development costs from inception of the collaboration up to May 4, 2010 was reflected in operating expenses in the Company's consolidated statements of operations.

The License Agreement (May 2010 to present)

Under the terms of the License Agreement, the Company granted Merck an exclusive license to develop, manufacture and commercialize ridaforolimus in oncology, and Merck assumed full responsibility for all activities related to the development, manufacture and commercialization of ridaforolimus and agreed to fund 100 percent of all ridaforolimus costs incurred after January 1, 2010. The License Agreement provides that Merck will develop ridaforolimus in multiple oncology indications. If ridaforolimus receives regulatory approval, Merck will be responsible for selling ridaforolimus worldwide, will record global sales and has agreed to pay the Company tiered double-digit royalties on global net sales. The Company has an option to co-promote ridaforolimus with up to 20 percent of the sales effort in all indications in the United States and, in such case, the Company would be compensated by Merck for its sales efforts.

Under the License Agreement, in 2010 Merck paid the Company an initial up-front fee of $50 million and approximately $12.8 million for its share of costs incurred in the period from January 1, 2010 to May 4, 2010 related to development, manufacture and commercial activities for ridaforolimus in accordance with the cost-sharing provisions of the Collaboration Agreement as in effect during that period. In addition, Merck has agreed to pay the Company up to $514 million in regulatory and sales milestone payments, based on the successful development of ridaforolimus in multiple potential cancer indications and upon achievement of specified product sales thresholds. Through December 31, 2012, Merck has paid the Company a $25 million milestone payment for the acceptance of the marketing authorization application in Europe for the sarcoma indication, which was subsequently withdrawn by Merck in November 2012. Potential additional milestone payments include up to $289 million associated with potential regulatory filings and approvals for other cancer indications, and up to $200 million associated with the achievement of certain sales thresholds if ridaforolimus receives regulatory approval.

Pursuant to the License Agreement, all ridaforolimus activities that had been the responsibility of the Company under the Collaboration Agreement were transitioned to Merck in 2010. Merck agreed to pay the Company for its internal services at agreed upon rates and reimburse the Company for all external costs incurred in connection with transition services or research and development activities, and these services are reflected as service revenue in the Company's consolidated statements of operations. Accordingly, the remaining deliverables of the Company were limited to transition services for which the Company could establish fair value and all deferred revenue was recognized as of May 4, 2010. Any remaining service revenues are recognized when earned and other revenue recognition criteria are met.

The Company determined that this License Agreement was a new agreement for accounting purposes, as the economic terms and deliverables were materially modified from the prior arrangement. The Company assessed each of the deliverables related to the License Agreement against the separation criteria for multiple element arrangements and concluded that there are two units of accounting, namely the license and the transition services. The Company concluded that the license deliverable had stand-alone value, as the nature of the transition services could be provided by other vendors and there was objective and reliable evidence of the fair value of the undelivered transition services. The Company's accounting policy for exclusive licenses is to recognize revenue when all revenue recognition criteria are met. Accordingly, the Company recognized the revenue associated with the delivered elements of the agreement in the second quarter of 2010.

The amounts recognized as license and collaboration revenue for the year ended December 31, 2010 included the following components related to the Merck agreements:

- $50 million up-front payment pursuant to the License Agreement,
- $12.8 million payment received from Merck pursuant to the License Agreement as payment for the Company's 50 percent share of costs incurred from January 1, 2010 to May 4, 2010, and
- $111.5 million representing the recognition of revenue deferred as of December 31, 2009 under the Company's accounting for the Collaboration Agreement.

For the year ended December 31, 2011, license and collaboration revenue included the $25 million milestone payment received from Merck for acceptance of the submission of the marketing authorization application for ridaforolimus for the sarcoma indication in Europe.

For the years ended December 31, 2012, 2011 and 2010, the Company recorded service revenue of approximately $44,000, $111,000 and $4.5 million, respectively. The cost of such services is reflected in operating expenses in the period in which they were incurred. License revenue that is not related to the Merck arrangement is not material in any of the years presented

3. Marketable Securities

The Company has classified its marketable securities as available-for-sale and, accordingly, carries such securities at fair value. At December 31, 2012, all of the Company's marketable securities consisted of United States government or agency securities, all of which mature within the next 12 months.

At December 31, 2012, the aggregate fair value and amortized cost of the Company's marketable securities were $45,035,000 and $45,015,000, respectively. Gross unrealized gains were $20,000 at December 31, 2012 and are included in accumulated other comprehensive income in the consolidated balance sheet.

At December 31, 2011, the Company had no marketable securities.

4. Property and Equipment, Net

Property and equipment, net, was comprised of the following at December 31:

In thousands	2012	2011
Leasehold improvements	$ 24,020	$ 22,252
Construction in progress	---	699
Equipment and furniture	19,876	17,032
	43,896	39,983
Less accumulated depreciation and amortization	(36,215)	(33,372)
	$ 7,681	$ 6,611

Depreciation and amortization expense for the years ended December 31, 2012, 2011 and 2010 was $2.8 million, $2.8 million and $3.0 million, respectively.

The Company leases certain assets under capital leases having terms up to four years. Assets under capital leases included in property and equipment were as follows at December 31:

In thousands	2012	2011
Equipment and furniture	$ 392	$ 392
Less accumulated depreciation and amortization	(336)	(257)
	$ 56	$ 135

5. Intangible and Other Assets, Net

Intangible and other assets, net, were comprised of the following at December 31:

In thousands	2012	2011
Capitalized patent and license costs	$ 5,975	$ 6,799
Purchased technology	---	5,901
	5,975	12,700
Less accumulated amortization	(4,982)	(6,957)
	993	5,743
Other assets	2,131	42
	$ 3,124	$ 5,785

Amortization expense for intangible assets was $218,000, $1.7 million and $0.9 million in 2012, 2011 and 2010, respectively. The weighted average amortization period for intangible assets was 17.0 years, 14.9

years and 14.8 years in 2012, 2011 and 2010, respectively. The estimated future amortization expense is $22,000 per year for 2013, 2014, 2015, 2016, and 2017 and $883,000 thereafter.

For the years ended December 31, 2012, 2011 and 2010, the Company recorded charges to operating expenses of $5.2 million, $312,000 and $2.4 million, respectively, to reflect impairment of the carrying value of certain capitalized patents and licenses or purchased technology. In 2012**,** the Company recorded a charge of $4.8 million to reflect impairment of the carrying value of intangible assets associated with ridaforolimus, the Company's investigational oral mTOR inhibitor being developed by Merck following the decision in June 2012 by the FDA not to approve the NDA filed by Merck for the treatment of patients with soft tissue or bone sarcomas. In 2010, the charges relate to the write-off of the carrying value of patents related to the Company's NF-κB technology, upon unsuccessful conclusion of litigation related to this technology, and an impairment of the carrying value of the ARGENT patents and certain other patents. The impairment of the carrying value of intangible assets was based on management's assessment of the uncertainty related to the timing and amount of future cash flows anticipated from these assets.

6. Long-term Debt and Capital Lease Obligations

Long-term debt and capital lease obligations were comprised of the following at December 31:

In thousands	2012	2011
Bank term loan	$ 11,200	$ 12,600
Capital lease obligations	15	69
	11,215	12,669
Less current portion	(2,115)	(1,454)
	$ 9,100	$ 11,215

The term loan provides for quarterly payments of principal and interest with final scheduled maturity on December 31, 2015. The loan bears interest at LIBOR plus 1.25 to 2.25 percent, depending on the percentage of the Company's liquid assets on deposit with or invested through the bank, or at the prime rate. The effective interest on the loan was 1.46 percent at December 31, 2012. The loan is secured by a lien on all assets of the Company excluding intellectual property, which the Company has agreed not to pledge to any other party. The loan requires the Company to maintain a minimum of $15 million in unrestricted cash, cash equivalents and investments. The loan also contains certain covenants that restrict additional indebtedness, additional liens and sales of assets, and dividends, distributions or repurchases of common stock.

In addition, the Company leases certain equipment under capital leases with original terms of up to four years. These leases have effective interest rates ranging from 7.2 percent to 12.3 percent and are secured by the underlying leased assets.

The future scheduled principal payments due under these financing obligations were as follows at December 31, 2012:

In thousands	Bank Term Loan	Capital Lease Obligations
Year ended December 31:		
2013	$ 2,100	$ 15
2014	4,200	---
2015	4,900	---
	11,200	15
Less current portion	(2,100)	(15)
Long-term portion	$ 9,100	$ ---

7. Executive Compensation Plan

Under the Company's deferred executive compensation plan, the Company accrues a liability for the value of the awards ratably over the vesting period. The grant date values of awards made in 2012, 2011 and 2010 were $1.1 million, $1.6 million and $1.8 million, respectively. The net expense for this plan was $2.8 million, $1.7 million and $1.5 million in 2012, 2011 and 2010, respectively. The estimated future expense for unvested awards based on the value at December 31, 2012 is $558,000 and $139,000 for 2013 and 2014, respectively.

8. Leases, Licensed Technology and Other Commitments

Facility Leases

The Company conducts the majority of its operations in a 100,000 square foot office and laboratory facility under a non-cancelable operating lease that extends to July 2019 with two consecutive five-year renewal options. The Company maintains an outstanding letter of credit of $699,000 in accordance with the terms of the amended lease. In May 2012, the Company entered into a three-year operating lease agreement for an additional 26,000 square feet of office space. Rent expense, net of sublease income of $6,000 in 2012, $67,000 in 2011 and $28,000 in 2010, amounted to $5.9 million, $2.0 million and $2.1 million in 2012, 2011 and 2010, respectively. Future non-cancelable minimum annual rental payments through July 2019 under these leases are $6.5 million in 2013, $6.7 million in 2014, $6.2 million in 2015, $5.5 million in 2016, $5.6 million in 2017, and $9.0 million thereafter.

In January 2013, the Company entered into a lease agreement for approximately 244,000 square feet of laboratory and office space in two adjacent, connected buildings under construction in Cambridge, Massachusetts, which is expected to be available for occupancy in early 2015. The term of the lease will be for 15 years from substantial completion of the buildings with options to renew for three terms of five years each. The Company has rights and options to expand into additional space in the buildings through June 2014. The base rent is subject to increases over the term of the lease. Non-cancelable minimum annual lease payments for the annual periods beginning upon commencement of the lease are $5.2 million, $6.3 million, $16.9 million, $19.3 million and $19.6 million in the first five years of the lease and $220.3 million thereafter, plus the Company's share of the facility operating expenses. The Company has established a letter of credit as security for the lease of approximately $5.8 million upon signing of the lease, which was supported by restricted cash in January 2013.

In addition, in January 2013, the Company entered into a lease agreement for approximately 22,000 square feet of office space in a building under construction in Lausanne, Switzerland, which is expected to be available for occupancy in early 2014. The term of the lease will be ten years, with options for

extension of the term and an early termination at the Company's option after five years. Non-cancelable minimum annual lease payments are expected to be approximately $1.1 million per year for the first five years of the lease and $5.8 million thereafter.

Licensed Technology

The Company has entered into agreements with several universities under the terms of which the Company has received exclusive licenses to technology and intellectual property. The agreements, which are generally cancelable by the Company, provide for the payment of license fees and/or minimum payments, which are generally creditable against future royalties. Fees paid by the Company amounted to $145,000 in each of 2012, 2011 and 2010, and are expected to amount to $145,000 in 2013 and thereafter. In addition, the agreements provide for payments upon the achievement of certain milestones in product development. The agreements also require the Company to fund certain costs associated with the filing and prosecution of patent applications.

Other Commitments

The Company has entered into various employment agreements with eighteen officers of the Company. The agreements for these officers have remaining terms as of December 31, 2012 through the end of 2013, providing for aggregate base salaries of $5.7 million for 2013.

9. Stockholders' Equity and Warrants

Preferred Stock

The Company has authorized 10,000,000 shares of preferred stock which the Board of Directors is authorized to designate and issue in different series.

Common Stock and Warrants

At December 31, 2012, the Company had 240,000,000 shares of common stock authorized.

On February 25, 2009, the Company sold 14,378,698 shares of its common stock in a registered direct offering to institutional investors, at a purchase price of $1.69 per share, resulting in net proceeds after fees and expenses of $22.8 million. The investors also received warrants to purchase an additional 10,784,024 shares of the Company's common stock exercisable at a price of $2.15 per share in cash or pursuant to the net exercise provisions of the warrants. The warrants became exercisable on August 25, 2009 and were scheduled to expire on February 25, 2012 if not exercised by that date. During the year ended December 31, 2010, 1,220,414 warrants were exercised for proceeds to the Company of approximately $2.6 million. During the year ended December 31, 2011, a total of 3,757,767 warrants were exercised for proceeds to the Company of approximately $8.1 million. In the first quarter of 2012, the remaining 5,805,843 warrants were exercised for proceeds to the Company of approximately $12.5 million. Prior to exercise, the warrant liability was recorded at fair value, with the adjustment to carrying value recognized in earnings. Upon exercise, the sum of the fair value of the exercised warrants and the proceeds received were credited to additional paid-in-capital and totaled $87.0 million in 2012. Upon the exercise of these remaining warrants, the balance of the warrant liability was credited to stockholders' equity and the liability was eliminated.

On October 29, 2010, the Company sold 16,000,000 shares of its common stock in an underwritten public offering at a purchase price of $3.70 per share. Net proceeds of this offering, after underwriting discounts and commissions and expenses, were approximately $57.5 million.

On December 20, 2011, the Company sold 24,725,000 shares of its common stock in an underwritten public offering at a purchase price of $10.42 per share. Net proceeds of this offering, after underwriting discounts and commissions and expenses, were approximately $243.1 million.

Subsequent to December 31, 2012, on January 29, 2013, the Company sold 16,489,893 shares of its common stock in an underwritten public offering at a purchase price of $19.60 per share. Net proceeds of this offering, after underwriting discounts and commissions and estimated expenses, were approximately $309.8 million.

On December 14, 2011, the Company filed a shelf registration statement with the SEC for the issuance of an unspecified amount of common stock, preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, from time to time at prices and on terms to be determined at the time of any such offering. This registration statement was effective upon filing and will remain in effect for up to three years from filing.

10. Fair Value of Financial Instruments

The Company provides disclosure of financial assets and financial liabilities that are carried at fair value based on the price that would be received upon sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value measurements may be classified based on the amount of subjectivity associated with the inputs to fair valuation of these assets and liabilities using the following three levels:

Level 1—Inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

Level 2—Inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (i.e., interest rates, yield curves, etc.) and inputs that are derived principally from or corroborated by observable market data by correlation or other means (market corroborated inputs).

Level 3—Unobservable inputs that reflect the Company's estimates of the assumptions that market participants would use in pricing the asset or liability. The Company develops these inputs based on the best information available, including its own data.

The following table presents information about the Company's assets and liabilities as of December 31, 2012 and 2011 that were measured at fair value on a recurring basis and indicates the fair value hierarchy of the valuation techniques the Company utilized to determine such fair value:

	December 31, 2012			
In thousands	**Total**	**Level 1**	**Level 2**	**Level 3**
Marketable securities	$ 45,035	$ ---	$ 45,035	$ ---

	December 31, 2011			
In thousands	**Total**	**Level 1**	**Level 2**	**Level 3**
Warrant liability	$ 58,639	$ ---	$ 58,639	$ ---

The Company's marketable securities are carried at fair value. The marketable securities all consist of U.S. government or government backed securities with maturities of less than one year. Marketable securities are classified as Level 2 in the fair value hierarchy as their prices are based on observable inputs but not for identical securities. Therefore their fair value is based on observable inputs other than quoted prices included within Level 1.

The fair value of the warrants was determined using the Black-Scholes option valuation model. The increase in the fair value of the warrants was recognized in other income (expense) in the consolidated statements of operations. The changes in the fair value of the warrant liability for the years ended December 31, 2012, 2011 and 2010 were as follows:

In thousands	2012	2011	2010
Balance, beginning of year	$ 58,639	$ 28,815	$ 11,363
Issuance of warrants	---	---	---
Revaluation of warrants	15,924	46,715	19,532
Exercise of warrants	(74,563)	(16,891)	(2,080)
Balance, end of year	$ ---	$ 58,639	$ 28,815

The carrying amounts of cash equivalents, accounts payable and accrued liabilities approximate fair value because of their short-term nature. The carrying amount of the Company's bank term loan approximates fair value due to its variable interest rate and other terms. All such measurements are Level 2 measurements in the fair value hierarchy. The Company's obligation under its executive compensation plan is based in part on the current fair market value of specified mutual funds, which is therefore stated at its estimated fair value.

11. Stock Compensation

ARIAD Stock Option and Stock Plans

The Company's 2001 and 2006 stock option and stock plans (the "Plans") provide for the awarding of nonqualified and incentive stock options, stock grants, restricted stock units, performance share units and other equity-based awards to officers, directors, employees and consultants of the Company. Stock options become exercisable as specified in the related option certificate, typically over a four-year period, and expire ten years from the date of grant. Stock grants, restricted stock units and performance share units provide the recipient with ownership of common stock subject to terms of vesting, any rights the Company may have to repurchase the shares granted or other restrictions. The 2001 Plan has no shares remaining available for grant, although existing stock options granted under this Plan remain outstanding. As of December 31, 2012, there were 12,790,684 shares available for awards under the 2006 Plan. The Company generally issues new shares upon the exercise or vesting of stock plan awards.

Employee Stock Purchase Plan

In 1997, the Company adopted the 1997 Employee Stock Purchase Plan and reserved 500,000 shares of common stock for issuance under this plan. In June 2008, the Plan was amended to reserve an additional 500,000 shares of common stock for issuance. Under this plan, substantially all of the Company's employees may, through payroll withholdings, purchase shares of the Company's common stock at a price of 85 percent of the lesser of the fair market value at the beginning or end of each three-month withholding period. In 2012, 2011 and 2010, 66,531, 87,331 and 176,318 shares of common stock were issued under the plan, respectively. Compensation cost is equal to the fair value of the discount on the date of grant and is recognized as compensation in the period of purchase.

Stock-Based Compensation

The Company awards stock options and other equity-based instruments to its employees, directors and consultants and provides employees the right to purchase common stock (collectively "share-based payments"), pursuant to stockholder approved plans. The Company's statements of operations included total compensation cost from share-based payments for the years ended December 31, as follows:

In thousands	2012	2011	2010
Compensation cost from:			
Stock options	$ 10,626	$ 2,893	$ 1,879
Stock and stock units	9,467	4,601	2,834
Purchases of common stock at a discount	248	181	123
	$ 20,341	$ 7,675	$ 4,836
Compensation cost included in:			
Research and development expenses	$ 9,846	$ 3,782	$ 2,444
General and administrative expenses	10,495	3,893	2,392
	$ 20,341	$ 7,675	$ 4,836

Stock Options

Stock options are granted with an exercise price equal to the closing market price of the Company's common stock on the date of grant. Stock options generally vest ratably over four years and have contractual terms of ten years. Stock options are valued using the Black-Scholes option valuation model and compensation cost is recognized based on such fair value over the period of vesting on a straight-line basis.

The following table summarizes information about stock options as of and for the years ended December 31, 2012, 2011 and 2010:

In thousands, except per share amounts	2012	2011	2010
Weighted average fair value of options granted, per share	$ 13.04	$ 5.80	$ 2.43
Total cash received from exercises of stock options	9,677	4,648	418
Total intrinsic value of stock options exercised	27,572	5,169	331

The weighted average fair value of options granted in the years ended December 31, 2012, 2011 and 2010, reflect the following weighted-average assumptions:

	2012	2011	2010
Expected life of options granted *(in years)*	7.1	7.5	6.8
Expected volatility	76%	75%	79%
Risk-free rate	1.32%	2.53%	2.57%
Expected dividends	0%	0%	0%

The expected life assumption is based on an analysis of historical behavior of participants related to options awarded over time. The expected volatility assumption is based on the historical implied volatility of the Company's common stock, derived from analysis of historical traded and quoted options on the Company's common stock over the period commensurate with the expected life of the options granted. The risk-free rate is based on the forward U.S. Treasury yield curve. The expected dividends reflect the Company's current and expected future policy for dividends on its common stock.

Stock option activity under the Company's stock plans for the year ended December 31, 2012 was as follows:

	Number of Shares	Weighted Average Exercise Price Per Share
Options outstanding, January 1, 2012	7,381,329	$ 5.22
Granted	3,089,750	$ 18.40
Forfeited	(138,713)	$ 12.47
Exercised	(2,104,032)	$ 4.63
Options outstanding, December 31, 2012	8,228,334	$ 10.20

The following table summarizes information about stock options outstanding as of December 31, 2012:

	Options Outstanding	Options Exercisable	Options Vested and Expected To Vest
Number of options	8,228,334	4,086,791	8,039,905
Weighted average exercise price per share	$ 10.20	$ 5.67	$ 10.23
Aggregate intrinsic value *(in 000's)*	$ 78,839	$ 55,296	$ 76,870
Weighted average remaining contractual term (*years*)	6.93	4.86	6.90

Options expected to vest consist of options scheduled to vest in the future less expected forfeitures.

At December 31, 2012, total unrecognized compensation cost related to non-vested stock options outstanding amounted to $35.6 million. That cost is expected to be recognized over a weighted-average period of 3.2 years.

Stock and Stock Unit Grants

Stock and stock unit grants are provided to non-employee directors as compensation and generally vest or include restrictions as to resale which lapse over the service period to which the grants relate. Stock and stock unit grants to officers carry restrictions as to resale for periods of time or vesting provisions over time or based on the achievement of performance measures as specified in the grant. Stock and stock unit grants are valued at the closing market price of the Company's common stock on the date of grant and compensation expense is recognized over the requisite service period, vesting period or period during which restrictions remain on the common stock or stock units granted.

Stock and stock unit activity under the Company's stock plans for the year ended December 31, 2012 was as follows:

	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding, January 1, 2012	2,785,026	$ 4.51
Granted	921,677	$ 15.12
Forfeited	(55,766)	$ 8.19
Vested or restrictions lapsed	(1,747,492)	$ 4.50
Outstanding, December 31, 2012	1,903,445	$ 9.55

The total fair value of stock and stock unit awards that vested in 2012, 2011 and 2010 was $27.8 million, $8.0 million and $1.6 million, respectively. The total unrecognized compensation expense for restricted shares or units that do not include any remaining performance vesting conditions was $7.5 million at December 31, 2012 and will be recognized over 1.8 years on a weighted average basis.

Included in stock vested and stock units outstanding in the above table are 392,500 performance share units, awarded in March 2011, that vested as to 50 percent of the award upon FDA approval of Iclusig in December 2012 and the remaining 50 percent will vest one year thereafter, and 352,000 performance share units, awarded in March 2012, that will vest if the Company receives regulatory approval of Iclusig from the European Medicines Agency on or before December 31, 2016. The number of shares that may vest, if any, related to the March 2012 awards is dependent on the timing of the approval. The compensation costs for such performance-based stock awards is based on the awards that ultimately vest and the grant date fair value of those awards. The Company begins to recognize compensation expense related to these performance share units when achievement of the performance condition is probable. The unrecognized compensation related to performance vesting awards could be up to $8.5 million of compensation expense if the maximum performance metrics are achieved.

12. Net Income (Loss) Per Share

Basic net income (loss) per share amounts have been computed based on the weighted-average number of common shares outstanding. Diluted net income (loss) per share amounts have been computed based on the weighted-average number of common shares outstanding plus the dilutive effect of potential common shares. The computation of potential common shares has been performed using the treasury stock method.

The calculation of net income (loss) and the number of shares used to compute basic and diluted earnings per share for the years ended December 31, 2012, 2011 and 2010 are as follows:

In thousands	2012	2011	2010
Net income (loss)	$ (220,872)	$ (123,603)	$ 85,248
Net income (loss) per share - basic	$ (1.34)	$ (0.93)	$ 0.75
Weighted average shares outstanding – basic	164,964	132,375	113,020
Dilutive stock options	---	---	572
Restricted stock and restricted stock units	---	---	1,142
Weighted average shares outstanding – diluted	164,964	132,375	114,734
Net income (loss) per share - diluted	$ (1.34)	$ (0.93)	$ 0.74

For the years ended December 31, 2012, 2011 and 2010, the following potentially dilutive securities were not included in the computation of net income (loss) per share because the effect would be anti-dilutive:

In thousands	2012	2011	2010
Stock options	8,228	7,381	5,852
Restricted stock and restricted stock units	1,903	2,785	---
Warrants	---	5,806	9,564
	10,131	15,972	15,416

13. Income Taxes

The Company is subject to U.S. federal and various state corporate income taxes as well as taxes in foreign jurisdictions where subsidiaries have been established. For the years ended December 31, 2012, 2011 and 2010, the Company did not have any material federal, foreign or state income tax expense given its continued cumulative net operating losses. A reconciliation of the federal statutory corporate income tax rate to the effective income tax rate for the years ended December 31, 2012, 2011 and 2010 is as follows:

	2012	2011	2010
Statutory federal income tax rate	(35)%	(35)%	35%
State income tax rate, net of federal benefit	(4)	(4)	5
Revaluation of warrant liability	3	13	8
Other permanent differences	(1)	---	1
Foreign rate differential	6	---	---
Change in valuation allowance	31	26	(49)
Effective tax rate	0%	0%	0%

The components of deferred income taxes were as follows at December 31:

In thousands	2012	2011
Deferred tax liabilities:		
Intangibles	$ (398)	$ (2,385)
Unrealized currency gain	(7,330)	---
Total deferred tax liabilities	(7,728)	(2,385)
Deferred tax assets:		
Net operating loss carryforwards	96,997	161,951
Federal and state tax credit carryovers	19,654	23,380
Depreciation	4,785	4,924
Stock-based compensation	5,491	3,420
Other	3,703	2,158
Total deferred tax assets	130,630	195,833
Deferred tax assets, net	122,902	193,448
Valuation allowance	(122,902)	(193,448)
Total deferred taxes	$ --	$ --

At December 31, 2012, the Company had available estimated net operating loss carryforwards and research and development credit carryforwards for federal, foreign and state tax reporting purposes as follows:

	Amount	Expiring if not utilized
	(in thousands)	
Net operating loss carryforwards:		
Federal	$ 307,714	2024 through 2031
Foreign	$ 30,422	2020
Research and development credit carryforwards:		
Federal	$ 17,765	2018 through 2032
State	$ 2,906	2025 through 2027

Included in the federal net operating loss carryforwards above is approximately $35.1 million related to stock-based compensation tax deductions in excess of book compensation expense which will be credited to additional paid-in-capital when such reductions reduce taxes payable. Although these net operating losses are included in the carryforwards above, they are not reflected in the table of deferred tax assets as the excess tax benefits are not yet realized.

In connection with the establishment of its European operations, the Company transferred certain intellectual property rights related to Iclusig to its wholly-owned subsidiary in Switzerland. Although the transfer of intellectual property rights between consolidated entities did not result in any gain in the consolidated results of operations, the Company generated a taxable gain in the U.S. that is substantially offset by existing tax loss and credit carryforwards. Any taxes incurred related to the intercompany transactions are treated as a prepaid tax in the Company's consolidated balance sheet and amortized to income tax expense over the life of the intellectual property. The amount of tax amortized to income tax expense for the year ended December 31, 2012 is approximately $64,000 and is included in general and administrative expenses.

Since the Company has not yet achieved sustained profitable operations, management believes its deferred tax assets do not satisfy the more likely than not realization criteria and has recorded a valuation allowance for all deferred tax assets as of December 31, 2012 and 2011. The valuation allowance decreased in 2012 by $70.5 million, increased by $28.5 million in 2011, and increased by $21.9 million in 2010. During 2012, the Company realized tax benefits of $66.5 million due to the utilization of U.S. net operating loss carryforwards related primarily to the inclusion of a taxable gain on transfer of intellectual property rights to its subsidiary in Switzerland.

The Company does not recognize a tax benefit unless it is more likely than not that the tax position will be sustained upon examination by tax authorities, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The tax benefit recognized for these positions is measured at the largest amount of benefit that is greater than 50 percent likelihood of being realized upon ultimate settlement. Deferred tax assets that do not meet these recognition criteria are not recorded and the Company recognizes a liability for uncertain tax positions that may result in tax payments. The Company recognizes interest and penalties as a component of income tax expense. Through December 31, 2012, there has been no interest or penalties included as a component of income tax expense.

In 2012, the Company's uncertain tax positions increased to approximately $24.4 million, related to certain uncertain tax benefits that arose in 2012. Of this amount, the Company has reduced its deferred tax assets and associated valuation allowance by $19.7 million and recorded a long-term liability of $2.2 million. If such unrecognized tax benefits were realized and not subject to valuation allowances, the Company would recognize a tax benefit of $21.2 million. No uncertain tax positions are expected to be resolved within the next twelve months. A reconciliation of the reserve for uncertain tax benefits (including state tax matters without federal benefits) is as follows:

In thousands	**2012**
Uncertain tax positions, beginning of the year:	$ ---
Gross increases – tax positions in current period	24,404
Uncertain tax positions, end of year	$ 24,404

Due to the Company's historical net operating loss position, the Company's U.S. federal and Massachusetts tax returns remain open to examination for three years after the Company utilizes that year's net operating loss carryforward. The Company's earliest year which generated a net operating loss included in the Company's current net operating loss carryforward is 2004 for U.S. federal tax purposes. The Company's Massachusetts state tax returns from 2009 to 2012 remain open to examination. All tax years for foreign subsidiaries (predominantly beginning in 2012) are also open to audit in their respective jurisdictions.

ITEM 9: CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A: CONTROLS AND PROCEDURES

(a) *Evaluation of Disclosure Controls and Procedures.* Our principal executive officer and principal financial officer, after evaluating the effectiveness of our disclosure controls and procedures (as defined in paragraph (e) of Rules 13a-15 and 15d-15 under the Securities Exchange Act of 1934) as of the end of the period covered by this Annual Report on Form 10-K, have concluded that, based on such evaluation, our disclosure controls and procedures were effective at the reasonable assurance level to ensure that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms and is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure, particularly during the period in which this Annual Report on Form 10-K was being prepared.

(b) *Changes in Internal Controls.* There were no changes in our internal control over financial reporting, identified in connection with the evaluation of such internal control that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. The Company's internal control system was designed to provide reasonable assurance to the Company's management and board of directors regarding the preparation and fair presentation of published financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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.

The Company's management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2012. In making this assessment, it used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework*. Based on our assessment we believe that, as of December 31, 2012, the Company's internal control over financial reporting is effective based on those criteria.

Deloitte & Touche LLP, the independent registered public accounting firm that audited the Company's consolidated financial statements, has issued an attestation report on the Company's internal control over financial reporting as of December 31, 2012, which is included below.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of
ARIAD Pharmaceuticals, Inc.
Cambridge, Massachusetts

We have audited the internal control over financial reporting of ARIAD Pharmaceuticals, Inc. and subsidiaries (the "Company") as of December 31, 2012, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company'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 Control 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 by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel 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 the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the 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, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on the criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2012 of the Company and our report dated March 1, 2013 expressed an unqualified opinion on those financial statements.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
March 1, 2013

ITEM 9B: OTHER INFORMATION

Not applicable.

PART III

ITEM 10: DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Board of Directors," "Executive Officers," "Section 16(a) Beneficial Ownership Reporting Compliance" and "Corporate Code of Conduct and Ethics" in the Company's Definitive Proxy Statement for the 2013 Annual Meeting of Stockholders.

ITEM 11: EXECUTIVE COMPENSATION

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Executive Compensation", "Compensation Committee Interlocks and Insider Participation", "Compensation Discussion and Analysis", "Compensation Committee Report", "Board of Directors" and "Compensation Practices and Policies Relating to Risk Management" in the Company's Definitive Proxy Statement for the 2013 Annual Meeting of Stockholders.

ITEM 12: SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" in the Company's Definitive Proxy Statement for the 2013 Annual Meeting of Stockholders.

ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The response to this item is incorporated by reference from the discussion responsive thereto under the captions "Board of Directors" and "Certain Relationships and Related Transactions" in the Company's Definitive Proxy Statement for the 2013 Annual Meeting of Stockholders.

ITEM 14: PRINCIPAL ACCOUNTING FEES AND SERVICES

The response to this item is incorporated by reference from the discussion responsive thereto under the caption "Ratification of Selection of Independent Registered Public Accounting Firm" in the Company's Definitive Proxy Statement for the 2013 Annual Meeting of Stockholders.

PART IV

ITEM 15: EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a)(1) The following Consolidated Financial Statements, Notes thereto and Report of Independent Registered Public Accounting Firm have been presented in Item 8:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets

Consolidated Statements of Operations

Consolidated Statements of Comprehensive Income (Loss)

Consolidated Statements of Stockholders' Equity (Deficit)

Consolidated Statements of Cash Flows

Notes to Consolidated Financial Statements

(a)(2) Financial Statement Schedules:

Schedules have been omitted because of the absence of conditions under which they are required or because the required information is included in the financial statements or notes thereto.

(a)(3) The Exhibits listed in the Exhibit Index are filed herewith in the manner set forth therein.

(b) See (a) (3) above.

(c) See (a) (2) above.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities 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 and Commonwealth of Massachusetts on the 1st day of March, 2013.

ARIAD PHARMACEUTICALS, INC.

By: **/s/ Harvey J. Berger, M.D.**
Name: **Harvey J. Berger, M.D.**
Title: **Chairman, Chief Executive Officer and President**

Pursuant to the requirements 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 dates indicated.

Signature	Title	Date
/s/ Harvey J. Berger, M.D. **Harvey J. Berger, M.D.**	**Chairman of the Board of Directors, Chief Executive Officer and President (Principal Executive Officer)**	**March 1, 2013**
/s/ Edward M. Fitzgerald **Edward M. Fitzgerald**	**Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)**	**March 1, 2013**
/s/ Jay R. LaMarche **Jay R. LaMarche**	**Director**	**March 1, 2013**
/s/ Athanase Lavidas, Ph.D. **Athanase Lavidas, Ph.D.**	**Director**	**March 1, 2013**
/s/ Massimo Radaelli, Ph.D. **Massimo Radaelli, Ph.D.**	**Director**	**March 1, 2013**
/s/ Norbert G. Riedel, Ph.D. **Norbert G. Riedel, Ph.D.**	**Director**	**March 1, 2013**
/s/ Robert M. Whelan, Jr. **Robert M. Whelan, Jr.**	**Director**	**March 1, 2013**
/s/ Wayne Wilson **Wayne Wilson**	**Director**	**March 1, 2013**

ARIAD Pharmaceuticals, Inc.

Form 10-K for the Year Ended December 31, 2012

Exhibit List

Exhibit Number		Exhibit Description	Filed with this Report	Incorporated by Reference herein from Form or Schedule	Filing Date	SEC File/ Reg. Number
2.1		Certificate of Ownership and Merger of ARIAD Corporation into ARIAD Pharmaceuticals, Inc. dated December 28, 2011		10-K (Exhibit 2.1)	02/29/12	000-21696
3.1		Certificate of Incorporation of ARIAD Pharmaceuticals, Inc., as amended		10-Q (Exhibit 3.1)	05/10/10	000-21696
3.2		Amended and Restated By-laws of ARIAD Pharmaceuticals, Inc.		8-K (Exhibit 3.1)	08/27/09	000-21696
4.1		Specimen common stock certificate of ARIAD Pharmaceuticals, Inc.		10-K Exhibit (4.1)	02/29/12	000-21696
4.2		Form of Warrant to Purchase Common Stock dated February 25, 2009		8-K (Exhibit 10.2)	02/20/09	000-21696
Leases and Credit Agreements						
10.1	.1	Lease Agreement, dated January 8, 1992, between ARIAD Pharmaceuticals, Inc. and Forest City Cambridge, Inc.		10-Q (Exhibit 10.1)	04/30/93	000-21696
	.2	Eighth Amendment to Lease dated October 30, 2006		10-K (Exhibit 10.57)	03/14/07	000-21696
	.3	Ninth Amendment to Lease dated May 20, 2011, between ARIAD Corporation and UP 26 Landsdowne LLC		10-Q (Exhibit 10.1)	08/09/11	000-21696
	.4	Assignment and Assumption dated December 31, 2011, by and between ARIAD Corporation and ARIAD Pharmaceuticals, Inc. (for lease at 26 Landsdowne Street)		10-K Exhibit 10.1.4	02/29/12	000-21696
10.2		Lease Agreement, dated January 4, 2013 between ARIAD Pharmaceuticals, Inc. and ARE-MA REGION NO. 48, LLC (for lease at 75 Binney Street and 25 Binney Street)**	X			
10.3	.1	Credit Agreement, dated as of March 12, 2003, by and among ARIAD Pharmaceuticals, Inc., ARIAD Corporation and ARIAD Gene Therapeutics, Inc. and Citizens Bank of Massachusetts		10-Q (Exhibit 10.1)	05/13/03	000-21696
	.2	Amendment No. 1 to Credit Agreement, dated as of December 31, 2003		10-K (Exhibit 10.57)	03/02/04	000-21696
	.3	Amendment No. 2 to Credit Agreement dated as of December 31, 2004		10-K (Exhibit 10.52)	02/18/05	000-21696

	.4	Amendment No. 3 to Credit Agreement, dated as of March 26, 2008, by and among ARIAD Pharmaceuticals, Inc., ARIAD Corporation and ARIAD Gene Therapeutics, Inc. and RBS Citizens, National Association, successor by merger to Citizens Bank of Massachusetts		8-K (Exhibit 10.2.4)	03/27/08	000-21696
	.5	Waiver and Amendment No. 4 to Credit Agreement dated as of June 19, 2009, by and among ARIAD Pharmaceuticals, Inc., ARIAD Corporation and RBS Citizens, National Association		10-Q (Exhibit 10.3)	08/10/09	000-21696
	.6	Waiver and Amendment No. 5 to Credit Agreement dated as of December 14, 2009		10-K (Exhibit 10.2.6)	03/16/10	000-21696
	.7	Amendment No. 6 to Credit Agreement, dated as of January 6, 2011		8-K (Exhibit 10.2.7)	01/12/11	000-21696
	.8	Amendment No. 7 to Credit Agreement, dated as of December 28, 2011, by and among ARIAD Pharmaceuticals, Inc., ARIAD Corporation and RBS Citizens, National Association		10-K (Exhibit 10.2.8)	02/29/12	000-21696
10.4		Security Agreement - All Assets, dated as of March 12, 2003, by and between ARIAD Pharmaceuticals, Inc. and Citizens Bank of Massachusetts		10-Q (Exhibit 10.3)	05/13/03	000-21696
10.5		Security Agreement - All Assets, dated as of March 12, 2003, by and between ARIAD Corporation and Citizens Bank of Massachusetts		10-Q (Exhibit 10.4)	05/13/03	000-21696
10.6		Third Amended and Restated Term Note, dated March 26, 2008, issued by ARIAD Pharmaceuticals, Inc., ARIAD Corporation and ARIAD Gene Therapeutics, Inc. to RBS Citizens, National Association, successor by merger to Citizens Bank of Massachusetts		8-K (Exhibit 10.2.4)	03/27/08	000-21696

Agreements with Respect to Collaborations, Licenses, Research and Development						
10.7		Amended and Restated Agreement, dated as of December 12, 1997, between The Board of Trustees of The Leland Stanford Junior University and ARIAD Gene Therapeutics, Inc.*		10-K (Exhibit 10.14)	03/10/98	000-21696
10.8		Revised and Restated Research and Development Agreement, dated as of March 15, 2002, by and between ARIAD Pharmaceuticals, Inc. and ARIAD Corporation		10-K (Exhibit 10.53)	03/22/02	000-21696
10.9		License Agreement, effective January 26, 2005, by and between ARIAD Pharmaceuticals, Inc. and Medinol Ltd.*		10-Q (Exhibit 10.1)	05/10/05	000-21696
10.10		Supply Agreement, entered into as of January 26, 2005, by and between ARIAD Pharmaceuticals, Inc. and Medinol Ltd.*		10-Q (Exhibit 10.2)	05/10/05	000-21696

10.11		License Agreement, dated October 9, 2007, among ARIAD Pharmaceuticals, Inc., ARIAD Gene Therapeutics, Inc. and ICON Medical Corp.*		10-K (Exhibit 10.13)	03/16/10	000-21696
10.12		Amended and Restated Collaboration and Exclusive License Agreement, dated May 4, 2010, between ARIAD Pharmaceuticals, Inc. and Merck, Sharpe & Dohme Corp.*		10-Q (Exhibit 10.1)	08/09/10	000-21696

Agreements with Executive Officers and Directors						
10.13		Amended and Restated Executive Employment Agreement, dated April 30, 2010, between ARIAD Pharmaceuticals, Inc. and Harvey J. Berger, M.D.+		8-K (Exhibit 10.1)	05/03/10	000-21696
10.14		Amended and Restated Executive Employment Agreement, dated May 15, 2010, between ARIAD Pharmaceuticals, Inc. and David L. Berstein, Esq.+		10-Q (Exhibit 10.4)	08/09/10	000-21696
10.15		Amended and Restated Executive Employment Agreement, dated May 15, 2010, between ARIAD Pharmaceuticals, Inc. and Daniel M. Bollag, Ph.D.+		10-Q (Exhibit 10.5)	08/09/10	000-21696
10.16	.1	Amended and Restated Executive Employment Agreement, dated May 1, 2010, between ARIAD Pharmaceuticals, Inc. and Maria Cantor+		10-Q (Exhibit 10.1)	05/09/12	000-21696
	.2	First Amendment to Amended and Restated Executive Employment Agreement, dated January 25, 2012, between ARIAD Pharmaceuticals, Inc. and Maria Cantor+		10-Q (Exhibit 10.2)	05/09/12	000-21696
10.17		Amended and Restated Executive Employment Agreement, dated May 15, 2010, between ARIAD Pharmaceuticals, Inc. and Timothy P. Clackson, Ph.D.+		10-Q (Exhibit 10.6)	08/09/10	000-21696
10.18		Amended and Restated Executive Employment Agreement, dated May 15, 2010, between ARIAD Pharmaceuticals, Inc. and Pierre F. Dodion, M.D., M.B.A.+		10-Q (Exhibit 10.7)	08/09/10	000-21696
10.19		Executive Employment Agreement, dated September 3, 2011, between ARIAD Pharmaceuticals, Inc. and Martin J. Duvall+		10-Q (Exhibit 10.1)	11/07/11	000-21696
10.20		Amended and Restated Executive Employment Agreement, dated May 15, 2010, between ARIAD Pharmaceuticals, Inc. and Edward M. Fitzgerald+		10-Q (Exhibit 10.8)	08/09/10	000-21696
10.21	.1	Amended and Restated Executive Employment Agreement, dated May 1, 2010, between ARIAD Pharmaceuticals, Inc. and Frank G. Haluska, M.D., Ph.D.+		10-Q (Exhibit 10.9)	08/09/10	000-21696
	.2	First Amendment to Amended and Restated Executive Employment Agreement, dated January 25, 2012 between ARIAD Pharmaceuticals, Inc. and Frank G. Haluska, M.D., Ph.D.+		10-Q Exhibit (10.3)	05/09/2012	000-21696

10.22		Amended and Restated Executive Employment Agreement, dated May 15, 2010, between ARIAD Pharmaceuticals, Inc. and Raymond T. Keane, Esq.+		10-Q (Exhibit 10.10)	08/09/10	000-21696
10.23	.1	ARIAD Pharmaceuticals, Inc. 1997 Executive Compensation Plan+		10-K (Exhibit 10.41)	03/10/98	000-21696
	.2	Amendment to ARIAD Pharmaceuticals, Inc. 1997 Executive Compensation Plan+		10-Q (Exhibit 10.2)	11/09/05	000-21696
10.24		ARIAD Pharmaceuticals, Inc. 2005 Executive Compensation Plan (as amended and restated effective October 1, 2008)+		10-K (Exhibit 10.31)	03/16/09	000-21696
10.25		Director Compensation Arrangements+		10-Q (Exhibit 10.4)	05/09/12	000-21696
10.26		Form of Indemnity Agreement between ARIAD Pharmaceuticals, Inc. and its directors and officers+		10-K (Exhibit 10.33)	03/16/09	000-21696

Equity Compensation Plans						
10.27	.1	ARIAD Pharmaceuticals, Inc. 1991 Stock Option Plan for Employees and Consultants, as amended+		10-K (Exhibit 10.13)	03/31/95	000-21696
	.2	Amendment to the 1991 Stock Option Plan for Employees and Consultants+		10-Q (Exhibit 10.36)	08/12/97	000-21696
10.28		ARIAD Pharmaceuticals, Inc. 1991 Stock Option Plan for Directors+		10-Q (Exhibit 10.15)	04/30/93	000-21696
10.29	.1	ARIAD Pharmaceuticals, Inc. 1994 Stock Option Plan for Non-Employee Directors+		10-K (Exhibit 10.24)	03/31/95	000-21696
	.2	Amendment to the 1994 Stock Option Plan for Non-Employee Directors.+		10-Q (Exhibit 10.37)	08/12/97	000-21696
10.30		Amended and Restated ARIAD Pharmaceuticals, Inc. 1997 Employee Stock Purchase Plan+		Def 14A (Appendix A)	04/30/09	000-21696
10.31		ARIAD Pharmaceuticals, Inc. 2001 Stock Plan, as amended and restated+		10-Q (Exhibit 10.3)	11/09/05	000-21696
10.32	.1	ARIAD Pharmaceuticals, Inc. 2006 Long-Term Incentive Plan, as amended+		Def 14A (Appendix A)	04/30/12	000-21696
	.2	Form of Stock Option Certificate under the ARIAD Pharmaceuticals, Inc. 2006 Long-Term Incentive Plan+		10-K (Exhibit 10.30.2)	02/29/12	000-21696
	.3	Form of Stock Grant Certificate under the ARIAD Pharmaceuticals, Inc. 2006 Long-Term Incentive Plan+		10-K (Exhibit 10.30.3)	02/29/12	000-21696
	.4	Form of Restricted Stock Unit Certificate under the ARIAD Pharmaceuticals, Inc. 2006 Long-Term Incentive Plan+		10-K (Exhibit 10.30.4)	02/29/12	000-21696
	.5	Form of Restricted Stock Grant Certificate under the ARIAD Pharmaceuticals, Inc. 2006 Long-Term Incentive Plan+		10-K (Exhibit 10.30.5)	02/29/12	000-21696
	.6	Form of 2012 Performance Share Certificate under the ARIAD Pharmaceuticals, Inc. 2006 Long-Term Incentive Plan+		10-Q (Exhibit 10.5)	05/09/12	000-21696
21.1		Subsidiaries of ARIAD Pharmaceuticals, Inc.	X			
23.1		Consent of Deloitte & Touche LLP	X			

31.1		Certification of the Chief Executive Officer	X			
31.2		Certification of the Chief Financial Officer	X			
32.1		Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X			
101		The following materials from ARIAD Pharmaceuticals, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations and Comprehensive Income (Loss), (iii) Consolidated Statements of Stockholders' Equity (Deficit), (iv) Consolidated Statements of Cash Flows, and (v) Notes to Consolidated Financial Statements.***	X			

(+) Management contract or compensatory plan or arrangement.

(*) Confidential treatment has been granted by the Securities and Exchange Commission as to certain portions.

(**) Confidential treatment has been requested from the Securities and Exchange Commission as to certain portions.

(***) Pursuant to Rule 406T of Regulation S-T, these interactive data files are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933 or Section 18 of the Securities Exchange Act of 1934 and otherwise are not subject to liability under these sections.