

AMAG PHARMACEUTICALS INC.
Form 424B5
January 20, 2010

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Filed Pursuant to Rule 424(b)(5)
Registration No. 333-164400

SUBJECT TO COMPLETION, DATED JANUARY 19, 2010

The information in this preliminary prospectus supplement is not complete and may be changed. A registration statement has been declared effective by the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and we are not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS SUPPLEMENT
(To Prospectus dated January 19, 2010)

3,000,000 Shares

COMMON STOCK

AMAG Pharmaceuticals, Inc. is offering 3,000,000 shares of its common stock.

Our common stock is listed on the NASDAQ Global Market under the symbol "AMAG." On January 15, 2010, the last reported sale price of our common stock on the NASDAQ Global Market was \$49.56 per share.

Investing in our common stock involves risks. See "RISK FACTORS" beginning on page S-9 of this prospectus supplement.

PRICE \$ A SHARE

	<i>Price to Public</i>	<i>Underwriting Discounts and Commissions</i>	<i>Proceeds to AMAG Pharmaceuticals, Inc.</i>
<i>Per Share</i>	\$	\$	\$
<i>Total</i>	\$	\$	\$

We have granted the underwriters the right to purchase up to an additional 450,000 shares to cover over-allotments.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved these securities, or determined if this prospectus supplement or the accompanying prospectus are truthful or complete. Any representation to the contrary is a criminal offense.

Morgan Stanley & Co. Incorporated, J.P. Morgan Securities Inc. and Goldman, Sachs & Co., on behalf of the underwriters, expects to deliver the shares to purchasers on or about _____, 2010.

MORGAN STANLEY J.P. MORGAN GOLDMAN, SACHS & CO.

, 2010

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of the common stock we are offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference herein and in the accompanying prospectus. The second part, the accompanying prospectus, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined together with all documents incorporated by reference. To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying prospectus or any document incorporated by reference therein, you should rely on the information in this prospectus supplement; provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date for example, a document incorporated by reference in the accompanying prospectus the statement in the document having the later date modifies or supersedes the earlier statement.

You should rely only on the information contained in this prospectus supplement, any related free writing prospectus or incorporated by reference herein and contained, or incorporated by reference, in the accompanying prospectus. We have not authorized, and the underwriters have not authorized, anyone to provide you with information that is different. The information contained in this prospectus supplement, any related free writing prospectus or incorporated by reference herein and contained, or incorporated by reference, in the accompanying prospectus is accurate only as of the respective dates thereof, regardless of the time of delivery of this prospectus supplement, any related free writing prospectus and the accompanying prospectus or of any sale of our common stock. It is important for you to read and consider all information contained in this prospectus supplement, the accompanying prospectus, and any related free writing prospectus, including the documents incorporated by reference herein and therein, in making your investment decision. You should also read and consider the information in the documents to which we have referred you in the section entitled "Where You Can Find More Information" on page S-38 of this prospectus supplement.

We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement, the accompanying prospectus, any related free writing prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement, the accompanying prospectus, or any related free writing prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement, the accompanying prospectus or any related free writing prospectus outside the United States. This prospectus supplement, the accompanying prospectus and any related free writing prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement, the accompanying prospectus or any related free writing prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Unless otherwise stated, all references in this prospectus to "we," "us," "our," "AMAG Pharmaceuticals," the "Company" and similar designations refer to AMAG Pharmaceuticals, Inc. Trademarks or service marks appearing in this prospectus supplement or any related free writing prospectus are the property of their respective holders.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Any statements in this prospectus supplement, the accompanying prospectus or any related free writing prospectus, including the documents that we incorporate by reference herein, about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 as amended, and Section 21E of the Securities and Exchange Act of 1934, as amended. You can identify these forward-looking statements by the use of words or phrases such as "believe," "may," "could," "will," "estimate," "continue," "anticipate," "intend," "seek," "plan," "expect," "potential," "predict," "project," "should," or "would." These forward looking statements including statements regarding our expected fourth quarter 2009 Feraheme revenues (including the amount attributable to our Feraheme launch incentive program), our expectation that utilization of previously deferred Feraheme launch incentive program revenues will increase, our expectation that we will not record any new deferred revenue during the fourth quarter of 2009, our expectation that total operating expenses for the fourth quarter of 2009 will be higher than that reported for the third quarter of 2009, the expected timing of the filing of our marketing authorization application for Feraheme with the European Medicines Agency, or EMEA, our plan to conduct one additional Feraheme clinical study in Europe and the expected timing of that trial, our plan to conduct pediatric studies both within and outside of the U.S. and the expected timing of these studies, our plan to conduct and the intended timing of our planned global studies of Feraheme for the treatment of iron deficiency anemia in a broad range of patients, our expectation that sales of Gastromark will not change materially, and our expectation that we will not recognize any Feridex I.V. related revenues in 2010. Among the factors that could cause actual results to differ materially from those indicated in the forward-looking statements include, without limitation, the risks and uncertainties set forth under the heading "Risk Factors" beginning on page S-9 of this prospectus supplement and the other risks and uncertainties described in our most recent annual report on Form 10-K and our quarterly reports on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC.

You should rely only on information contained, or incorporated by reference, in this prospectus supplement, the accompanying prospectus or any related free writing prospectus, the registration statement of which this prospectus supplement is a part, and the documents incorporated by reference in this prospectus supplement, the accompanying prospectus or any related free writing prospectus. Our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee future results, events, levels of activity, performance or achievement. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law. Before deciding to purchase our securities, you should carefully consider the risk factors incorporated herein by reference, in addition to the other information set forth in this prospectus supplement, the accompanying prospectus, any related free writing prospectus and in the documents incorporated by reference.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us and this offering. This information is not complete and does not contain all the information you should consider before investing in our common stock. You should carefully read this entire prospectus supplement and the accompanying prospectus and any related free writing prospectus, including the "Risk Factors" section of this prospectus supplement and any related free writing prospectus and the financial statements and the other information incorporated by reference in the prospectus, before making an investment decision.

Our Business

AMAG Pharmaceuticals, Inc., a Delaware corporation, was founded in 1981. We are a biopharmaceutical company that utilizes our proprietary technology for the development and commercialization of a therapeutic iron compound to treat anemia and novel imaging agents to aid in the diagnosis of cancer and cardiovascular disease. We currently manufacture and sell two approved products, Feraheme® (ferumoxytol) Injection for intravenous, or IV, use and GastroMARK®.

On June 30, 2009, *Feraheme* was approved for marketing in the U.S. by the U.S. Food and Drug Administration, or the FDA, for use as an IV iron replacement therapy for the treatment of iron deficiency anemia, or IDA, in adult patients with chronic kidney disease, or CKD. We market and sell *Feraheme* through our own commercial organization consisting of seasoned professionals, including a specialized sales force and an experienced account management and reimbursement team. We sell *Feraheme* primarily to authorized wholesalers and specialty distributors and began commercial sale of *Feraheme* in the U.S. in July 2009.

In November 2009, the Centers for Medicare & Medicaid Services assigned *Feraheme* two unique Q-codes, one for the treatment of IDA in end-stage renal disease patients undergoing dialysis and one for the treatment of IDA in non-end-stage renal disease patients. These Q-codes, which are temporary product-specific codes, that enable automated processing of *Feraheme*-related claims, became effective on January 1, 2010.

In December 2009, we submitted certain pediatric protocols to meet our FDA post-approval Pediatric Research Equity Act requirement to support pediatric labeling of *Feraheme* and we intend to initiate these pediatric studies in 2010.

We plan to advance our *Feraheme* clinical development program in the U.S. by conducting additional clinical trials to assess *Feraheme* for the treatment of IDA in a broad range of patients, which may include women with abnormal uterine bleeding, or AUB, and patients with cancer and gastrointestinal diseases. We are in continuing discussions with the FDA to finalize the design of a global Phase III clinical development program for *Feraheme* to treat IDA regardless of the underlying cause and intend to initiate our Phase III program by mid-2010.

We also continue to evaluate our strategy for seeking approval for *Feraheme* as an IV iron replacement therapeutic agent in countries outside of the U.S. The commercial opportunity for *Feraheme* as an IV iron replacement therapeutic agent varies from country to country, and in determining which additional markets outside of the U.S. we intend to enter, we are assessing factors such as potential pricing and reimbursement, the role of iron in medical treatment protocols and the regulatory requirements of each country. We expect to file a Marketing Authorization Application, or MAA, for *Feraheme* for the treatment of IDA in patients with CKD with the EMEA by mid-2010. In the fourth quarter of 2009, we received approval from the EMEA for our Pediatric Investigation Plan, which is a prerequisite for the submission of our *Feraheme* MAA. To further support our MAA, we plan to conduct one additional clinical study evaluating *Feraheme* treatment compared to treatment with another IV iron. We intend to conduct this study concurrent with the EMEA's review of the *Feraheme* MAA.

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In December 2009, we filed a New Drug Submission with the Therapeutic Products Directorate of Health Canada, the regulatory agency in Canada, for *Feraheme* to treat IDA in patients with CKD. In December 2009, our partner in China, 3SBio, Inc., or 3SBio, also filed an application for a registrational trial with the Chinese regulatory agency. The approval of the application will allow 3SBio to begin a bridging study of *Feraheme* in CKD patients, which is necessary to file for marketing approval in China. In addition, we are also currently evaluating possible strategic alliances and partnerships to assist us in entering other foreign markets.

In addition to its use for the treatment of IDA, *Feraheme* may also be useful as a vascular enhancing agent in magnetic resonance imaging, or MRI. In August 2008, the FDA granted Fast Track designation to *Feraheme* with respect to its development as a diagnostic agent for vascular-enhanced MRI for the assessment of peripheral arterial disease, or PAD, in patients with CKD. We have enrolled over half of our 108 patient Phase II study of *Feraheme* in vascular-enhanced MRI for the detection of clinically significant arterial stenosis or occlusion.

GastroMARK, our oral contrast agent used for delineating the bowel in MRI, is approved and marketed in the U.S., Europe, and other countries through our marketing partners. Sales of *GastroMARK* by our marketing partners have been at their current levels for the last several years, and we do not expect sales of *GastroMARK* to change materially.

Feridex I.V.®, our liver contrast agent, had been marketed and sold in the U.S., Europe and other countries for a number of years through our marketing partners. In November 2008, we decided to cease manufacturing *Feridex I.V.* Accordingly, we have terminated all of our agreements with our marketing partners for *Feridex I.V.* throughout the world and do not intend to continue commercializing *Feridex I.V.* We recorded no product sales revenues associated with *Feridex I.V.* in 2009 and do not expect to recognize any *Feridex I.V.* related revenues in 2010.

Our common stock trades on the NASDAQ Global Market, or NASDAQ, under the trading symbol "AMAG."

Our Core Technology

Our core technology is based on small, coated superparamagnetic iron oxide nanoparticles and their characteristic properties. Our core competencies include the ability to design such nanoparticles for particular applications, to manufacture the nanoparticles in controlled sizes and to cover the nanoparticles with different coatings depending upon the application for which they will be used. Our technology and expertise enable us to synthesize, sterilize and stabilize these iron oxide nanoparticles in a manner necessary for use in pharmaceutical products such as IV iron replacement therapeutics and MRI contrast agents.

Our iron oxide nanoparticles are composed of bioavailable iron that is easily utilized by the body and incorporated into the body's iron stores. As a result, products using our core technology are well suited for use as an IV iron replacement therapy. Additionally, the superparamagnetic characteristic of our products result in nanoparticles that become strongly magnetic when placed in a magnetic field, but lose their magnetism once the field is removed. Therefore, use of our nanoparticles can result in magnetic resonance images that provide essential information to the reviewing physician. Our rights to our technology are derived from and/or protected by license agreements, patents, patent applications and trade secret protections.

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The following table summarizes applications and potential applications of our products, the names of our principal marketing partners, the current U.S. and foreign status and primary markets for each of our products.

Product	Applications	Marketing Partners	U.S. Status	Foreign Status
<i>Feraheme</i>	IV iron replacement therapeutic agent for treatment of IDA in adult patients with CKD.	3SBio Inc. (China)	Approved for commercial sale on June 30, 2009; commenced commercial launch in July 2009.	3SBio filed for registrational trial with the Chinese regulatory agency in December 2009. New Drug Submission filed with the Therapeutic Products Directorate of Health Canada in December 2009. Marketing Authorization Application planned to be filed with the European Medicines Agency by mid-2010.
	IV iron replacement therapeutic agent in patients with IDA, regardless of underlying cause.	None	Global Phase III program planned to be initiated by mid-2010.*	No marketing applications filed to date.
	Vascular-Enhanced MRI agent for PAD.	None	Phase II clinical trial in progress.	No marketing applications filed to date.
<i>GastroMARK</i>	Delineating the bowel in abdominal imaging.	Covidien, Ltd. (U.S.); and Guerbet, S.A. (various countries in the European Union, South America, the Middle East, southeast Asia, Africa and eastern Europe)	Approved and marketed.	Approved and marketed in several European Union countries.

*

The study designs and timelines for the initiation of our clinical development programs for *Feraheme* in patients with IDA are currently subject to the completion of protocol discussions with the FDA.

Feraheme* as an IV Iron Replacement TherapeuticOverview*

On June 30, 2009, *Feraheme* was approved for marketing in the U.S. by the FDA for use as an IV iron replacement therapy for the treatment of IDA in adult patients with CKD. In July 2009, we began to market and sell *Feraheme* in both the dialysis and non-dialysis markets, including to nephrologists, hematologists, dialysis organizations, hospitals and other end-users.

Our NDA for *Feraheme* was supported by four pivotal Phase III clinical studies for *Feraheme* as an IV iron replacement therapeutic agent in patients with CKD. These trials included patients with all stages of CKD, including patients with stages 1 through 5 CKD who were not on dialysis, patients with stage 5 CKD who were on hemodialysis or peritoneal dialysis, and kidney transplant recipients.

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Chronic kidney disease, anemia, and iron deficiency

It has been estimated that approximately 10% to 15% of the U.S. adult population is affected by CKD, a condition generally characterized by damaged kidneys, or a reduction in kidney function below 60 percent of normal. Anemia, a common condition among CKD patients, is associated with cardiovascular complications, decreased quality of life, hospitalizations, and increased mortality. Anemia develops early during the course of CKD and worsens with advancing kidney disease. Iron deficiency is a common cause of anemia in CKD patients and can result from multiple blood draws, hospitalizations and interventional procedures, gastrointestinal bleeding, or poor nutritional intake. Regardless of the cause of anemia, iron replacement therapy is essential to increase iron stores and raise hemoglobin levels. Iron is also essential for effective treatment with erythropoiesis stimulating agents, or ESAs, which are commonly used in anemic patients to stimulate red blood cell production.

According to an estimate by the United States Renal Data System, or USRDS, there were projected to be approximately 393,000 CKD patients on dialysis in the U.S. in 2009. Approximately 90% of these dialysis patients received IV iron as part of managing their anemia. Additionally, according to estimates contained in a 2007 publication in the *Journal of American Medical Association*, based on the 1999 to 2004 National Health and Nutrition Examination Survey, in 2000 there were over 16 million people in the U.S. suffering from stage 3 or stage 4 CKD who were not on dialysis. If these estimates are applied to the U.S. Census population estimates for 2009, then the number of patients with stage 3 and 4 CKD was approximately 18 million in the U.S. Among these patients, we estimate that approximately 3 million have anemia based on the 2004 USRDS Annual Data Report. Moreover, data contained in a 2002 publication in the *Journal of the American Society of Nephrology*, suggests that up to 1.6 million of stage 3 and 4 non-dialysis CKD patients with anemia may be iron deficient and could therefore benefit from receiving IV iron.

Currently there are two methods used to treat iron deficiency anemia in CKD patients; oral iron supplements and IV iron. Oral iron supplements used as an iron replacement therapy are often not absorbed well by the gastrointestinal tract and frequently have side effects, such as constipation, diarrhea, and cramping, which can cause patients to stop taking their medication. In addition, it can take an extended time for hemoglobin levels to improve following the initiation of oral iron treatment. Conversely, iron given intravenously allows larger amounts of iron to be provided to patients while avoiding many of the side effects and treatment compliance issues associated with oral iron, and can result in faster rises in hemoglobin levels. The administration of IV iron has been shown to be effective in treating anemia either when used alone or in combination with an ESA and current U.S. treatment guidelines indicate that treating first with iron alone may delay or reduce the need for ESA therapy.

For IV iron replacement therapy in patients with CKD, the total therapeutic course of iron typically used in clinical practice is 1,000 milligrams, or one gram. Rapid administration of large doses of other IV iron products has been associated with an unfavorable safety profile. As a result, other IV iron products are typically administered as a slow push or a 15 to 60 minute infusion in doses of 100 to 200 milligrams, thus requiring five to ten physician visits and repeated IV access for patients to receive a standard one gram therapeutic course, potentially resulting in considerable burden to both providers and patients. *Feraheme* is administered as a 510 milligram injection followed by a second 510 milligram injection three to eight days later, each of which can be administered at a regular office visit or during dialysis treatment without the use of infusion equipment or prolonged medical intervention.

Feraheme in indications other than CKD

Iron deficiency anemia is widely prevalent in many different patient populations, including women with AUB and patients with cancer and gastrointestinal diseases. We believe that the product characteristics of *Feraheme* support clinical development in these additional indications and are currently in the process of developing a global clinical program for *Feraheme* in a broad range of patients with IDA,

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regardless of the cause. The study design and timelines for the initiation of our clinical development program for *Feraheme* in broad-based IDA patients are currently subject to the completion of protocol discussions with the FDA.

Included among the additional patient populations we are evaluating for additional indications of *Feraheme*, are women with AUB and cancer patients. AUB is defined as chronic, heavy, or prolonged uterine bleeding that can result from multiple causes including uterine abnormalities, blood disorders, pregnancy, intrauterine devices, medications, and heavy menstrual bleeding. Both iron deficiency and IDA are commonly associated with AUB. The prevalence of anemia in AUB patients ranges from 10% to 67%, and the prevalence of iron deficiency in AUB patients ranges from 20% to 50%, depending on patient age and diagnostic criteria. IDA in patients with AUB, regardless of the cause, requires treatment with iron supplementation, either by oral or IV administration.

Anemia is also common in patients with cancer. Depending on the type of cancer, between 30% and 90% of patients with cancer have anemia. Iron supplementation through both oral and IV administration has an important role in treating anemia in cancer patients. While there may be some differences in the underlying causes of anemia and iron deficiency in cancer patients who are receiving chemotherapy and those who are not, patients in both categories may develop absolute IDA due to blood loss and/or the inadequate intake or absorption of iron. Oral iron has been used to treat IDA in cancer patients, but its efficacy is variable due to inconsistent bioavailability and absorption, the high incidence of gastrointestinal side effects, potential interactions with other treatments, and patient noncompliance. IV iron has been shown in small clinical trials to be well tolerated in the cancer patient population in both patients who are receiving chemotherapy and those who are not.

Ferumoxytol as a Diagnostic Agent for Vascular Enhancement in MRI

MRI is a non-invasive method used to visualize normal or abnormal anatomy or pathophysiology in order to diagnose disease and injury. Imaging agents or biomarkers play an important role in improving the quality of diagnostic images by increasing the contrast between different internal structures or types of tissues in various disease states.

Ferumoxytol is currently in development as an agent for vascular-enhanced MRI because of its ability to increase the magnetic relaxivity of blood, resulting in magnetic resonance images with enhanced vascular contrast. When used with the appropriate pulse sequence, ferumoxytol may provide high-quality diagnostic images. In addition to its superparamagnetic properties, ferumoxytol can be administered rapidly as an IV injection at a rate of up to one milliliter per second. It also has a long blood half-life of approximately 15 hours, which may permit repeated imaging of the same or different body regions. These features of ferumoxytol may make it useful as an MRI biomarker in vascular disorders.

The initial focus of our clinical development of ferumoxytol as an imaging agent has been in patients with PAD for the detection of clinically significant arterial stenosis or occlusion. PAD is a manifestation of atherosclerotic cardiovascular disease and can occur when plaque builds up on the inside wall of the arteries that carry blood from the heart to the head, internal organs and limbs causing the arteries to narrow, which can reduce or block blood flow. Symptomatic PAD is associated with decreased quality of life, and whether symptomatic or asymptomatic, PAD is associated with an increased risk of cardiovascular and cerebrovascular problems, and cardiovascular mortality.

The prevalence of PAD in the U.S. is approximately 8 million adults, affecting up to 20% of individuals 65 years of age and older. The prevalence of PAD increases with age, diabetes, CKD, hypertension and smoking, as does the presence of known atherosclerosis in other parts of the body. In the U.S., cardiovascular disease is an important cause of morbidity and mortality, with a prevalence of approximately one in three adults. Additionally, cardiovascular disease is the leading cause of death, accounting for approximately 35% of all deaths in 2005.

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Both the diagnosis and clinical management of PAD and cardiovascular disease often require the accurate assessment of vascular anatomy, and therefore, there is an important medical need for the availability of safe and effective techniques for invasive and/or non-invasive imaging modalities in these patient populations. High-resolution imaging, including digital subtraction angiography, contrast-enhanced computed tomography, and contrast-enhanced magnetic resonance angiography all provide the depiction of vascular anatomy required for consideration of endovascular or surgical intervention. However, there are important side effects of these techniques that seriously impact the appropriate evaluation of patients. There is a well-known risk of kidney damage associated with the administration of certain contrast agents for computed tomography, digital subtraction angiography, and X-ray angiography. The currently approved contrast agents used for MRI in the U.S. are all gadolinium-based and are associated with rare but severe adverse events in patients with CKD. In September 2007, the FDA issued a "Black Box" warning for all gadolinium-based contrast agents in certain patients due to such agents' observed association with Nephrogenic Systemic Fibrosis, or NSF. NSF is a condition that so far has only occurred in patients with kidney disease. NSF can pose a serious and potentially fatal risk to patients with CKD and limit the use of currently available contrast agents in this patient population. Currently there is no effective treatment for NSF.

Ferumoxytol is an iron-based agent with unique paramagnetic properties that may be visualized by MRI. Currently, there are no iron-based PAD contrast agents approved for MRI in the U.S. The FDA has granted Fast Track designation to ferumoxytol for its development as a diagnostic agent for vascular-enhanced MRI to improve the assessment of PAD in patients. The Fast Track process is designed to facilitate the development and expedite the FDA's review of products and is intended to bring valuable treatments more quickly to patients in need. We have initiated a 108 patient Phase II study of ferumoxytol for vascular-enhanced MRI for the detection of clinically significant arterial stenosis or occlusion, and have currently enrolled over half of the patients in this study.

We currently have exclusive world-wide rights to market and sell ferumoxytol as an imaging agent.

Feridex I.V.

Feridex I.V. was approved by the FDA in 1996 and by the Committee for Proprietary Medicinal Products in the European Union, or EU, in 1994. In November 2008, we decided to cease manufacturing *Feridex I.V.*, and we do not intend to continue its commercialization. Accordingly, we have terminated all of our agreements with our marketing partners for *Feridex I.V.* throughout the world. We recorded no product sales revenues associated with *Feridex I.V.* in 2009 and do not expect to recognize any *Feridex I.V.* related revenues in 2010.

GastroMARK

Images of organs and tissues in the abdomen using MRI without contrast agents can be difficult to read because the abdominal organs and tissues cannot be easily distinguished from the loops of the bowel. *GastroMARK*, our oral contrast agent for delineation of the bowel, flows through and darkens the bowel when ingested. By more clearly identifying the intestinal loops, *GastroMARK* enhances the ability to distinguish the bowel from adjacent tissues and organs in the upper gastrointestinal tract. Sales of *GastroMARK* by our marketing partners have been at their current levels for the last several years, and we do not expect sales of *GastroMARK* to materially increase.

GastroMARK was approved by the FDA in 1996. Our marketing partner, Covidien, Ltd., or Covidien, formerly Tyco Healthcare, Ltd., or Tyco Healthcare, and Mallinckrodt, Inc., or Mallinckrodt, has been marketing *GastroMARK* in the U.S. since 1997. We initially licensed the marketing rights to *GastroMARK* on an exclusive basis to Guerbet S.A., or Guerbet, in western Europe and Brazil. Guerbet has been marketing *GastroMARK* in several EU countries since 1993 under the tradename Lumirem® and

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subsequently acquired the rights to market *GastroMARK* in several other countries in South America, the Middle East, southeast Asia, Africa, and eastern Europe.

Our principal offices are located at 100 Hayden Avenue, Lexington, Massachusetts 02421, and our telephone number is (617) 498-3300.

Recent Developments

On January 10, 2010, we announced expected *Feraheme* net product revenues of between \$12.0 million and \$13.0 million (unaudited) for the fourth quarter of 2009, including approximately \$1.0 million of \$11.5 million in previously deferred product revenues. During the third quarter of 2009, shortly after the launch of *Feraheme*, we implemented a launch incentive program, under which certain dialysis organizations purchased *Feraheme* directly from us. This incentive program provided these customers with discounted pricing and expanded rights of return and as a result we deferred revenues associated with this program which we will recognize as revenues as the participating organizations utilize their inventory of *Feraheme*. We expect that utilization of the remaining deferred product revenues from the launch incentive program, which were recorded during the third quarter of 2009, will increase going forward as each launch incentive program customer has now initiated a pilot program and begun to use *Feraheme*.

On January 10, 2010, we also announced that we expect that total operating expenses for the fourth quarter of 2009 will be higher than that reported for the third quarter of 2009 due primarily to increased research and development expenses and commercial spending. We expect total operating expenses, including cost of product sales, research and development expenses, and selling, general and administrative expenses, of between \$32.0 million and \$35.0 million (unaudited) for the fourth quarter of 2009. We intend to continue to invest in *Feraheme* in order to expand the indications for *Feraheme* in the U.S. and to maximize its commercial potential worldwide. As a result, we expect our total operating expenses in 2010 to be significantly higher than our operating expenses in 2009. The primary factors that will affect the amount and timing of our 2010 operating expenses include the timing of initiation and pace of enrollment of our pediatric studies of *Feraheme*, the design, timing and pace of enrollment of our other clinical trials of *Feraheme*, including our planned trial of *Feraheme* in a broad range of patients with IDA and our planned trial of *Feraheme* to support our MAA filing with the EMEA, and costs associated with programs and initiatives we undertake to support the commercialization of *Feraheme*.

Because we only recently launched *Feraheme* in the United States in the third quarter of 2009, there are a number of factors that make it particularly difficult to predict the magnitude of future *Feraheme* net product revenues. Accordingly, our expected *Feraheme* net product revenues for the fourth quarter of 2009 may not be indicative of future *Feraheme* net product revenues. The factors that make it difficult to predict future *Feraheme* net product revenues include the magnitude and timing of adoption of *Feraheme* by physicians, dialysis clinics and other healthcare payors and providers; the inventory levels maintained by *Feraheme* wholesalers, distributors and other customers; the frequency of re-orders by existing customers; and the pricing of products that compete with *Feraheme* and other actions taken by competitors. As a result of these factors and the other risk factors identified in this prospectus supplement, sales of *Feraheme* could be lower than anticipated or vary significantly from quarter to quarter.

The financial data for the quarter ended December 31, 2009 set forth above is preliminary and is based on information available to management as of the date of this prospectus supplement and is subject to completion by management of our financial statements for the quarter and year ended December 31, 2009. Our independent public accountants have not audited, reviewed or performed any procedures with respect to such preliminary financial data and accordingly do not express an opinion or any other form of assurance with respect thereto.

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The Offering

Common Stock offered by us 3,000,000 shares

Common stock to be outstanding after the offering 20,386,794 shares

Use of Proceeds We intend to use the net proceeds from this offering for general corporate purposes, including working capital, research and development expenditures, sales and marketing expenditures, and business development activities, including the potential acquisition or in-licensing of additional assets. See "Use of Proceeds."

Risk Factors You should read the "Risk Factors" section of this prospectus supplement for a discussion of factors to consider before deciding to purchase shares of our common stock.

Nasdaq Global Market symbol AMAG

The number of shares outstanding after this offering is based on 17,386,794 shares of our common stock outstanding as of January 15, 2010, and excludes:

2,380,963 shares of our common stock issuable upon exercise of outstanding stock options at a weighted average exercise price of \$39.75 and 215,500 shares of common stock issuable upon the vesting of restricted stock units granted pursuant to our stock option plans; and

an aggregate of 998,102 additional shares of common stock reserved for future issuance under our Amended and Restated 2007 Equity Incentive Plan and our 2006 Employee Stock Purchase Plan.

Except as otherwise indicated, all information in this prospectus supplement assumes no exercise by the underwriters of their over-allotment option.

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RISK FACTORS

Before you participate in this offering, you should be aware that there are various risks in making an investment in our common stock, including the ones listed below.

The following risk factors should be considered carefully together with the information provided elsewhere in this prospectus supplement, the accompanying prospectus, our Annual Report on Form 10-K for the fiscal year ended December 31, 2008, our subsequent Quarterly Reports on Form 10-Q with respect to the quarterly periods ended March 31, 2009, June 30, 2009, and September 30, 2009, and any other documents we incorporate by reference in evaluating this offering.

The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. If any of the following risks actually occur, our business, financial conditions and results of operations could be materially and adversely affected.

We are solely dependent on the success of Feraheme.

Our ability to generate future revenues is solely dependent on our successful commercialization and development of *Feraheme*. We currently sell only one other product, *GastroMARK*, in the U.S. and in certain foreign jurisdictions through our partners. However, sales of *GastroMARK* have been at their current levels for the last several years, and we do not expect sales of *GastroMARK* to materially increase. Accordingly, if we are unable to generate sufficient revenues from sales of *Feraheme*, we may never be profitable, our financial condition will be materially adversely affected, and our business prospects will be limited.

We intend to dedicate significant resources to our *Feraheme* development efforts; however, we may not be successful in expanding the potential indications or developing new applications for *Feraheme*. Although we are pursuing or have commenced additional clinical trials for *Feraheme* in indications other than chronic kidney disease and as an imaging agent, we are not currently conducting or sponsoring research to expand our product development pipeline beyond *Feraheme* and therefore our revenues and operations will not be as diversified as some of our competitors which have multiple products or product candidates. Any failure by us to acquire, develop and commercialize additional products and product candidates or gain approval for additional indications or uses for *Feraheme* could limit long-term shareholder value and would adversely affect the future prospects of our business.

Competition in the pharmaceutical and biopharmaceutical industries is intense. If our competitors are able to develop and market products that are or are perceived to be more effective, safer, more convenient or have more favorable pricing, insurance coverage, coding and reimbursement than Feraheme, the commercial opportunity for Feraheme will be adversely impacted.

The pharmaceutical and biopharmaceutical industries are subject to intense competition and rapid technological change. We have competitors both in the U.S. and internationally, and many have greater financial and other resources, and more experienced trade, sales, and manufacturing organizations, than we do. In addition, many of our competitors have name recognition, established positions in the market and long-standing relationships with customers and distributors. Our *Feraheme* commercial opportunity will be reduced or eliminated if our competitors develop, commercialize or acquire or license technologies and drug products that are or are perceived to be safer, more effective, and/or easier to administer, or have more favorable pricing, insurance coverage, coding and reimbursement than *Feraheme*.

There are currently two options for treating iron deficiency anemia in chronic kidney disease patients: oral iron supplements and intravenous iron. *Feraheme* primarily competes with existing intravenous iron replacement therapies, including Venofer®, which is marketed in the U.S. by Fresenius Medical Care North America and American Regent Laboratories, Inc., a subsidiary of Luitpold Pharmaceuticals, Inc.,

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Ferrlecit®, which is marketed by Sanofi-Aventis U.S. LLC, and certain oral iron products. *Feraheme* may not receive the same level of market acceptance as these competing iron replacement therapy products, especially since these products have been on the market longer and are currently widely used by physicians. We may not be able to convince physicians and other healthcare providers or payors to switch from using the existing marketed intravenous iron therapeutic products to *Feraheme*. The iron replacement therapy market is highly sensitive to several factors including, but not limited to, the actual and perceived safety profile of the available products, the ability to obtain appropriate insurance coverage, coding and reimbursement, price competitiveness, and product characteristics such as convenience of administration and dosing regimens. To date, we have not conducted any head-to-head clinical studies comparing *Feraheme* to other intravenous iron replacement products.

In addition to the foregoing currently marketed products, there are several iron replacement therapy products in various stages of clinical and commercial development in the U.S. and abroad, including Injectafer®, which is known Ferinject® in Europe, and soluble ferric pyrophosphate, a form of iron given as part of the hemodialysis procedure.

In addition to competition from existing marketed products and products known by us to be currently under development, the market opportunity for *Feraheme* could be negatively affected if generic intravenous iron replacement therapy products were to be approved and achieve commercial success. For example, in July 2009, Watson Pharmaceuticals, Inc. announced that it entered into a license agreement with GeneraMedix, Inc. for the exclusive U.S. marketing rights to a generic version of Ferrlecit®, which is indicated for the treatment of iron deficiency anemia in hemodialysis patients receiving supplemental erythropoiesis stimulating agent therapy. GeneraMedix, Inc. has filed an Abbreviated New Drug Application with the FDA, which is under expedited review. Companies that manufacture generic products typically invest far less resources in research and development than the manufacturer of a branded product and can therefore price their products significantly lower than those already on the market. It remains unclear if and when a generic product will enter this market.

If any of these product candidates are approved for marketing and sale by the FDA, our efforts to market and sell *Feraheme* and our ability to generate additional revenues and achieve profitability could be adversely affected.

Feraheme may not be widely adopted by physicians, patients, healthcare payors, and the major operators of dialysis clinics in the U.S.

The commercial success of *Feraheme* depends upon its level of market adoption by physicians, patients, and healthcare payors or providers, including dialysis clinics. If *Feraheme* does not achieve an adequate level of market adoption for any reason, our potential profitability and our future business prospects would be severely adversely impacted. *Feraheme* represents an alternative to existing products and might not be adopted by the medical community if perceived to be no safer, no more effective, or no more convenient than currently available products. The degree of market acceptance of *Feraheme* depends on a number of factors, including but not limited to:

Our ability to demonstrate to the medical community, particularly nephrologists, hematologists, dialysis clinics and others who may purchase or prescribe *Feraheme*, the clinical efficacy and safety of *Feraheme* as an alternative to current treatments for iron deficiency anemia in both dialysis and non-dialysis chronic kidney disease patients;

The ability of physicians and other providers to be adequately reimbursed for *Feraheme* in a timely manner from payors, including government payors, such as Medicare and Medicaid, and private payors, particularly in light of the expected "bundling" of costs of providing care to dialysis patients;

The relative price of *Feraheme* as compared to alternative iron replacement therapeutic agents;

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The actual or perceived convenience and ease of administration of *Feraheme* as compared to alternative iron replacement therapeutic agents;

The effectiveness of our sales and marketing organizations and our distribution network; and

The development of unanticipated adverse reactions to *Feraheme* resulting in safety concerns among prescribers.

We market and sell *Feraheme* for use by both dialysis and non-dialysis chronic kidney disease patients. The dialysis market is the largest and most established market for intravenous iron replacement therapies, with two companies serving a significant majority of all dialysis patients in the U.S. Fresenius Medical Care North America and DaVita, Inc., together treat approximately two-thirds of the U.S. dialysis population. If we are unable to successfully market and sell *Feraheme* to physicians who treat dialysis dependent chronic kidney disease patients in clinics controlled by either or both of Fresenius Medical Care North America and DaVita, Inc., our ability to realize and grow revenues from sales of *Feraheme* could be limited. In addition, if we are unable to successfully market and sell *Feraheme* to a significant number of the dialysis clinics that treat the remaining one-third of the U.S. dialysis population, our potential profitability and our future business prospects could be materially adversely impacted.

In September 2008, Fresenius Medical Care North America finalized an exclusive sublicense agreement with Luitpold Pharmaceuticals, Inc., the U.S. licensing partner of Vifor Pharma, a subsidiary of Galenica Ltd., to manufacture, sell and distribute Venofer®, an existing intravenous iron replacement therapeutic, to independent outpatient dialysis clinics in the U.S. Luitpold Pharmaceuticals, Inc. retains the right to sell Venofer® in the U.S. to any other customer. In addition, in 2008, Galenica Ltd., Vifor Pharma and Fresenius Medical Care North America entered into a strategic joint-venture, which became effective on January 1, 2009, to market and distribute the intravenous iron products Venofer® and Ferinject® in the dialysis market in Europe, the Middle East, Africa and Latin America. Fresenius Medical Care North America has significant experience selling and distributing dialysis equipment and supplies to outpatient dialysis clinics and, as a result of these agreements, it may be difficult for us to penetrate the dialysis market, particularly at their clinics.

Another key component of our commercialization strategy is to market and sell *Feraheme* for use by non-dialysis chronic kidney disease patients. The current non-dialysis market is comprised primarily of three segments: the hospital, hematology office and nephrology office settings. Our ability to effectively market and sell *Feraheme* in the hospital market depends in part upon our ability to achieve acceptance of *Feraheme* onto hospital formularies. In addition, since many hospitals are members of group purchasing organizations, which leverage the purchasing power of a group of entities to obtain discounts based on the collective bargaining power of the group, our ability to attract customers in the hospital market also depends in part on our ability to effectively promote *Feraheme* within group purchasing organizations. In addition, intravenous iron therapeutic products are not currently widely used by physicians who treat non-dialysis chronic kidney disease patients in the physician's office setting due to safety concerns and the inconvenience and often impracticability of administering the existing marketed intravenous iron therapeutic products in that setting. It is often difficult to change physicians' existing treatment paradigms even when supportive clinical data is available. If we are not successful in securing and maintaining formulary coverage for *Feraheme* or are significantly delayed in doing so or if we are not successful in effectively promoting *Feraheme* to physicians who treat non-dialysis chronic kidney disease patients in the physician's office setting, we will have difficulty achieving market acceptance of *Feraheme* in the non-dialysis market and our ability to generate revenues and achieve and maintain profitability, and our long-term business prospects could be adversely affected.

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Our ability to generate future revenues from Feraheme depends heavily on the ability of end-users to receive adequate reimbursement for the use of Feraheme in a timely manner.

The commercial success of *Feraheme* substantially depends on the availability and extent of reimbursement for *Feraheme* from third-party payors, including governmental payors, such as Medicare and Medicaid, and private payors. *Feraheme* is purchased by hospitals, clinics, dialysis centers, physicians and other users, each of which generally relies on third-party payors to reimburse them or their patients for pharmaceutical products administered in the hospital, clinic, dialysis center and physician-office settings. Public and private insurance coverage and reimbursement plans are therefore central to new product acceptance, with customers unlikely to use *Feraheme* if they do not receive adequate reimbursement in a timely manner. If *Feraheme* is not reimbursed at an adequate level, our ability to generate revenues from sales of *Feraheme*, our potential profitability and our future business prospects would be adversely affected.

In the U.S. there have been, and we expect there will continue to be, a number of federal and state proposals to reform the healthcare system in ways that could adversely impact the available reimbursement for, and therefore our ability to sell Feraheme profitably.

In the U.S., both federal and state agencies continue to promote efforts to reduce healthcare costs. For example, one of the proposals included in recently proposed federal healthcare legislation would require pharmaceutical manufacturers to be responsible for higher Medicaid rebates owed to state Medicaid agencies. As a result of reimbursement and legislative proposals, and the trend toward managed health care in the U.S., third-party payors, including government and private payors, are also increasingly attempting to contain health care costs by limiting the coverage and the level of reimbursement of new drugs. These cost-containment methods may include, but are not limited to, using formularies, which are lists of approved or preferred drugs, requiring prior authorization or step therapy, which is a program to encourage using lower cost alternative treatments, basing payment amounts on the least costly alternative treatment, or refusing to provide coverage of approved products for medical indications other than those for which the FDA has granted marketing approval. Cost control initiatives could adversely affect the commercial opportunity or decrease the price of *Feraheme* and may impede the ability of potential *Feraheme* users to obtain reimbursement, any of which could have a material adverse effect on our profitability and future business prospects.

Medicare currently reimburses for physician-administered drugs in the dialysis center and physician clinic at a rate of 106% of the drug's average selling price. If the Centers for Medicare & Medicaid Services, or one of its local contractors, believe that *Feraheme*'s average selling price is too high, it may attempt to initiate one or more of the cost-containment methods discussed above at either the national or local level. In July 2008, Congress enacted the Medicare Improvements for Patients and Providers Act of 2008 which created a bundled payment system for the treatment of end stage renal disease to take effect on January 1, 2011. The Medicare Improvements for Patients and Providers Act of 2008 requires the Centers for Medicare & Medicaid Services to move from a system in which it pays separately for physician-administered drugs for dialysis patients to a system in which all costs of providing care to dialysis patients are bundled together into a single capitated payment beginning on January 1, 2011, and to complete the phase-in by January 1, 2014. In September 2009, in compliance with the statutory requirements of the Medicare Improvements for Patients and Providers Act of 2008, the Centers for Medicare & Medicaid Services proposed a new prospective payment system for dialysis services provided to Medicare beneficiaries who have end stage renal disease. The Centers for Medicare & Medicaid Services is currently accepting comments and will respond to comments in a final rule expected to be issued in 2010. This bundled approach to reimbursement may lower utilization of physician-administered drugs in the end stage renal disease market. In addition, the bundled approach to reimbursement in the dialysis setting may lower the amount of reimbursement available for *Feraheme* and consequently put downward pressure on the price we can charge for *Feraheme*. Therefore, we may be limited in our ability to successfully market and sell *Feraheme* in the dialysis setting. While the Medicare Improvements for Patients and Providers Act of

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2008 applies only to Medicare, private payors and state Medicaid plans frequently adopt Medicare principles in setting their own reimbursement methodologies. Any change in the Medicare reimbursement rate would, therefore, likely result in changes to payment rates from non-Medicare payors as well, further limiting our ability to successfully market and sell *Feraheme*.

To the extent we sell our products internationally, market acceptance may also depend, in part, upon the availability of reimbursement within existing healthcare payment systems. Generally, in Europe and other countries outside of the U.S., the government sponsored healthcare system is the primary payor of healthcare costs of patients and therefore enjoys significant market power. Some foreign countries also set prices for pharmaceutical products as part of the regulatory process, and we cannot guarantee that the prices set by such governments will be sufficient to generate substantial revenues in those countries.

We have limited experience independently commercializing a pharmaceutical product, and any failure on our part to effectively execute our Feraheme commercial plans would have a severe adverse impact on our business.

We have never independently marketed or sold a drug product as we have relied on our corporate partners to market and sell our other approved products, *Feridex I.V.* and *GastroMARK*. We have established an internal sales and marketing infrastructure to market and sell *Feraheme*, and if we are unsuccessful in maintaining an effective sales and marketing function or experience a high level of turnover, then the commercialization of *Feraheme* could be severely impaired. Any failure by us to successfully execute our commercialization plans for *Feraheme* could have a material adverse impact on our ability to generate revenues, our ability to achieve profitability, and the future prospects for our business.

We have limited experience independently distributing a pharmaceutical product, and our Feraheme commercialization plans could suffer if we fail to effectively manage and maintain our supply chain and distribution network.

We do not have significant experience in managing and maintaining a supply chain and distribution network, and we are placing substantial reliance on third-parties to perform product supply chain services for us. Such services include packaging, warehousing, inventory management, storage and distribution of *Feraheme*. We have contracted with Integrated Commercialization Services, Inc. to be our exclusive third party logistics provider to perform a variety of functions related to the sale and distribution of *Feraheme*, including services related to warehousing and inventory management, distribution, contract administration and chargeback processing, government price reporting, accounts receivable management and customer service call center management. As a result, most of our inventory is stored at a single warehouse maintained by Integrated Commercialization Services, Inc. In addition, we have contracted with Catalent Pharma Solutions, LLC to provide certain labeling and packaging services for final *Feraheme* drug product. If Integrated Commercialization Services, Inc. or Catalent Pharma Solutions, LLC are unable to provide uninterrupted supply chain services or labeling and packaging services, respectively, we may incur substantial losses of sales to wholesalers or other purchasers of *Feraheme*.

In addition, the packaging, storage and distribution of *Feraheme* requires significant coordination among our manufacturing, sales, marketing and finance organizations and multiple third parties including our third party logistics provider, packaging and labeling provider, distributors, and wholesalers. In most cases, we do not currently have back-up suppliers or service providers to perform these tasks. If any of these third-parties experience significant difficulties in their respective processes, fail to maintain compliance with applicable legal or regulatory requirements, fail to meet expected deadlines or otherwise do not carry out their contractual duties to us, or encounter physical or natural damages at their facilities, our ability to deliver *Feraheme* to meet commercial demand would be significantly impaired. The loss of any of our third party providers, together with a delay or inability to secure an alternate distribution source for end users, could cause the distribution of *Feraheme* to be delayed or interrupted, which would have an adverse effect on our business, financial condition and results of operation.

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We may not be able to operate our manufacturing facility in compliance with current good manufacturing practices and other FDA regulations, which could result in a suspension of our ability to manufacture Feraheme, the loss of our Feraheme inventory, our inability to manufacture sufficient quantities of Feraheme to meet demand, or other unanticipated compliance costs.

Our Cambridge, Massachusetts manufacturing facility is subject to current good manufacturing practices regulations enforced by the FDA through periodic inspections to confirm such compliance. We must continually expend time, money and effort in production, record-keeping and quality assurance and control to ensure that our manufacturing facility meets the FDA's regulatory requirements. Failure to maintain ongoing compliance with current good manufacturing practices regulations and other applicable manufacturing requirements of various regulatory agencies could result in the FDA's issuance of warning letters, fines, the withdrawal or recall of *Feraheme* from the marketplace, total or partial suspension of *Feraheme* production, the loss of our *Feraheme* inventory, suspension of the FDA's review of any future supplemental New Drug Applications, enforcement actions, injunctions or criminal prosecution. If the FDA inspects our manufacturing facility and determines that we are not in compliance with current good manufacturing practices regulations or we otherwise determine that we are not in compliance with these regulations, we could experience an inability to manufacture sufficient quantities of *Feraheme* to meet demand or incur unanticipated compliance expenditures, either of which could have an adverse impact on *Feraheme* sales, our potential profitability and the future prospects of our business.

We currently manufacture Feraheme at one manufacturing facility without a qualified second source manufacturer, and if we experience any difficulties, disruptions or delays in the manufacturing process, we may not be able to produce sufficient quantities of Feraheme to meet commercial demand or continue our Feraheme development efforts.

We currently manufacture *Feraheme* for commercial use and for use in human clinical trials in our Cambridge, Massachusetts manufacturing facility. Although we are working to establish and qualify second source manufacturing facilities, we currently have only one facility at which we produce *Feraheme*. Our ability to manufacture *Feraheme* in sufficient quantities to meet commercial demand and our clinical development needs at acceptable costs is dependent on the uninterrupted and efficient operation of our manufacturing facility. If there are any difficulties, disruptions or delays in the *Feraheme* manufacturing process, including quality control problems, we may experience manufacturing failures which could result in product defects or shipment delays, recall or withdrawal of products previously shipped for commercial or clinical purposes, inventory write-offs or the inability to meet commercial demand for *Feraheme* in a timely and cost-effective manner. Furthermore, if we fail to continue to attract and retain key members of our manufacturing or quality control departments, we may be unable to manufacture sufficient quantities of *Feraheme* in a timely manner, which could delay or impair our product sales and development efforts.

If we cannot produce sufficient quantities of Feraheme at our manufacturing facility, we will need to rely on third party manufacturers, which may expose us to a number of risks.

If we are unable to produce sufficient quantities of *Feraheme* to meet demand or we experience any manufacturing difficulties at our Cambridge, Massachusetts manufacturing facility, we will be required to enter into arrangements with third-party manufacturers. We are currently working to establish and qualify second source manufacturing facilities for *Feraheme*, however we may not be able to enter into agreements with manufacturers whose facilities and procedures comply with current good manufacturing practices, regulations and other regulatory requirements on terms that are favorable to us, if at all. Even if we were to reach agreement, the transition of the manufacturing process to a third party could take a significant amount of time. Any prolonged interruption in our manufacturing operations could result in cancellations of orders or loss of product in the manufacturing process. Furthermore, use of second-source manufacturing facilities may increase the risk of certain problems, including cost overruns, process reproducibility, stability issues, the inability to deliver required quantities of product that conform to

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specifications in a timely manner, or the inability to manufacture *Feraheme* in accordance with current good manufacturing practices. If we are unable to consistently manufacture our products on a timely basis because of these or other factors, we may not be able to meet anticipated commercial demand or our clinical development needs for *Feraheme*. As a result, we may lose sales and fail to generate increased revenues and our clinical development programs may be delayed, which could have an adverse impact on our potential profitability and future business prospects.

Our inability to obtain raw materials and our reliance on sole source suppliers could adversely impact our ability to manufacture sufficient quantities of Feraheme, which would have a severe adverse impact on our business.

We currently purchase certain raw materials used to manufacture *Feraheme* from third-party suppliers. We do not have any long-term supply contracts with these third-parties. Some of these raw materials are procured from a single source with no qualified alternative supplier. We are in the process of identifying and qualifying additional third-party suppliers for these raw materials. Third-party suppliers may cease to produce the raw materials used in *Feraheme* or otherwise fail to supply these raw materials to us or fail to supply these raw materials to us in sufficient quantities for a number of reasons, including but not limited to the following:

Unexpected demand for or shortage of raw materials;

Labor disputes or shortages;

Manufacturing difficulties;

Regulatory requirements or action;

Adverse financial developments at or affecting the supplier; or

Import or export problems.

If any of our third-party suppliers cease to supply our raw materials for any reason, we will be unable to manufacture *Feraheme* or unable to manufacture *Feraheme* in sufficient quantities until we are able to qualify an alternative source, which would adversely affect our ability to satisfy commercial demand and our clinical development needs for *Feraheme*.

The qualification of an alternative source may require repeated testing of the new materials and generate greater expenses to us if materials that we test do not perform in an acceptable manner. In addition, we sometimes obtain raw materials from one vendor only, even where multiple sources are available, to maintain quality control and enhance working relationships with suppliers, which could make us susceptible to price inflation by the sole supplier, thereby increasing our production costs. As a result of the high quality standards imposed on our raw materials, we may not be able to obtain raw materials of the quality required to manufacture *Feraheme* from an alternative source on commercially reasonable terms, or in a timely manner, if at all.

Even if we are able to obtain raw materials from an alternative source, if these raw materials are not available in a timely manner or on commercially reasonable terms, we would be unable to manufacture *Feraheme*, both for commercial sale and for use in our clinical trials, on a timely and cost-effective basis. Any such difficulty in obtaining raw materials would severely hinder our ability to manufacture *Feraheme* and would have a material adverse impact on our ability to generate additional revenues and to achieve profitability.

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Our operating results will likely fluctuate so you should not rely on the results of any single quarter to predict how we will perform over time.

Our future operating results will likely vary from quarter to quarter depending on a number of factors, some of which we cannot control, including but not limited to:

The timing and magnitude of our recognition of revenues from sales of *Feraheme*, including the recognition of net product revenues associated with purchases made under our launch incentive program, which were deferred as of September 30, 2009;

The timing and magnitude of costs associated with the commercialization of *Feraheme* in the U.S., including costs associated with maintaining our commercial infrastructure and executing our promotional and marketing strategy;

The timing and magnitude of costs associated with commercial-scale manufacturing of *Feraheme*, including costs associated with building and maintaining commercial inventory and qualifying additional manufacturing capacities and second source suppliers;

The timing and magnitude of costs associated with our development of additional indications for *Feraheme* and our development of *Feraheme* in countries outside of the U.S.;

Actual or anticipated difficulties, disruptions or delays associated with our manufacturing facility, packager, or supply chain and distribution network;

Changes in laws and regulations concerning reimbursement for *Feraheme*, from government health administration authorities, private health insurers and other third-party payors;

The initiation of litigation to enforce or defend any of our assets; and

Implementation of new or revised accounting or tax rules or policies.

As a result of these and other factors, our quarterly operating results could fluctuate, and this fluctuation could cause the market price of our common stock to decline. Results from one quarter should not be used as an indication of future performance.

Wholesaler and distributor buying patterns and other factors may cause our quarterly results to fluctuate, and these fluctuations may adversely affect our short-term results.

Our results of operations, including, in particular, product sales revenues, may vary from period to period due to a variety of factors, including the buying patterns of our wholesalers and distributors, which vary from quarter to quarter. In the event wholesalers and distributors with whom we do business determine to limit their purchases of our products, sales of our products could be adversely affected. For example, in advance of an anticipated price increase, customers may order *Feraheme* in larger than normal quantities which could cause sales of *Feraheme* to be lower in subsequent quarters than they would have been otherwise. Further, any changes in purchasing patterns, inventory levels, increases in returns of *Feraheme*, delays in purchasing products or delays in payment for products by one of our distributors could also have a negative impact on our revenue and results of operations.

If the estimates we make, or the assumptions on which we rely, in preparing our consolidated financial statements prove inaccurate, our actual results may vary from those reflected in our projections and accruals.

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Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of our assets, liabilities, revenues and expenses, the amounts of charges accrued by us, and related disclosure of contingent assets and liabilities. On an ongoing basis, our management evaluates our critical and other significant estimates and judgments, including among others, those related to revenue recognition and related allowances,

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investments, inventory, stock-based compensation, accrued expenses and income taxes. We base our estimates on market data, our observance of trends in our industry, and on various other assumptions that we believe to be reasonable under the circumstances. If actual results differ from these estimates, there could be a material adverse effect on our financial results and the performance of our stock.

As part of our revenue recognition policy, our estimates of product returns, rebates and chargebacks, fees and other discounts require subjective and complex judgments due to the need to make estimates about matters that are inherently uncertain. Any significant differences between our actual results and our estimates could negatively affect our financial position, results of operations and cash flows. In addition, to determine the required quantities of our products and the related manufacturing schedule, we also need to make significant judgments and estimates based on inventory levels, current market trends, anticipated sales, and other factors. Because of the inherent nature of estimates, there could be significant differences between our estimates and the actual amount of product need. For example, the level of our access to wholesaler and distributor inventory levels and sales data, which varies based on the wholesaler or distributor, affects our ability to accurately estimate certain reserves included in our financial statements. Any difference between our estimates and the actual amount of product demand could result in unmet demand or excess inventory, each of which would adversely impact our financial results and results of operation.

We have a history of net losses, and we may not be able to generate sufficient revenues to achieve and maintain profitability in the future.

We have a history of significant operating losses, and we may not be profitable in the future or if we attain profitability, it may not be sustainable. In the past, we have financed our operations primarily from the sale of our equity securities, cash generated by our investing activities, and payments from our marketing and distribution partners. As of September 30, 2009, we had an accumulated deficit of approximately \$263.3 million. Our losses are primarily the result of costs incurred in research and development, including costs associated with our *Feraheme* and other development programs, costs associated with establishing and maintaining our sales and marketing infrastructure, and selling, general and administrative costs. We expect to continue to incur significant expenses to manufacture, market and sell *Feraheme* as an intravenous iron replacement therapeutic in chronic kidney disease patients in the U.S. and to further develop *Feraheme* for additional indications and in additional countries outside of the U.S. As a result, we will need to generate sufficient revenues in future periods to achieve and maintain profitability. We anticipate that the vast majority of any revenue we generate in the near future will be from sales of *Feraheme* as an iron replacement therapeutic agent for chronic kidney disease patients in the U.S. We have never independently marketed or sold any products, and we may not be successful in marketing or selling *Feraheme*. If we are not successful in marketing and selling *Feraheme*, if revenues grow more slowly than we anticipate or if our operating expenses exceed our expectations, our business, results of operations and financial condition could be materially adversely affected. In addition, if we are unable to achieve, maintain or increase profitability on a quarterly or annual basis, the market price of our common stock may decline.

We may need additional capital to achieve our business objectives.

We have expended and will continue to expend substantial funds to successfully commercialize and develop *Feraheme*. As a result, we anticipate that our expenses will increase and that our cash-burn rate will continue to increase in the near- and long-term. Our long-term capital requirements will depend on many factors, including, but not limited to:

The magnitude of *Feraheme* sales and the timing of our receipt of cash from such sales;

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Costs associated with the U.S. commercialization of *Feraheme*, including costs associated with maintaining our commercial infrastructure and distribution network and executing our promotional and marketing strategy for *Feraheme*;

Costs associated with commercial-scale manufacturing of *Feraheme*, including costs associated with building and maintaining commercial inventory and qualifying additional manufacturing capacities and second source suppliers;

Costs associated with our development of additional indications for *Feraheme*;

Costs associated with our pursuit of approval for *Feraheme* as an intravenous iron replacement therapeutic agent outside of the U.S.;

Our ability to liquidate our investments in a timely manner and without significant loss;

The impact of the current deterioration in the credit and capital markets upon the investments in our portfolio;

Our ability to establish additional development and marketing arrangements or to enter into alternative strategic relationships, if necessary; and

Our ability to raise additional capital on terms and within a timeframe acceptable to us, if necessary.

We estimate that our existing cash resources, combined with cash we currently expect to receive from sales of *Feraheme* and earnings on our investments, will be sufficient to finance our operations for at least the next twelve months. Thereafter, we may require additional funds or need to establish alternative strategic arrangements to continue our *Feraheme* commercialization efforts and development activities. We may seek needed funding through arrangements with collaborative partners or through public or private equity or debt financings. We may not be able to obtain financing or to secure alternative strategic arrangements on acceptable terms or within an acceptable timeframe, if at all.

Any additional equity financings or alternative strategic arrangements would be dilutive to our stockholders. In addition, the terms of any debt financing could greatly restrict our ability to raise additional capital and may provide rights and preferences to the investors in any such financing which are not available to current stockholders. Our inability to raise additional capital on terms and within a timeframe acceptable to us when needed could force us to dramatically reduce our expenses and delay, scale back or eliminate certain of our activities and operations, including our commercialization and development activities, any of which would have a material adverse effect on our business, financial condition and future business prospects.

The investment of our cash is subject to risks, which may cause losses or adversely affect the liquidity of these investments.

At September 30, 2009, we had \$62.3 million in cash and cash equivalents, \$39.1 million in short-term investments, \$49.7 million in long-term investments, and \$0.8 million in settlement rights with respect to certain of our auction rate securities. These investments are subject to general credit, liquidity, market and interest rate risks, which have been and may continue to be exacerbated by the U.S. sub-prime mortgage defaults and the ensuing fallout. The recent disruptions in the credit and financial markets have negatively affected many industries, including those in which we invest, and we may realize losses in the fair value of certain of our investments or a complete loss of these investments, which would have an adverse effect on our results of operations, liquidity and financial condition.

At September 30, 2009, we held a total of \$58.2 million in fair market value of auction rate securities, reflecting an impairment of approximately \$7.6 million compared to the par value of these securities of \$65.8 million. Of the \$7.6 million impairment, approximately \$6.8 million is considered a temporary impairment and was reported as an unrealized loss at September 30, 2009. The remaining \$0.8 million

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represents an impairment which was recognized in our consolidated statement of operations at September 30, 2009. In February 2008, our auction rate securities began to experience failed auctions and have continued to experience failed auctions. Since that time, the continued uncertainty in the credit markets has caused almost all additional auctions with respect to our auction rate securities to fail and prevented us from liquidating certain of our holdings of auction rate securities because the amount of these securities submitted for sale has exceeded the amount of purchase orders for these securities. These auctions may continue to fail indefinitely, and there could be a further decline in value of these securities or any other securities, which may ultimately be deemed to be other-than-temporary. In the future, should we determine that these declines in value of auction rate securities are other-than-temporary, we would recognize a loss in our consolidated statement of operations, which could be material. In addition, failed auctions will adversely impact the liquidity of our investments. Based on our ability to access our cash and other short-term investments, our expected operating cash flows, and our other sources of cash, we do not anticipate that the current lack of liquidity with respect to these securities will materially affect our ability to operate our business in the ordinary course in the short term, however, we are uncertain when the current liquidity issues relating to auction rate securities will improve, if at all.

The condition of the credit markets remains dynamic and unpredictable. As a result, we may experience a reduction in value or loss of liquidity with respect to our investments. In addition, should our investments cease paying or reduce the amount of interest paid to us, our interest income would suffer. Further, as part of our determination of the fair value of our investments, we consider credit ratings provided by independent investment rating agencies as of the valuation date. These ratings are subject to change. For example, in February 2009 three of our auction rate securities with a total par value of \$8.7 million and one of our auction rate securities with a par value of \$5.0 million were downgraded by one of the major credit rating agencies to A3 and Baa1, respectively, from their previous rating of Aaa. In contrast, the auction rate securities having a par value of \$5.0 million was re-affirmed as AAA by a different major rating agency in January 2009. As the ratings of our auction rate securities change we may be required to adjust our future valuation of our auction rate securities which may adversely affect the value of these investments. These market risks associated with our investment portfolio may have an adverse effect on our results of operations, cash position, liquidity and overall financial condition.

The current credit and financial market conditions may exacerbate certain risks affecting our business.

Over the past two years, the U.S. and global economies have taken a dramatic downturn as a result of the deterioration in the credit markets and related financial crisis, as well as a variety of other factors including, among other things, extreme volatility in security prices, severely diminished liquidity and credit availability, ratings downgrades of certain investments and declining valuations of others. The U.S. and certain foreign governments have taken unprecedented actions in an attempt to address and rectify these extreme market and economic conditions by providing liquidity and stability to the financial markets. If the actions taken by the U.S. and other governments are not successful, the continued economic decline may continue to negatively affect the liquidity of our investments, significantly impact our ability to raise capital, if needed, on a timely basis and on acceptable terms or at all, and cause our investments to substantially decline in value. Any of these could have a material adverse effect on our liquidity, cash position and the potential future prospects of our business.

In addition, we rely and intend to continue to rely on third-parties, including clinical research organizations, third-party manufacturers, third-party logistics providers, packaging and labeling providers, wholesale distributors and certain other important vendors and consultants. As a result of the current volatile and unpredictable global economic situation, there may be a disruption or delay in the performance or satisfaction of commitments to us by our third-party contractors and suppliers. For example, as a result of the current economic climate, our distributors, customers or suppliers may experience difficulty in obtaining the liquidity necessary to purchase inventory or raw materials, may begin to maintain lower inventory levels or could become insolvent. If such third-parties are unable to adequately satisfy their contractual commitments to us in a timely manner, our business could be severely adversely affected.

If we fail to comply with our reporting and payment obligations under governmental pricing programs, we could be required to reimburse government programs for underpayments and could be required to pay penalties, sanctions and fines which could have a material adverse effect on our business, financial condition and results of operation.

As a condition of reimbursement by various federal and state healthcare programs, we are required to calculate and report certain pricing information to federal and state healthcare agencies. For example, we are required to provide average selling price information to the Centers for Medicare and Medicaid Services on a quarterly basis in order to compute Medicare payment rates. Price reporting and payment obligations are highly complex and vary among products and programs. Our processes for estimating amounts due under these governmental pricing programs involve subjective decisions, and as a result, our price reporting calculations remain subject to the risk of errors and our methodologies for calculating these prices could be challenged under the Federal False Claims Act or other laws. If we become subject to investigations or other inquiries concerning our compliance with price reporting laws and regulations, we could be required to pay or be subject to additional reimbursements, penalties, sanctions or fines, which could have a material adverse effect on our business, financial condition and results of operation.

We are subject to ongoing regulatory review of Feraheme, and if we fail to comply with such continuing regulations, we could be subject to penalties up to and including the suspension of the manufacturing, marketing and sale of Feraheme.

We are subject to ongoing FDA regulatory requirements and review pertaining to *Feraheme's* manufacture, labeling, packaging, adverse event reporting, storage, advertising, promotion and record keeping. Failure to comply with such regulatory requirements or the later discovery of previously unknown problems with *Feraheme* or our manufacturing facility may result in restrictions on our ability to market and sell *Feraheme*, including withdrawal from the market. We may also be subject to additional sanctions, including but not limited to:

FDA warning letters;

Civil or criminal penalties;

Suspension or withdrawal of regulatory approvals;

Temporary or permanent closing of our manufacturing facilities;

Requirements to communicate with physicians and other customers about concerns related to actual or potential safety, efficacy, or other issues involving *Feraheme*;

FDA-imposed label changes;

Implementation of an FDA-mandated Risk Evaluation and Mitigation Strategy,

Restrictions on our continued manufacturing, marketing or sale of *Feraheme*; or

Recalls or a refusal by the FDA to consider or approve applications for additional indications.

Any of these sanctions would have a material adverse impact on our ability to generate revenues and to achieve profitability.

If we market or distribute our products in a manner that violates federal or state healthcare fraud and abuse laws, marketing disclosure laws or other federal or state laws and regulations, we may be subject to civil or criminal penalties.

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In addition to FDA and related regulatory requirements, we are subject to extensive federal and state healthcare regulation, including but not limited to, the federal false claims act and the federal anti-kickback statute. False claims laws prohibit anyone from knowingly presenting, or causing to be presented for payment to third-party payors, including Medicare and Medicaid, false or fraudulent claims for reimbursed drugs or services, claims for items or services not provided as claimed, or claims for medically unnecessary items or services. Anti-kickback laws make it illegal to solicit, offer, receive or pay

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any remuneration in exchange for, or to induce, the referral of business, including the purchase or prescription of a particular drug, that is reimbursed by a state or federal program. We have developed and implemented a corporate compliance program based on what we believe are current best practices in the pharmaceutical industry, but we cannot guarantee that we, our employees, our consultants or our contractors are or will be in compliance with all federal and state regulations and/or laws. If we or our representatives fail to comply with any of these laws or regulations, a range of fines, penalties and/or other sanctions could be imposed on us, including, but not limited to, restrictions on how we market and sell *Feraheme*, significant fines, exclusions from government healthcare programs, including Medicare and Medicaid, litigation, or other sanctions. 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 also have an adverse effect on our business, financial condition and results of operation.

In recent years, several states and localities have enacted legislation requiring pharmaceutical companies to establish marketing and promotional compliance programs or codes of conduct and/or file periodic reports with the state or make periodic public disclosures on sales, marketing, pricing, clinical trials, and other activities. Similar legislation is being considered by additional states and by Congress. Many of these requirements are new and uncertain, and the penalties for failure to comply with these requirements are unclear. Compliance with these laws is difficult and time consuming, and if we are found to not be in full compliance with these laws, we may face enforcement actions, fines and other penalties, and we could receive adverse publicity which could have an adverse effect on our business, financial condition and results of operation.

If we fail to comply with any federal or state laws or regulations governing our industry, we could be subject to a range of regulatory actions that could adversely affect our ability to commercialize *Feraheme*, harm or prevent sales of *Feraheme*, or substantially increase the costs and expenses of commercializing and marketing *Feraheme*, all of which could have a material adverse effect on our business, financial condition and results of operation.

Significant safety or drug interaction problems could arise with respect to Feraheme even after FDA approval, resulting in recalls, restrictions in Feraheme's label, or withdrawal of Feraheme from the market.

Discovery of previously unknown problems with an approved product may result in recalls, restrictions on the product's permissible uses, or withdrawal of the product from the market. The data submitted to the FDA as part of our new drug application was obtained in controlled clinical trials of limited duration. New safety or drug interaction issues may arise as *Feraheme* is used over longer periods of time by a wider group of patients taking numerous other medicines and with additional underlying health problems. In addition, as we conduct additional clinical trials for *Feraheme*, new safety problems may be identified which could negatively impact both our ability to successfully complete these studies and the use and/or regulatory status of *Feraheme* for the treatment of iron deficiency anemia in patients with chronic kidney disease. These new safety or drug interaction issues may require us to provide additional warnings on the *Feraheme* label, directly alert healthcare providers of new safety information, or narrow our approved indications, any of which could reduce the market acceptance of *Feraheme*. In addition, if significant safety or drug interaction issues arise, FDA approval for *Feraheme* could be withdrawn, and the FDA could require the recall of all existing *Feraheme* in the marketplace. The FDA also has the authority to require the recall of our products if there is contamination or other problems with manufacturing, transport or storage of the product. A government-mandated recall or a voluntary recall could divert managerial and financial resources, could be difficult and costly to correct, could result in the suspension of sales of *Feraheme*, and could have a severe adverse impact on our potential profitability and the future prospects of our business.

We may also be required to conduct certain post-approval clinical studies to assess known or suspected significant risks associated with *Feraheme*. The Food and Drug Administration Amendments Act of 2007 expanded the FDA's authority. Under the Food and Drug Administration Amendments Act, the

FDA may: (i) require manufacturers to conduct post-approval clinical studies to assess known risks or signals of serious risks, or to identify unexpected serious risks; (ii) mandate labeling changes to a product based on new safety information; or (iii) require sponsors to implement a Risk Evaluation Management Strategy where necessary to assure safe use of the drug. If we are required to conduct post-approval clinical studies or implement a Risk Evaluation Management Strategy, or if the FDA changes the label for *Feraheme* to include additional discussion of potential safety issues, such requirements or restrictions could have a material adverse impact on our ability to generate revenues from sales of *Feraheme*, or require us to expend significant additional funds on clinical studies.

Our ability to grow revenues from sales of Feraheme will be limited if we do not obtain approval, or if we experience significant delays in our efforts to obtain approval to market Feraheme for additional indications in the U.S.

We have commenced or are pursuing additional clinical trials and plan to seek regulatory approval to market *Feraheme* in indications other than chronic kidney disease in the U.S. There is no guarantee that we will be successful in completing any clinical trials for additional indications in a timely manner or that, if completed, the results of such clinical trials will demonstrate *Feraheme* to be safe and effective in such uses and/or patient populations.

The FDA imposes substantial requirements on the development and production of all drug products. Before obtaining regulatory approval for the commercial marketing and sale of *Feraheme* for additional indications, we must demonstrate through extensive human clinical trials that *Feraheme* is safe and efficacious for these new uses and in these new patient populations. Conducting clinical trials is a complex, time-consuming and expensive process that requires adherence to a wide range of regulatory requirements. The FDA has substantial discretion in the approval process and may decide that the results of our clinical trials are insufficient for approval or that *Feraheme* is not effective or safe in indications other than chronic kidney disease. Clinical and other data is often susceptible to varying interpretations, and many companies that have believed their product candidates performed satisfactorily in clinical trials have nonetheless failed to obtain FDA approval for their products.

The FDA could also determine that our clinical trials and/or our manufacturing processes were not properly designed, were not conducted in accordance with federal laws and regulations, or were otherwise not properly managed. In addition, under the FDA's current good clinical practices regulations, we are responsible for conducting, recording and reporting the results of clinical trials to ensure that the data and results are credible and accurate and that the trial participants are adequately protected. The FDA may conduct inspections of clinical investigator sites which are involved in our clinical development programs to ensure their compliance with current good clinical practices regulations. If the FDA determines that we, our contract research organizations or our study sites fail to comply with applicable current good clinical practices regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA may disqualify certain data generated from those sites or require us to perform additional clinical trials before approving our marketing applications, which could adversely impact our ability to obtain approval for *Feraheme* in indications other than chronic kidney disease. Any such deficiency in the design, implementation or oversight of our clinical development programs could cause us to incur significant additional costs, experience significant delays in our efforts to obtain regulatory approval for *Feraheme* indications other than chronic kidney disease, or even prevent us from obtaining regulatory approval for *Feraheme* for additional indications. This would, in turn, materially adversely impact our cash position, our ability to increase revenues, our ability to achieve profitability, and the future prospects of our business.

In addition, our ability to complete our clinical trials in a timely manner depends on a number of factors, including:

Our ability to reach agreement with the FDA on a trial design in a timely manner;

Our ability to identify and enter into contracts with prospective clinical sites in a timely manner;

The rate of patient enrollment; and

The ability of our contract research organizations to perform their oversight responsibilities and meet expected deadlines.

Any failure by us to obtain approval for additional *Feraheme* indications in the U.S. in a timely manner may limit the commercial success of *Feraheme* and our ability to grow our revenues.

Our ability to grow revenues from sales of Feraheme will be limited if we do not obtain approval, or if we experience significant delays in our efforts to obtain approval to market Feraheme in countries outside of the U.S.

To the extent we wish to manufacture, market or sell *Feraheme* in foreign countries, we will need to comply with foreign regulatory requirements, which vary widely from country to country and may in some cases be more rigorous than requirements in the U.S. Foreign regulatory agents may require additional studies or studies designed with different clinical endpoints and/or comparators than those which we have already completed. The time required for approval may also be longer or shorter than in the U.S. In addition, in order to increase the number of patients available for enrollment in our clinical trials, we may conduct trials in geographies outside the U.S. We have no experience conducting clinical trials outside the U.S., and, therefore, we will need to expend substantial time and resources to identify and familiarize ourselves with the regulatory requirements of such foreign countries.

Any failure by us to obtain approval for *Feraheme* indications outside of the U.S. in a timely manner may limit the commercial success of *Feraheme* and our ability to grow our revenues.

We rely on third parties in the conduct of our clinical trials, and if they fail to fulfill their obligations, our development plans may be adversely affected.

We rely on independent clinical investigators, contract research organizations and other third-party service providers to assist us in managing, monitoring and otherwise carrying out our clinical trials. We have and we plan to continue to contract with certain third-parties to provide certain services, including site selection, enrollment, monitoring and data management services. Although we depend heavily on these parties, we do not control them and, therefore, we cannot be assured that these third-parties will adequately perform all of their contractual obligations to us. If our third-party service providers cannot adequately fulfill their obligations to us in a timely manner and on a satisfactory basis or if the quality and accuracy of our clinical trial data is compromised due to failure to adhere to our protocols or regulatory requirements or if such third-parties otherwise fail to adequately discharge their responsibilities or meet deadlines, our development plans may be delayed or terminated.

If we do not effectively manage our growth, our ability to commercialize Feraheme, pursue opportunities and expand our business could be adversely affected.

We have experienced significant growth, which has placed and may continue to place a substantial strain on our management, employees, facilities and resources. In anticipation of the approval and U.S. commercialization of *Feraheme*, we rapidly expanded our marketing, sales, manufacturing, regulatory, medical affairs, finance, development, and compliance capabilities. As our operations continue to expand, we will also need to manage additional relationships with various collaborative partners, suppliers and other third parties. In addition, we will need to continue to improve our operational and financial systems, train and manage our expanding workforce, and maintain close coordination among our various departments. We may not be able to accomplish these tasks, and our failure to accomplish any one of them could prevent us from successfully commercializing *Feraheme*, pursuing new business opportunities, or expanding our business, any one of which could adversely impact our future business prospects.

Our actual net product revenue and total operating expense results might vary from our publicly disclosed expected net product revenue and total operating expenses.

Our actual net product revenue and total operating expenses for the fiscal quarter ended December 31, 2009 might vary from the preliminary expected net revenue and total operating expenses we disclosed, and these variations could be material. While we believe such preliminary information is accurate, our actual *Feraheme* net product revenue results and total operating expenses for the fourth quarter of 2009 have not been audited or reviewed by our independent auditors at the time of such disclosure and are subject to possible revision.

Our preliminary net product revenue and total operating expenses reflect numerous estimates of certain amounts, including product sales allowances and accruals, discounts, chargebacks, rebates, fees and product returns, in accordance with our accounting policies on revenue recognition and related sales allowances, reserves for doubtful accounts, accrued expenses and equity-based compensation expense. Because we just recently launched *Feraheme* in the U.S. in the third quarter of 2009, we have limited experience estimating the various elements of net product revenue and total operating expenses. Although we believe that the estimates underlying our preliminary revenue and expense figures are reasonable, estimates included in our actual results could be materially different, which could cause the actual net product revenue and total operating expenses to be materially different.

Our financial results are subject to numerous risks and uncertainties, including those identified throughout these risk factors and elsewhere in this prospectus and the documents incorporated by reference in this prospectus. We have only announced preliminary *Feraheme* net product revenue and total operating expenses for the fiscal quarter ended December 31, 2009, and have not announced results for other items included in our results of operations for such quarter. Net product revenue and total operating expenses are only two elements of our results of operations and are not, by themselves, indicative of our financial performance during a period. The actual results of other items could adversely effect our operating results. If our actual operating results vary from our preliminary announced net product revenue and total operating expenses results or market expectations for our operating results based on such preliminary net product revenue and total operating expenses, our common stock price may decline.

We may enter into collaborations, in-licensing arrangements, or acquisition agreements that could disrupt our business, decrease our profitability, result in dilution to stockholders or cause us to incur debt or significant additional expense.

As part of our business strategy, we intend to pursue collaboration and in-licensing opportunities, acquisitions of products or businesses, and/or strategic alliances that we believe would be complementary to our existing business. We have limited experience with respect to these business development activities. Any such strategic transactions by us could result in large and immediate write-offs or the incurrence of debt and contingent liabilities, any of which would adversely impact our operating results. Management of a license arrangement, collaboration, or other strategic arrangement and/or integration of an acquired asset or company may also disrupt our ongoing business, require management resources that otherwise would be available for ongoing development of our existing business and our U.S. commercialization of *Feraheme*. We may not identify or complete any such transactions in a timely manner, on a cost-effective basis, or at all, and we may not realize the anticipated financial benefits of any such transaction. In addition, to finance any such strategic transactions, we may choose to issue shares of our common or preferred stock as consideration, which would result in dilution to our stockholders. Alternatively, it may be necessary for us to raise additional funds through public or private financings, and such additional funds may not be available on terms that are favorable to us, if at all. In addition, proposing, negotiating and implementing collaborations, in-licensing arrangements or acquisition agreements may be a lengthy and complex process. Other companies, including those with substantially greater financial, marketing and sales resources, may compete with us for these arrangements, and we may not be able to enter into such arrangements on acceptable terms or at all.

Our success depends on our ability to attract and retain key employees.

Because of the specialized nature of our business, our success depends to a significant extent on the continued service of our Chief Executive Officer and President, Brian J.G. Pereira, MD, our other executive officers and on our ability to continue to attract, retain and motivate qualified managerial, scientific, medical and sales personnel. We have entered into employment agreements with our senior executives but such agreements do not guarantee that these executives will remain employed by us for any significant period of time, or at all. If we are unable to retain these personnel, or we lose the services of our key personnel for any reason, our *Feraheme* development and commercialization efforts could be adversely impacted.

Furthermore, our expansion into areas and activities requiring additional expertise, such as commercial-scale manufacturing, marketing and sales, and late-stage development has required the addition of new management personnel and the development of additional expertise by existing management personnel. There is intense competition for qualified personnel in the areas of our activities, and we may not be able to continue to attract and retain the qualified personnel necessary for the development of our business. Our failure to attract and retain such personnel or to develop such expertise could impose significant limits on our business operations and hinder our ability to successfully and efficiently commercialize *Feraheme* and complete our development projects.

Our success depends on our ability to maintain the proprietary nature of our technology.

We rely on a combination of patents, trademarks, copyrights and trade secrets in the conduct of our business. The patent positions of pharmaceutical and biopharmaceutical firms are generally uncertain and involve complex legal and factual questions. We may not be successful or timely in obtaining any patents for which we submit applications. The breadth of the claims obtained in our patents may not provide significant protection for our technology. The degree of protection afforded by patents for licensed technologies or for future discoveries may not be adequate to protect our proprietary technology. The patents issued to us may not provide us with any competitive advantage. In addition, there is a risk that others will independently develop or duplicate similar technology or products or circumvent the patents issued to us.

Our primary U.S. *Feraheme* patent is currently scheduled to expire in 2020. This and any other patents issued to us may be contested or invalidated. Future patent interference proceedings involving our patents may harm our ability to commercialize *Feraheme*. Claims of infringement or violation of the proprietary rights of others may be asserted against us. If we are required to defend against such claims or to protect our own proprietary rights against others, it could result in substantial costs to us and the distraction of our management. An adverse ruling in any litigation or administrative proceeding could prevent us from marketing and selling *Feraheme*, limit our development and commercialization of *Feraheme*, or harm our competitive position and result in additional significant costs. In addition, any successful claim of infringement asserted against us could subject us to monetary damages or injunction preventing us from making or selling *Feraheme*. We also may be required to obtain licenses to use the relevant technology. Such licenses may not be available on commercially reasonable terms, if at all.

The laws of foreign countries may not protect our intellectual property rights to the same extent as do the laws of the U.S. In countries where we do not have or have not applied for patents on *Feraheme*, we may be unable to prevent others from developing or selling similar products. In addition, in jurisdictions outside the U.S. where we have patent rights, we may be unable to prevent unlicensed parties from selling or importing products or technologies derived elsewhere using our proprietary technology.

We also rely upon unpatented trade secrets and improvements, unpatented know-how and continuing technological innovation to develop and maintain our competitive position, which we seek to protect, in part, by confidentiality agreements with our corporate partners, collaborators, employees and consultants. These agreements, however, may be breached. We may not have adequate remedies for any such breaches, and our trade secrets might otherwise become known or might be independently discovered by our

competitors. In addition, we cannot be certain that others will not independently develop substantially equivalent or superseding proprietary technology, or that an equivalent product will not be marketed in competition with *Feraheme*, thereby substantially reducing the value of our proprietary rights.

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

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

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

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

We are exposed to a number of different potential liability claims, and we may not be able to maintain or obtain sufficient insurance coverage to protect our cash and other assets.

The administration of our products to humans, whether in clinical trials or after approved commercial usage, may expose us to liability claims. Although we maintain product liability insurance coverage for claims arising from the use of our products in clinical trials and commercial use, coverage is expensive and we may not be able to maintain sufficient insurance at a reasonable cost, if at all. Product liability claims, whether or not they have merit, could decrease demand for *Feraheme*, divert the attention of our management and key personnel from our core business, require us to spend significant time and money in litigation or pay significant damages, all of which could prevent or interfere with the commercialization and development of *Feraheme* and adversely affect our business. Claims of this nature could also subject us to product recalls or harm our reputation, which could damage our position in the market.

Our shareholder rights plan, certain provisions in our charter and by-laws, certain contractual relationships and certain Delaware law provisions could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current members of our Board of Directors.

In 2009 we adopted a shareholder rights plan, the provisions of which are intended to deter a hostile takeover by making any proposed hostile acquisition of us more expensive and less desirable to a potential acquirer by enabling our shareholders (other than the potential hostile acquiror) to purchase significant amounts of additional shares of our common stock at dilutive prices. The rights issued pursuant to our shareholder rights plan become exercisable generally upon the earlier of 10 days after a person or group acquires 20% or more of our outstanding common stock or 10 business days after the announcement by a person or group of an intention to acquire 20% of our outstanding common stock via tender offer or similar transaction. The shareholder rights plan could delay or discourage transactions involving an actual

or potential change in control of us or our management, including transactions in which stockholders might otherwise receive a premium for their shares over then current prices.

In addition, certain provisions in our certificate of incorporation and our by-laws may discourage, delay or prevent a change of control or takeover attempt of our company by a third-party as well as substantially impede the ability of our stockholders to benefit from a change of control or effect a change in management and board of directors. These provisions include:

The ability of our Board of Directors to increase or decrease the size of the Board without stockholder approval;

Advance notice requirements for the nomination of candidates for election to our Board and for proposals to be brought before our annual meeting of stockholders;

The authority of our Board to designate the terms of and issue new series of preferred stock without stockholder approval;

Non-cumulative voting for directors; and

Limitations on the ability of our stockholders to call special meetings of stockholders.

As a Delaware corporation, we are subject to the provisions of Section 203 of the Delaware General Corporation Law which prevents us from engaging in any business combination with any "interested stockholder," which is defined generally as a person that acquires 15% or more of a corporation's outstanding voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in the manner prescribed in Section 203. These provisions could have the effect of delaying or preventing a change of control, whether or not it is desired by, or beneficial to, our stockholders.

In addition to the above factors, an acquisition of our company could be made more difficult by employment agreements we have in place with our executive officers, as well as a company-wide change of control policy which provide for severance benefits as well as the full acceleration of vesting of any outstanding options or restricted stock units in the event of a change of control and subsequent termination of employment. Further, our Amended and Restated 2007 Equity Incentive Plan generally permits our Board to provide for the acceleration of vesting of options granted under that plan in the event of certain transactions that result in a change of control.

We are subject to environmental laws and potential exposure to environmental liabilities.

Because we use certain hazardous materials in the production of our products, we are subject to various federal, state and local environmental laws and regulations that govern our operations, including the import, handling and disposal of non-hazardous and hazardous wastes, and emissions and discharges into the environment. Failure to comply with these laws and regulations could result in costs for corrective action, penalties or the imposition of other liabilities. We also are subject to laws and regulations that impose liability and clean-up responsibility for releases of hazardous substances into the environment. Under certain of these laws and regulations, a current or previous owner or operator of property may be liable for the costs of remediating the release or spill of hazardous substances or petroleum products on or from its property, without regard to whether the owner or operator knew of, or caused, the contamination, and such owner or operator may incur liability to third parties impacted by such contamination. The presence of, or failure to remediate properly the release or spill of, these substances could adversely affect the value of, and our ability to transfer or encumber, our real property.

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Risks Related to the Offering

Our stock price has been and may continue to be volatile, and your investment in our stock could decline in value or fluctuate significantly.

The market price of our common stock has been, and may continue to be, volatile, and your investment in our stock could decline in value or fluctuate significantly. Our stock price has ranged between \$22.20 and \$58.23 in the fifty-two week period through January 15, 2010. The stock market has from time to time experienced extreme price and volume fluctuations, particularly in the biotechnology and pharmaceuticals sectors, which have often been unrelated to the operating performance of particular companies. Various factors and events, many of which are beyond our control, may have a significant impact on the market price of our common stock. Factors which may affect the market price of our common stock include, among others:

Our ability to successfully commercialize *Feraheme* in the U.S.;

The timing and magnitude of *Feraheme* revenue and actual or anticipated fluctuations in our operating results;

Changes in or our failure to meet financial estimates published by securities analysts;

The availability of reimbursement coverage for *Feraheme* or changes in the reimbursement policies of governmental or private payors;

Public announcements of regulatory actions with respect to *Feraheme* or products or product candidates of our competitors;

Safety concerns related to *Feraheme* or products or product candidates of our competitors;

General market conditions;

Sales of large blocks of our common stock;

The status or results of clinical trials for *Feraheme* in indications other than chronic kidney disease or products or product candidates of our competitors;

The acquisition or development of technologies, product candidates or products by us or our competitors;

Developments in patents or other proprietary rights by us or our competitors;

The initiation of litigation to enforce or defend any of our assets; and

Significant collaboration, acquisition, joint venture or similar agreements by us or our competitors.

Thus, as a result of events both within and beyond our control, our stock price could fluctuate significantly or lose value rapidly.

If securities analysts downgrade our stock, cease coverage of us, or if our operating results do not meet analysts' forecasts and expectations, our stock price could decline.

The trading market for our common stock relies in part on the research and reports that industry or financial analysts publish about us and our business. Currently, ten financial analysts publish reports about us and our business. We do not control these or any other analysts. Furthermore, there are many large, well-established, publicly traded companies active in our industry and market, which may mean that it is less likely that we will receive widespread analyst coverage. In addition, our future operating results are subject to substantial uncertainty, and our stock price could decline significantly if we fail to meet or exceed analysts' forecasts and expectations, especially with respect to the timing and magnitude of *Feraheme* revenues, including the recognition of net product revenues associated with purchases made

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under our launch incentive program, which were deferred as of September 30, 2009. If any of the analysts who cover us downgrade our stock or issue commentary or observations that are perceived by the market to be adverse to us or our stock, our stock price would likely decline rapidly. If these analysts cease coverage of our company, we could lose visibility in the market, which in turn could cause our stock price to decline.

Future sales of additional shares of our common stock could cause the price of our common stock to decline.

Sales of substantial amounts of our common stock in the public market following this offering, or the perception by the market that those sales could occur, may lower our stock price or make it difficult for us to raise additional equity capital in the future. For example, one of our large stockholders may decide to sell a substantial portion of its shares of our common stock. In addition, the issuance of common stock upon exercise of outstanding options could be dilutive, and may cause the market price for a share of our common stock to decline. As of January 15, 2010, we had 17,386,794 shares of common stock issued and outstanding, together with outstanding options to purchase approximately 2,380,963 shares of common stock with a weighted average exercise price of \$39.75 per share and 215,500 shares of common stock issuable upon the vesting of restricted stock units.

An investment in our common stock may decline in value as a result of announcements of business developments by us or our competitors.

The market price of our common stock is subject to substantial volatility as a result of announcements by us or other companies in our industry. As a result, purchasers of our common stock may not be able to sell their shares of common stock at or above the price at which they purchased such stock. Announcements which may subject the price of our common stock to substantial volatility include announcements regarding:

the results of discovery, preclinical studies and clinical trials by us or our competitors;

the acquisition of technologies, product candidates or products by us or our competitors;

the development of new technologies, product candidates or products by us or our competitors;

regulatory actions with respect to our product candidates or products or those of our competitors;

the initiation or conclusion of litigation to enforce or defend any of our assets; and

significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors.

We could be subject to class action litigation due to stock price volatility, which, if it occurs, will distract our management and could result in substantial costs or large judgments against us.

The stock market in general has recently experienced extreme price and volume fluctuations. In addition, the market prices of securities of companies in the biopharmaceutical industry have been extremely volatile and have experienced fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. These fluctuations could adversely affect the market price of our common stock. In the past, securities class action litigation has often been brought against companies following periods of volatility in the market prices of their securities. We may be the target of similar litigation in the future. Securities litigation could result in substantial costs and divert our management's attention and resources, which could cause serious harm to our business, operating results and financial condition.

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Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.

We have not designated the amount of net proceeds we will use for any particular purpose. Accordingly, our management will have broad discretion as to the application of the net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not yield profitable results or increase our market value.

You will experience immediate dilution in the book value per share of the common stock you purchase.

Because the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on an assumed public offering price of \$49.56 per share, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$34.76 per share in the net tangible book value of the common stock. If the underwriters exercise their over-allotment option, you will experience additional dilution. See "Dilution" on page S-32 for a more detailed discussion of the dilution you will incur in this offering.

Our ability to use net operating loss carryforwards and tax credit carryforwards to offset future taxable income may be limited as a result of the sale of shares of our common stock in this offering or other transactions involving our common stock.

In general, under Section 382 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating losses, or NOLs, and certain other tax assets to offset future taxable income. In general, an ownership change occurs if the aggregate stock ownership of certain stockholders increases by more than 50 percentage points over such stockholders' lowest percentage ownership during the testing period (generally three years). An ownership change could limit our ability to utilize our NOL and tax credit carryforwards for taxable years including or following such "ownership change." It is possible that the issuance of shares of our common stock in this offering, together with certain other transactions involving our common stock within the testing period, will result in an ownership change. Even if the issuance of our common stock in this offering does not result in an ownership change, this offering would significantly increase the likelihood that there would be an ownership change in the future (which ownership change could occur as a result of transactions involving our common stock that are outside of our control, such as sales by existing stockholders). Limitations imposed on the ability to use NOLs and tax credits to offset future taxable income could require us to pay U.S. federal income taxes earlier than would otherwise be required if such limitations were not in effect and could cause such NOLs and tax credits to expire unused, in each case reducing or eliminating the benefit of such NOLs and tax credits. Similar rules and limitations may apply for state income tax purposes.

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USE OF PROCEEDS

We expect to receive net proceeds of approximately \$141.8 million after deducting underwriting discounts and commissions and estimated offering expenses payable by us, at an assumed public offering price of \$49.56 per share. If the underwriters exercise in full their option to purchase 450,000 additional shares, we expect to receive net proceeds of approximately \$163.1 million. We intend to use the net proceeds from this offering for general corporate purposes, including working capital, research and development expenditures, sales and marketing expenditures, and business development activities, including the potential acquisition or in-licensing of additional assets. Pending the use of the net proceeds, we intend to invest the net proceeds in interest-bearing, investment-grade corporate and U.S. government securities.

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Table of Contents**DILUTION**

If you invest in our common stock, your interest will be diluted immediately to the extent of the difference between the public offering price per share of our common stock and the net tangible book value per share of our common stock after this offering.

Our net tangible book value as of September 30, 2009 was approximately \$156.1 million, or \$9.12 per share of common stock. "Net tangible book value" is calculated by subtracting our total liabilities from our total tangible assets, which is total assets less intangible assets. "Net tangible book value per share" is net tangible book value divided by the number of shares of common stock outstanding.

After giving effect to the issuance and sale by us of 3,000,000 shares of common stock offered in this offering at an assumed public offering price of \$49.56 per share and after deducting the estimated underwriting discounts and commissions and offering expenses payable by us, our net tangible book value as of September 30, 2009 would have been approximately \$297.9 million, or \$14.80 per share of common stock. This represents an immediate increase in the net tangible book value of \$5.68 per share to our existing stockholders and an immediate and substantial dilution in net tangible book value of \$34.76 per share to new investors. The following table illustrates this per share dilution:

Public offering price per share	\$	49.56
Net tangible book value per share as of September 30, 2009	\$	9.12
Increase in net tangible book value per share attributable to the offering		5.68
Net tangible book value per share after giving effect to this offering		14.80
Dilution per share to new investors in this offering	\$	34.76

In the discussion and table above, we assume no exercise of outstanding options or vesting of outstanding restricted stock units. As of September 30, 2009, there were 2,671,142 shares of common stock issuable upon exercise of outstanding options with a weighted average exercise price of \$37.32 per share and 216,250 shares of common stock issuable upon the vesting of restricted stock units. To the extent that any of these outstanding options are exercised or any of the restricted stock units vest, there will be further dilution to new investors.

The discussion and table above excludes an aggregate of 967,128 additional shares of common stock reserved for future issuance as of September 30, 2009 under our Amended and Restated 2007 Equity Incentive Plan and our 2006 Employee Stock Purchase Plan.

UNDERWRITING

Under the terms and subject to the conditions contained in an underwriting agreement dated the date of this prospectus supplement, the underwriters named below, for whom Morgan Stanley & Co. Incorporated, J.P. Morgan Securities Inc. and Goldman, Sachs & Co. are acting as representatives, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares of common stock indicated below:

Name	Number of Shares
Morgan Stanley & Co. Incorporated	
J.P. Morgan Securities Inc.	
Goldman, Sachs & Co.	
Total	3,000,000

The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus supplement and the accompanying prospectus are subject to the approval of various legal matters by their counsel and to other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus supplement and the accompanying prospectus if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters' over-allotment option described below.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the public offering price listed on the cover page of this prospectus supplement, less underwriting discounts and commissions, and part to certain dealers at a price that represents a concession not in excess of \$ _____ a share under the public offering price. No underwriter may allow, and no dealer may re-allow, any concessions to other underwriters or to certain dealers. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the representatives. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to an aggregate of 450,000 additional shares of common stock at the public offering price set forth on the cover of this prospectus supplement, less underwriting discounts and commissions. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus supplement and the accompanying prospectus. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase about the same percentage of the additional shares of common stock as the number listed next to the underwriter's name in the preceding table bears to the total number of shares of common stock listed next to the names of all underwriters in the preceding table.

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The following table shows the per share and total underwriting discounts and commissions that we are to pay to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters' option.

	No Exercise	Full Exercise
Per share	\$	\$
Total	\$	\$

The underwriters have informed us that they do not intend sales to discretionary accounts to exceed five percent of the total number of shares of common stock offered by them.

We and our directors and Section 16 executive officers have agreed that, without the prior written consent of Morgan Stanley & Co. Incorporated, J.P. Morgan Securities Inc. and Goldman, Sachs & Co. on behalf of the underwriters, we and they will not, during the period beginning on the date of this prospectus supplement and ending 90 days thereafter:

offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock; or

enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock;

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. The restrictions described in this paragraph do not apply:

in our case, to (1) the sale of shares of common stock to the underwriters; (2) the issuance by us of employee stock options and other stock-based awards pursuant to stock option plans described in the prospectus; and (3) the issuance by us of shares of common stock upon the exercise of an option or a warrant or the conversion of a security outstanding on the date of this prospectus supplement of which the underwriters have been advised in writing;

in the case of our directors and executive officers, to (1) transactions relating to shares of common stock or other securities acquired in open market transactions after the completion of this offering, provided that no filing under Section 16(a) of the Exchange Act will be required or will be voluntarily made in connection with subsequent sales of common stock or other securities acquired in such open market transactions; (2) the purchase or sale of our securities pursuant to a plan, contract or instruction that satisfies Rule 10b5-1 under the Exchange Act and was in effect prior to the date hereof; and (3) transfers of shares of our common stock or any security convertible into our common stock as a bona fide gift, to any trust for the direct or indirect benefit of the stockholder or the immediate family of the stockholder, or to certain entities affiliated with the stockholder, provided the transferee agrees to be bound by the lock-up restrictions and no filing is made or required to be made under Section 16(a) of the Exchange Act.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the over-allotment option. The underwriters can close out a covered short sale by exercising the over-allotment option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriters may also sell shares in excess of the over-allotment option, creating a naked short

position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. As an additional means of facilitating the offering, the underwriters may bid for, and purchase, shares of common stock in the open market to stabilize the price of the common stock. The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions. The underwriting syndicate may also reclaim selling concessions allowed to an underwriter or a dealer for distributing the common stock in the offering, if the syndicate repurchases previously distributed common stock to cover syndicate short positions or to stabilize the price of the common stock. These activities, as well as other purchases by the underwriters for their own accounts may raise or maintain the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. These transactions may be effected on the NASDAQ Global Market, in the over-the-counter market or otherwise. The underwriters are not required to engage in these activities and may end any of these activities at any time.

Our common stock is quoted on the Nasdaq Global Market under the symbol "AMAG."

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act.

We estimate that our share of the total expenses in this offering, excluding underwriting discounts and commissions, will be approximately \$200,000.

A prospectus supplement, the accompanying prospectus or any related free writing prospectus in electronic format may be made available on the web sites maintained by one or more of the underwriters, and one or more of the underwriters may distribute prospectuses electronically. Other than the prospectus supplement, accompanying prospectus or any related free writing prospectus in electronic format, the information on any of these websites and any other information contained on a website maintained by an underwriter or syndicate member is not part of this prospectus supplement or accompanying prospectus. The underwriters may agree to allocate a number of shares to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the underwriters that make Internet distributions on the same basis as other allocations.

European Economic Area

In relation to each Member State of the European Economic Area that has implemented the Prospectus Directive, each representative has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Member State it has not made and will not make an offer of our shares of common stock to the public in that Member State, except that it may, with effect from and including such date, make an offer of such shares to the public in that Member State:

- (a) at any time to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- (b) at any time to any legal entity which has two or more of: (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000; and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;
- (c) to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the representatives for any such offer; or

(d)

at any time in any other circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of the above, the expression an "offer of our shares of common stock to the public" in relation to any such shares in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and such shares to be offered so as to enable an investor to decide to purchase or subscribe such shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in that Member State.

United Kingdom

Each underwriter has represented and agreed that it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000) in connection with the issue or sale of the shares in circumstances in which Section 21(1) of such Act does not apply to us and it has complied and will comply with all applicable provisions of such Act with respect to anything done by it in relation to any shares in, from or otherwise involving the United Kingdom.

Hong Kong

The shares may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of

that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Other Relationships

Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for the company, for which they received or will receive customary fees and expenses. The underwriters may, from time to time in the future, engage in transactions with and perform services for us in the ordinary course of their business.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for the issuer, for which they received or will receive customary fees and expenses.

LEGAL MATTERS

The validity of the common stock and certain other legal matters will be passed upon for us by Cooley Godward Kronish LLP, Boston, Massachusetts. Ropes & Gray LLP, Boston, Massachusetts, will pass upon certain legal matters in connection with this offering for the underwriters.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K for the year ended December 31, 2008 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other information with the SEC. You may read and copy the reports, proxy statements and other information that we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for information about the operation of its Public Reference Room and for its prescribed rates to obtain copies of such material. The SEC also maintains a website that contains reports, proxy and information statements and other information regarding registrants, like us, that file electronically with the SEC. The address of the SEC's Internet site is <http://www.sec.gov>. Our website is <http://www.amagpharma.com>.

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and other filings with the SEC are available, free of charge, through our website, shortly after those reports or filings are electronically filed with or furnished to the SEC. Information on our website or any other website is not incorporated by reference into this prospectus supplement or the accompanying prospectus and does not constitute a part of this prospectus supplement or the accompanying prospectus.

This prospectus supplement is part of a registration statement we filed with the SEC relating to the securities we may offer. As permitted by SEC rules, this prospectus supplement does not contain all of the information we have included in the registration statement and the accompanying exhibits and schedules we filed with the SEC. You may refer to the registration statement, exhibits and schedules for more information about us and the securities. The registration statements, exhibits and schedules are available at the SEC's public reference room or through its website.

The SEC allows us to "incorporate by reference" the information we have filed with it, which means that we can disclose important information by referring you to those documents. The information we incorporate by reference is an important part of this prospectus supplement and the accompanying prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference into this prospectus supplement and the accompanying prospectus any future documents filed with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act subsequent to the date of this prospectus supplement and prior to the termination of the offering.

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PROSPECTUS

**Common Stock
Preferred Stock
Debt Securities
Warrants**

We may offer and sell, from time to time, in one or more offerings:

common stock;

preferred stock;

debt securities; and

warrants

These securities may be offered and sold separately or together in units with other securities described in this prospectus.

We will indicate the particular securities we offer and their specific terms in a supplement to this prospectus. In each case we would describe the type and amount of securities we are offering, the initial public offering price and the other terms of the offering.

Our common stock is listed on the Nasdaq Global Market under the symbol "AMAG." We will make applications to list any shares of common stock sold pursuant to a supplement to this prospectus on the Nasdaq. We have not determined whether we will list any of the other securities we may offer on any exchange or over-the-counter market. If we decide to seek listing of any securities, the supplement will disclose the exchange or market.

INVESTING IN OUR SECURITIES INVOLVES RISKS. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES DESCRIBED UNDER THE HEADING "RISK FACTORS" BEGINNING ON PAGE 4 AND CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND ANY RELATED FREE WRITING PROSPECTUS, AND UNDER SIMILAR HEADINGS IN THE OTHER DOCUMENTS THAT ARE INCORPORATED BY REFERENCE HEREIN.

The securities may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus and in the applicable prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will be set forth in a prospectus supplement.

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NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Our principal executive office is at 100 Hayden Avenue, Lexington, Massachusetts 02421, and our telephone number is (617) 498-3300.

The date of this prospectus is January 19, 2010

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process. Under this shelf process, we may sell any combination of the securities described in this prospectus from time to time in one or more offerings.

This prospectus provides you only with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement containing specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. We may also add, update or change in the prospectus supplement (and in any related free writing prospectus that we may authorize to be provided to you) any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. You should read both this prospectus and any prospectus supplement or related free writing prospectus together with additional information described under the headings "Where You Can Find More Information" and "Documents Incorporated By Reference."

You should rely only on the information incorporated by reference or provided in this document. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We will not make an offer of these securities in any jurisdiction where it is unlawful. You should assume that the information in this prospectus, as well as the information we have previously filed with the SEC and incorporated by reference in this prospectus, is accurate only as of the date of the documents containing the information.

References in this prospectus to the terms "AMAG Pharmaceuticals," "company," "we," "our" or "us" or other similar terms means AMAG Pharmaceuticals, Inc.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Any statements in this prospectus or the applicable prospectus supplement or free writing prospectus, including the documents that we incorporate by reference herein, about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 as amended, and Section 21E of the Securities and Exchange Act of 1934, as amended. You can identify these forward-looking statements by the use of words or phrases such as "believe," "may," "could," "will," "estimate," "continue," "anticipate," "intend," "seek," "plan," "expect," "potential," "predict," "project," "should," or "would." Among the factors that could cause actual results to differ materially from those indicated in the forward-looking statements are risks and uncertainties inherent in our business including, without limitation, statements about our plan to advance our *Feraheme* clinical development program in the U.S. by conducting additional clinical trials to assess *Feraheme* for the treatment of iron deficiency anemia, or IDA, in a broad range of patients, and our expectation that sales of *GastroMARK* will not change materially from historical levels; and other material risks described under the heading "Risk Factors" in our most recent annual report on Form 10-K and our quarterly reports on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC.

You should rely only on information contained, or incorporated by reference, in this prospectus, the registration statement of which this prospectus is a part, the documents incorporated by reference in this prospectus, and any applicable prospectus supplement or free writing prospectus and understand that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

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Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee future results, events, levels of activity, performance or achievement. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law. Before deciding to purchase our securities, you should carefully consider the risk factors incorporated herein by reference, in addition to the other information set forth in this prospectus, any accompanying prospectus supplement, any free writing prospectus and in the documents incorporated by reference.

OUR COMPANY

This business overview highlights information contained in certain documents incorporated by reference into this prospectus. This business overview does not contain all of the information that you should consider before investing in our securities. You should read the entire prospectus carefully, including the "Risk Factors" section and the financial statements and the notes to those statements incorporated herein by reference, before making an investment decision.

AMAG Pharmaceuticals, Inc., a Delaware corporation, was founded in 1981. We are a biopharmaceutical company that utilizes our proprietary technology for the development and commercialization of a therapeutic iron compound to treat anemia and novel imaging agents to aid in the diagnosis of cancer and cardiovascular disease. We currently manufacture and sell two approved products, Feraheme® (ferumoxytol) Injection for intravenous, or IV, use and GastroMARK®.

On June 30, 2009, *Feraheme* was approved for marketing in the U.S. by the U.S. Food and Drug Administration, or the FDA, for use as an IV iron replacement therapy for the treatment of iron deficiency anemia, or IDA, in adult patients with chronic kidney disease, or CKD. We market and sell *Feraheme* through our own commercial organization consisting of seasoned professionals, including a specialized sales force and an experienced account management and reimbursement team. We sell *Feraheme* primarily to authorized wholesalers and specialty distributors and began commercial sale of *Feraheme* in the U.S. in July 2009.

In November 2009, the Centers for Medicare & Medicaid Services assigned *Feraheme* two unique Q-codes, one for the treatment of IDA in end-stage renal disease patients undergoing dialysis and one for the treatment of IDA in non-end-stage renal disease patients. These Q-codes, which are temporary product-specific codes that enable automated processing of *Feraheme*-related claims, became effective on January 1, 2010.

In December 2009, we submitted certain pediatric protocols to meet our FDA post-approval Pediatric Research Equity Act requirement to support pediatric labeling of *Feraheme*.

We plan to advance our *Feraheme* clinical development program in the U.S. by conducting additional clinical trials to assess *Feraheme* for the treatment of IDA in a broad range of patients, which may include women with abnormal uterine bleeding and patients with cancer and gastrointestinal diseases.

We also continue to evaluate our strategy for seeking approval for *Feraheme* as an IV iron replacement therapeutic agent in countries outside of the U.S. The commercial opportunity for *Feraheme* as an IV iron replacement therapeutic agent varies from country to country, and in determining which additional markets outside of the U.S. we intend to enter, we are assessing factors such as potential pricing and reimbursement, the role of iron in medical treatment protocols and the regulatory requirements of each country. In the fourth quarter of 2009, we received approval from the European Medicines Agency for our Pediatric Investigation Plan, which is a prerequisite for the submission of our *Feraheme* Marketing Authorization Application.

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In December 2009, we filed a New Drug Submission with the Therapeutic Products Directorate of Health Canada, the regulatory agency in Canada, for *Feraheme* to treat IDA in patients with CKD. In December 2009, our partner in China, 3SBio, Inc., or 3SBio, also filed an application for a registrational trial with the Chinese regulatory agency. The approval of the application will allow 3SBio to begin a bridging study of *Feraheme* in CKD patients, which is necessary to file for marketing approval in China.

In addition to its use for the treatment of IDA, *Feraheme* may also be useful as a vascular enhancing agent in magnetic resonance imaging, or MRI. In August 2008, the FDA granted Fast Track designation to *Feraheme* with respect to its development as a diagnostic agent for vascular-enhanced MRI for the assessment of peripheral arterial disease in patients with CKD. We are currently conducting a 108-patient Phase II study of *Feraheme* in vascular-enhanced MRI for the detection of clinically significant arterial stenosis or occlusion.

GastroMARK, our oral contrast agent used for delineating the bowel in MRI, is approved and marketed in the U.S., Europe, and other countries through our marketing partners. Sales of *GastroMARK* by our marketing partners have been at their current levels for the last several years, and we do not expect sales of *GastroMARK* to change materially.

Feridex I.V.®, our liver contrast agent, had been marketed and sold in the U.S., Europe and other countries for a number of years through our marketing partners. In November 2008, we decided to cease manufacturing *Feridex I.V.* Accordingly, we have terminated all of our agreements with our marketing partners for *Feridex I.V.* throughout the world and do not intend to continue commercializing *Feridex I.V.*

Our common stock trades on the NASDAQ Global Market, or NASDAQ, under the trading symbol "AMAG."

Our Core Technology

Our core technology is based on small, coated superparamagnetic iron oxide nanoparticles and their characteristic properties. Our core competencies include the ability to design such nanoparticles for particular applications, to manufacture the nanoparticles in controlled sizes and to cover the nanoparticles with different coatings depending upon the application for which they will be used. Our technology and expertise enable us to synthesize, sterilize and stabilize these iron oxide nanoparticles in a manner necessary for use in pharmaceutical products such as IV iron replacement therapeutics and MRI contrast agents.

Our iron oxide nanoparticles are composed of bioavailable iron that is easily utilized by the body and incorporated into the body's iron stores. As a result, products using our core technology are well suited for use as an IV iron replacement therapy. Additionally, the superparamagnetic characteristic of our products results in nanoparticles that become strongly magnetic when placed in a magnetic field, but lose their magnetism once the field is removed. Therefore, use of our nanoparticles can result in magnetic resonance images that provide essential information to the reviewing physician. Our rights to our technology are derived from and/or protected by license agreements, patents, patent applications and trade secret protections.

Our principal offices are located at 100 Hayden Avenue, Lexington, Massachusetts 02421, and our telephone number is (617) 498-3300.

Table of Contents**RISK FACTORS**

An investment in our securities involves a high degree of risk. In addition to the other information included in, or incorporated by reference into, this prospectus, you should carefully consider the risk factors in any applicable prospectus supplement when determining whether or not to purchase the securities offered under this prospectus and the prospectus supplement.

**RATIO OF EARNINGS TO COMBINED FIXED CHARGES
AND PREFERENCE STOCK DIVIDENDS**

The following table sets forth our ratio of earnings to fixed charges and the ratio of our combined fixed charges and preference stock dividends to earnings for the periods indicated:

	Fiscal Year Ended September 30 2004	Fiscal Year Ended September 30 2005	Fiscal Year Ended September 30 2006	Three Months Ended December 31 2006	Fiscal Year Ended December 31 2007	Fiscal Year Ended December 31 2008	Nine Months Ended September 30, 2009
Ratio of earnings to fixed charges							
Ratio of combined fixed charges and preference dividends to earnings							
Deficiency of earnings available to cover fixed charges	(a)	(b)	(c)	(d)	(e)	(f)	(g)

- (a) Earnings in fiscal year ended September 30, 2004 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately \$4.5 million.
- (b) Earnings in fiscal year ended September 30, 2005 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately \$12.7 million.
- (c) Earnings in the fiscal year ended September 30, 2006 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately \$25.4 million.
- (d) Earnings in the three months ended December 31, 2006 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately \$7.4 million.
- (e) Earnings in the fiscal year ended December 31, 2007 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately \$33.9 million.
- (f) Earnings in the fiscal year ended December 31, 2008 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately \$71.9 million.
- (g) Earnings in the nine months ended September 30, 2009 were inadequate to cover combined fixed charges and preference dividends. The coverage deficiency was approximately \$75.1 million.

The ratios above were computed by dividing earnings by fixed charges or by dividing earnings by combined fixed charges and preference dividends. For this purpose, earnings is calculated by as follows: (i) adding (a) pre-tax income (loss) from continuing operations before adjustment for income or loss from equity investees; (b) fixed charges; (c) amortization of capitalized interest; (d) distributed income of equity investees; and (e) our share of pre-tax losses of equity investees for which charges arising from guarantees are included in fixed charges; and

(ii) then subtracting from such sum (a) interest capitalized; (b) preference security dividend requirements of our consolidated subsidiaries; and (c) any noncontrolling interest in the pre-tax income (loss) of our subsidiaries that have not incurred fixed charges. Equity investees are investments that we account for using the equity method of accounting.

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Fixed charges consist of that portion of rental expense associated with certain facility, equipment and vehicle leases considered to be a reasonable estimate of the interest factor. We did not pay or accrue any preference dividends for the periods presented.

USE OF PROCEEDS

Unless otherwise described in a prospectus supplement or related free writing prospectus, we intend to use the net proceeds from the sale of the offered securities for general corporate purposes, which may include, but are not limited to, working capital, development and commercialization of *Feraheme*, strategic acquisitions and other potential business development activities, ongoing research and development activities and capital expenditures. Pending any specific utilization, the proceeds from the sale of the offered securities may be invested in a manner designed to ensure levels of liquidity which correspond to our current and foreseeable cash needs. Such investments may include, but may not be limited to, short-term investments, including government bonds, or other interest-bearing investments.

DESCRIPTION OF OUR COMMON STOCK

We are authorized to issue up to 58,750,000 shares of common stock, \$.01 par value per share. As of January 15, 2010, approximately 17,386,794 shares of common stock were outstanding.

This section describes the general terms of our common stock that we may offer from time to time. For more detailed information, a holder of our common stock should refer to our certificate of incorporation, our by-laws and our rights agreement with respect to our preferred share purchase rights plan, copies of which are filed with the SEC as exhibits to the registration statement of which this prospectus is a part.

Holder of our common stock are entitled to one vote per share and vote together as a single class on all matters to be voted on by our stockholders. Pursuant to our certificate of incorporation, there are no cumulative voting rights in the election of directors. The approval of corporate actions may also require the approval of the holders of any series of our preferred stock. See "Description of Our Preferred Stock."

Our common stock will be the only type of our capital stock entitled to vote in the election and removal of directors and other matters presented to our stockholders from time to time, unless we issue voting preferred stock or our certificate of incorporation or the law requires otherwise.

Our common stockholders will be entitled to receive dividends and distributions declared by our board of directors, or our board, to the extent permitted by outstanding series of preferred stock and by our certificate of incorporation. If a dividend is declared, it will be distributed pro rata to our common stockholders on a per share basis.

If we are liquidated or dissolved, our common stockholders will be entitled to receive our assets and funds available for distribution to common stockholders in proportion to the number of shares they hold. Our common stockholders may not receive any assets or funds until our creditors have been paid in full and the preferential or participating rights of our preferred stockholders, if any, have been satisfied.

Holder of our common stock will not have any preemptive, subscription or conversion rights with respect to shares of our common stock. We may issue additional shares of our common stock, if authorized by our board, without the common stockholders' approval, unless required by Delaware law or a stock exchange on which our securities are traded. The issuance of additional shares could have the effect of diluting any earnings per share and the book value per share of outstanding shares of common stock. If we receive the appropriate payment, shares of our common stock that we issue will be fully paid and nonassessable. There are no redemption or sinking fund provisions applicable to our common stock.

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Reference is made to the applicable prospectus supplement relating to the common stock offered by that prospectus supplement for specific terms, including:

amount and number of shares offered;

the initial offering price, if any, and market price; and

information with respect to dividends.

DESCRIPTION OF OUR PREFERRED STOCK

We are authorized to issue up to 2,000,000 shares of preferred stock, \$.01 par value per share. To date, our board has designated 45,000 of the 2,000,000 authorized shares of preferred stock as Series A Junior Participating Preferred Stock, which series is described in greater detail below under " Preferred Share Purchase Rights Plan." As of January 15, 2010, no shares of preferred stock were outstanding.

This section describes the general terms and provisions of our preferred stock that we may offer from time to time. The applicable prospectus supplement will describe the specific terms of the shares of preferred stock offered through that prospectus supplement. We will file a copy of the certificate of designation that contains the terms of each new series of preferred stock with the SEC each time we issue a new series of preferred stock, and these certificates of designation will be incorporated by reference into the registration statement of which this prospectus is a part. Each certificate of designation will establish the number of shares included in a designated series and fix the designation, powers, privileges, preferences and rights of the shares of each series as well as any applicable qualifications, limitations or restrictions. A holder of our preferred stock should refer to the applicable certificate of designation, our certificate of incorporation and the applicable prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) for more specific information.

Our board has been authorized, subject to limitations provided in our certificate of incorporation, to provide for the issuance of shares of our preferred stock in multiple series. As of the date of this prospectus, our board has designated one series of preferred shares as Series A Junior Participating Preferred Stock and no other series has been designated and no shares of our preferred stock are currently outstanding.

The issuance of preferred stock could adversely affect the voting power of holders of common stock and reduce the likelihood that common stockholders will receive dividend payments and payments upon liquidation. The issuance of preferred stock could have the effect of decreasing the market price of our common stock. The issuance of preferred stock also could have the effect of delaying, deterring or preventing a change in control of our company.

With respect to each new series of our preferred stock, our board has the authority to fix, among other things, the following terms:

the designation of the series,

the number of shares within the series,

whether the dividends are cumulative and, if cumulative, the dates from which dividends are cumulative,

the rate of any dividends, any conditions upon which dividends are payable, and the dates of payment of dividends,

whether the shares are redeemable, the redemption price and the terms of redemption,

the amount payable to a holder for each share owned if we are dissolved or liquidated,

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whether the shares are convertible or exchangeable, the price or rate of exchange, and the applicable terms and conditions,

any restrictions on issuance of shares in the same series or any other series,

the voting rights, if any, of the shares of the series, and

the provisions for a sinking fund, if any.

Holders of our preferred stock will not have preemptive rights with respect to shares of our preferred stock. In addition, rights with respect to shares of our preferred stock will be subordinate to the rights of our general creditors. If we receive the appropriate payment, shares of our preferred stock that we issue will be fully paid and nonassessable.

Preferred Share Purchase Rights Plan. Each outstanding share of our common stock has attached to it one preferred share purchase right, which we refer to as a right. Each right entitles the registered holder of our common stock to purchase from us one one-thousandth of a share of Series A Junior Participating Preferred Stock, which we refer to as participating preferred shares, at a price of \$250 per one one-thousandth of a participating preferred share, subject to adjustment. Each one one-thousandth of a share of participating preferred shares has designations and powers, preferences and rights, and the qualifications, limitations and restrictions that make its value approximately equal to the value of a share of our common stock at the end of the ten-year term of the rights. The description and terms of the rights are set forth in a Rights Agreement, dated as of September 4, 2009, between us and American Stock Transfer & Trust Company, LLC, as rights agent, or the rights agreement, which is incorporated by reference as an exhibit into the registration statement of which this prospectus is a part.

Until the distribution date described below, we will not issue separate certificates evidencing the rights. Until that date, the rights will be evidenced, with respect to any common stock certificate, by that common stock certificate. The rights will detach from the common stock and a distribution date will occur upon the earlier of the following dates:

the 10th day following the date of a public announcement that an "acquiring person," which may include an entity or group of affiliated or associated persons, has acquired beneficial ownership of 20% or more of our outstanding common stock, or

the 10th business day following the commencement of, or announcement of an intention to make, a tender offer or exchange offer which would result in the beneficial ownership by an "acquiring person" of 20% or more of our outstanding common stock.

Our board may postpone the distribution date by determining a later distribution date before the time any person or group becomes an acquiring person.

The term "acquiring person" does not include us, any of our subsidiaries, any of our or our subsidiaries' employee benefit or compensation plans or any entity holding our common stock for or under any of our or our subsidiaries' employee benefit or compensation plans. In addition, a person who would otherwise be an acquiring person will not be considered an acquiring person if our board determines in good faith that such person inadvertently became the beneficial owner of 20% or more of our common stock and such person divests itself, as promptly as practicable following written notice from us, of beneficial ownership of a sufficient number of shares of our common stock so that it would no longer otherwise qualify as an acquiring person or, in the case of any derivative securities underlying a transaction entered into by such person or otherwise acquired by such person, such person terminates such transaction or otherwise disposes of such derivative securities so that such person would no longer be an "acquiring person," then such person shall not be considered an "acquiring person."

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In addition, except under limited circumstances, no person or entity shall become an acquiring person as the result of our acquisition of our common stock that, by reducing the number of shares outstanding, increases the proportionate number of shares beneficially owned by such person or entity to 20% or more of our outstanding common stock; *provided, however*, that if a person shall become the beneficial owner of 20% or more of our outstanding common stock by reason of our acquisition of our common stock and shall, following written notice from us, or public disclosure by us of such share purchases by us, become the beneficial owner of any additional common stock without our prior consent and shall then beneficially own more than 20% of our common stock, then outstanding, then such person shall be deemed to be an "acquiring person."

The rights agreement provides that, until the distribution date, or earlier redemption or expiration of the rights, the rights will be transferred only with our common stock. The rights will be evidenced, with respect to any common stock certificate outstanding as of September 17, 2009, by that common stock certificate with a summary of the rights attached to it. Until the distribution date, or earlier redemption or expiration of the rights, new common stock certificates issued after September 17, 2009 upon transfer or new issuances of common stock will contain a notation incorporating the rights agreement by reference. Until the distribution date, the surrender for transfer of any certificates for common stock, even without a summary of the rights attached to it, also will constitute the transfer of the rights associated with the common stock represented by that certificate. As soon as practicable after the distribution date, separate certificates evidencing the rights will be mailed to holders of record of our common stock as of the close of business on the distribution date, and the separate right certificates alone will evidence the rights.

The rights are not exercisable until the distribution date. The rights will expire on September 17, 2019, unless the rights are earlier redeemed or exchanged by us, in each case, as described below.

The purchase price payable for the participating preferred shares, and the number of participating preferred shares or other securities or property issuable, upon exercise of the rights, as well as the number of rights outstanding, are subject to adjustment from time to time to prevent dilution in the following circumstances:

a stock dividend on, or a subdivision, combination or reclassification of, the participating preferred shares;

upon the grant to holders of the participating preferred shares of certain rights or warrants to subscribe for or purchase participating preferred shares at a price, or securities convertible into participating preferred shares with a conversion price, less than the then current market price of the participating preferred shares; or

upon the distribution to holders of the participating preferred shares of evidences of indebtedness or assets (excluding regular periodic cash dividends paid out of earnings or retained earnings or dividends payable in participating preferred shares) or of subscription rights or warrants (other than those referred to above).

The exercise of rights to purchase participating preferred shares is at all times subject to the availability of a sufficient number of authorized but unissued participating preferred shares.

The number of outstanding rights and the number of one one-thousandths of a participating preferred share issuable upon exercise of each right are also subject to adjustment in the event of a dividend or other distribution on the common stock payable in common stock or subdivisions, consolidations or combinations of our common stock occurring, in any of those cases, before the distribution date.

Participating preferred shares purchasable upon exercise of the rights will be non-redeemable and rank junior to any other series of our preferred stock. Each participating preferred share would be

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entitled to receive a minimum preferential quarterly dividend payment of \$1.00 per share but would be entitled to receive an aggregate dividend of 1,000 times the dividend declared per share of our common stock. If there is a liquidation, the holders of the participating preferred shares will be entitled to a minimum preferential liquidation payment of \$250 per share and will be entitled to an aggregate payment of 1,000 times the payment made per share of our common stock. Each participating preferred share will have 1,000 votes, voting together with our common stock. Finally, in the event of any merger, consolidation or other transaction in which our common shares are exchanged, each participating preferred share will be entitled to receive 1,000 times the amount of consideration received per common share. These rights are protected by customary anti-dilution provisions.

Because of the nature of the dividend, liquidation and voting rights of the participating preferred shares, the value of the one one-thousandth interest in a participating preferred share purchasable upon exercise of each right should approximate the value of one share of our common stock.

In the event that any person or group of affiliated or associated persons becomes an "acquiring person," proper provision shall be made so that each holder of a right, other than rights beneficially owned by the "acquiring person" and its associates and affiliates (which will thereafter be void), will for a sixty (60) day period have the right to receive upon exercise that number of common shares having a market value of two times the exercise price of the right (or, if such number of shares is not and cannot be authorized, we may issue participating preferred shares, cash, debt, stock or a combination thereof in exchange for the rights). This right will terminate sixty (60) days after the date on which the rights become nonredeemable (as described below), unless there is an injunction or similar obstacle to exercise of the rights, in which event this right will terminate sixty (60) days after the date on which the rights again become exercisable.

If we are acquired in a merger or other business combination transaction or 50% or more of our consolidated assets or earning power are sold to an "acquiring person", its associates or affiliates or certain other persons in which such persons have an interest, proper provision will be made so that each holder of a right will thereafter have the right to receive, upon the exercise thereof at the then current exercise price of the right, that number of shares of common stock of the acquiring company that at the time of such transaction will have a market value of two times the exercise price of the right.

At any time after an "acquiring person" becomes an "acquiring person" and prior to the acquisition by such "acquiring person" of 50% or more of our outstanding common shares, our board may exchange the rights (other than rights owned by such person or group that have become void), in whole or in part, at an exchange ratio of one common share per right (or, in lieu of the common shares, at our election, we may issue cash, debt, stock or a combination thereof in exchange for the rights), subject to adjustment.

With specified exceptions, no adjustments in the purchase price for the preferred shares will be required until cumulative adjustments require an adjustment of at least 1% in the purchase price. No fractional participating preferred shares will be issued, other than fractions that are integral multiples of one one-thousandth of a participating preferred share, which may, at our election, be evidenced by depositary receipts. Instead of issuing fractional participating preferred shares, we will make an adjustment in cash based on the closing price of the participating preferred shares on the last trading day immediately before the date of exercise.

At any time prior to the earliest of (i) the day that a person has become an "acquiring person" or (ii) September 17, 2019, our board may redeem the rights in whole, but not in part, at a price of \$0.01 per right, which may be paid in cash, common shares or any other consideration deemed appropriate by our board. The rights become nonredeemable on the day that a person has become an "acquiring person". Immediately upon any redemption of the rights, the right to exercise the rights will terminate and the only right of the holders of rights will be to receive the redemption price.

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Until a right is exercised, the holder of the right, in the capacity of a holder, will have no rights as a stockholder of ours, including, without limitation, the right to vote or to receive dividends. Although the distribution of the rights will not be taxable to stockholders or to us, stockholders may, depending upon the circumstances, recognize taxable income in the event that the rights become exercisable for our common stock or other consideration, or for common stock of any company acquiring us.

The terms of the rights generally may be amended by our board without the consent of the holders of the rights, except that from and after the time that the rights are no longer redeemable, no such amendment may adversely affect the interests of the holders of the rights (excluding the interests of any "acquiring person" and any group of affiliated or associated persons).

The rights have certain anti-takeover effects. The rights will cause substantial dilution to a person or group that attempts to acquire us on terms not approved by our board. The rights should not interfere with any merger or other business combination approved by our board since the rights may be amended to permit such acquisition or redeemed by us at the redemption price prior to the earliest of (i) the time that a person or group has acquired beneficial ownership of 20% or more of our common shares or (ii) September 17, 2019.

Transfer Agent and Registrar. We currently plan to retain American Stock Transfer & Trust Company as the registrar and transfer agent of any series of our preferred stock.

DESCRIPTION OF OUR DEBT SECURITIES

This section describes the general terms and provisions of our debt securities that we may issue from time to time.

We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any future debt securities we may offer under this prospectus, the applicable prospectus supplement or free writing prospectus will describe the specific terms of any debt securities offered through that prospectus supplement or free writing prospectus. The terms of any debt securities we offer under a prospectus supplement or free writing prospectus may differ from the terms we describe below. Unless the context requires otherwise, whenever we refer to the "indentures," we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue any senior debt securities under the senior indenture that we will enter into with the trustee named in the senior indenture. We will issue any subordinated debt securities under the subordinated indenture that we will enter into with the trustee named in the subordinated indenture. We have filed forms of these documents as exhibits to the registration statement, of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The indentures will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We use the term "trustee" to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplement or free writing prospectus and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete applicable indenture that contains the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

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General

We will describe in the applicable prospectus supplement or free writing prospectus the terms of the series of debt securities being offered, including:

the title;

the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;

any limit on the amount that may be issued;

whether or not we will issue the series of debt securities in global form, and, if so, the terms and who the depositary will be;

the maturity date;

whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;

the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;

whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;

the terms of the subordination of any series of subordinated debt;

the place where payments will be payable;

restrictions on transfer, sale or other assignment, if any;

our right, if any, to defer payment of interest and the maximum length of any such deferral period;

the date, if any, after which, the conditions upon which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;

the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option, to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;

whether the indenture will restrict our ability or the ability of our subsidiaries to:

incur additional indebtedness;

issue additional securities;

create liens;

pay dividends or make distributions in respect of our capital stock or the capital stock of our subsidiaries;

redeem capital stock;

place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;

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make investments or other restricted payments;

sell or otherwise dispose of assets;

enter into sale-leaseback transactions;

engage in transactions with stockholders or affiliates;

issue or sell stock of our subsidiaries; or

effect a consolidation or merger;

whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;

a discussion of certain material or special United States federal income tax considerations applicable to the debt securities;

information describing any book-entry features;

provisions for a sinking fund purchase or other analogous fund, if any;

the applicability of the provisions in the indenture on discharge;

whether the debt securities are to be offered at a price such that they will be deemed to be offered at an "original issue discount" as defined in paragraph (a) of Section 1273 of the Internal Revenue Code of 1986, as amended;

the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;

the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations or advisable in connection with the marketing of the debt securities.

Conversion or Exchange Rights

We will set forth in the applicable prospectus supplement or free writing prospectus the terms on which a series of debt securities may be convertible into or exchangeable for our common stock, our preferred stock or other securities (including securities of a third-party). We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions

pursuant to which the number of shares of our common stock, our preferred stock or other securities (including securities of a third-party) that the holders of the series of debt securities receive would be subject to adjustment.

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Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, the indentures will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate. If the debt securities are convertible into or exchangeable for other securities of ours or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

Events of Default under the Indenture

Unless we provide otherwise in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, the following are events of default under the indentures with respect to any series of debt securities that we may issue:

if we fail to pay interest when due and payable and our failure continues for 90 days and the time for payment has not been extended;

if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable at maturity, upon redemption or repurchase or otherwise, and the time for payment has not been extended;

if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and

if specified events of bankruptcy, insolvency or reorganization occur.

We will describe in each applicable prospectus supplement or free writing prospectus any additional events of default relating to the relevant series of debt securities.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the unpaid principal, premium, if any, and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indentures, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity or security satisfactory to it against any loss, liability or expense. The holders of a majority in principal amount of the outstanding debt

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securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

the direction so given by the holder is not in conflict with any law or the applicable indenture; and

subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the indentures or to appoint a receiver or trustee, or to seek other remedies if:

the holder has given written notice to the trustee of a continuing event of default with respect to that series;

the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the trustee or security satisfactory to it against any loss, liability or expense or to be incurred in compliance with instituting the proceeding as trustee; and

the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities, or other defaults that may be specified in the applicable prospectus supplement or free writing prospectus.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indentures.

Modification of Indenture; Waiver

Subject to the terms of the indenture for any series of debt securities that we may issue, we and the trustee may change an indenture without the consent of any holders with respect to the following specific matters:

to fix any ambiguity, defect or inconsistency in the indenture;

to comply with the provisions described above under "Description of Our Debt Securities Consolidation, Merger or Sale;"

to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act;

to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;

to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided under "Description of Our Debt Securities General," to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of

debt securities;

to evidence and provide for the acceptance of appointment hereunder by a successor trustee;

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to provide for uncertificated debt securities and to make all appropriate changes for such purpose;

to add to our covenants such new covenants, restrictions, conditions or provisions for the benefit of the holders, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred to us in the indenture; or

to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.

In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, subject to the terms of the indenture for any series of debt securities that we may issue or as otherwise provided in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

extending the stated maturity of the series of debt securities;

reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption or repurchase of any debt securities; or

reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

Each indenture provides that, subject to the terms of the indenture and any limitation otherwise provided in the prospectus supplement or free writing prospectus applicable to a particular series of debt securities, we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

register the transfer or exchange of debt securities of the series;

replace stolen, lost or mutilated debt securities of the series;

maintain paying agencies;

hold monies for payment in trust;

recover excess money held by the trustee;

compensate and indemnify the trustee; and

appoint any successor trustee.

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In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we otherwise specify in the applicable prospectus supplement or free writing prospectus, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will

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be deposited with, or on behalf of, The Depository Trust Company or another depository named by us and identified in a prospectus supplement or free writing prospectus with respect to that series.

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement or free writing prospectus, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement or free writing prospectus, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will make no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement or free writing prospectus the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs.

Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement or free writing prospectus, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

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We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement or free writing prospectus, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement or free writing prospectus, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement or free writing prospectus any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

Ranking of Debt Securities

The subordinated debt securities will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement or free writing prospectus. The subordinated indenture does not limit the amount of subordinated debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

The senior debt securities will rank equally in right of payment to all our other senior unsecured debt. The senior indenture does not limit the amount of senior debt securities that we may issue. It also does not limit us from issuing any other secured or unsecured debt.

DESCRIPTION OF OUR WARRANTS

The following description, together with the additional information we include in any applicable prospectus supplements or free writing prospectus, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock, preferred stock and/or debt securities in one or more series. Warrants may be offered independently or together with common stock, preferred stock and/or debt securities offered by any prospectus supplement or free writing prospectus, and may be attached to or separate from those securities. While the terms we have summarized below will generally apply to any future warrants we may offer under this prospectus, we will describe the particular terms of any warrants that we may offer in more detail in the applicable prospectus supplement or free writing prospectus. The terms of any warrants we offer under a prospectus supplement or free writing prospectus may differ from the terms we describe below.

We will issue the warrants under a warrant agreement which we will enter into with a warrant agent to be selected by us. We use the term "warrant agreement" to refer to any of these warrant agreements. We use the term "warrant agent" to refer to the warrant agent under any of these warrant agreements. The warrant agent will act solely as an agent of ours in connection with the warrants and will not act as an agent for the holders or beneficial owners of the warrants.

The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement applicable to a particular series of warrants. We urge you to read the applicable prospectus

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supplements or free writing prospectus related to the warrants that we sell under this prospectus, as well as the complete warrant agreements that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement or free writing prospectus the terms relating to a series of warrants. If warrants for the purchase of debt securities are offered, the prospectus supplement or free writing prospectus will describe the following terms, to the extent applicable:

the offering price and the aggregate number of warrants offered;

the currencies in which the warrants are being offered;

the designation, aggregate principal amount, currencies, denominations and terms of the series of debt securities that can be purchased if a holder exercises a warrant;

the designation and terms of any series of debt securities with which the warrants are being offered and the number of warrants offered with each such debt security;

the date on and after which the holder of the warrants can transfer them separately from the related series of debt securities;

the principal amount of the series of debt securities that can be purchased if a holder exercises a warrant and the price at which and currencies in which such principal amount may be purchased upon exercise;

the terms of any rights to redeem or call the warrants;

the date on which the right to exercise the warrants begins and the date on which such right expires;

federal income tax consequences of holding or exercising the warrants; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the warrants.

Warrants for the purchase of debt securities will be in registered form only.

If warrants for the purchase of common stock or preferred stock are offered, the prospectus supplement or free writing prospectus will describe the following terms, to the extent applicable:

the offering price and the aggregate number of warrants offered;

the total number of shares that can be purchased if a holder of the warrants exercises them and, in the case of warrants for preferred stock, the designation, total number and terms of the series of preferred stock that can be purchased upon exercise;

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the designation and terms of any series of preferred stock with which the warrants are being offered and the number of warrants being offered with each share of common stock or preferred stock;

the date on and after which the holder of the warrants can transfer them separately from the related common stock or series of preferred stock;

the number of shares of common stock or preferred stock that can be purchased if a holder exercises the warrant and the price at which such common stock or preferred stock may be purchased upon exercise, including, if applicable, any provisions for changes to or adjustments in the exercise price and in the securities or other property receivable upon exercise;

the terms of any rights to redeem or call, or accelerate the expiration of, the warrants;

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the date on which the right to exercise the warrants begins and the date on which that right expires;

federal income tax consequences of holding or exercising the warrants; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the warrants.

Warrants for the purchase of common stock or preferred stock will be in registered form only.

Exercise of Warrants

Each holder of a warrant is entitled to purchase the principal amount of debt securities or number of shares of common stock or preferred stock, as the case may be, at the exercise price described in the applicable prospectus supplement or free writing prospectus. After the close of business on the day when the right to exercise terminates (or a later date if we extend the time for exercise), unexercised warrants will become void.

A holder of warrants may exercise them by following the general procedure outlined below:

delivering to the warrant agent the payment required by the applicable prospectus supplement or free writing prospectus to purchase the underlying security;

properly completing and signing the reverse side of the warrant certificate representing the warrants; and

delivering the warrant certificate representing the warrants to the warrant agent within five business days of the warrant agent receiving payment of the exercise price.

If you comply with the procedures described above, your warrants will be considered to have been exercised when the warrant agent receives payment of the exercise price, subject to the transfer books for the securities issuable upon exercise of the warrant not being closed on such date. After you have completed those procedures and subject to the foregoing, we will, as soon as practicable, issue and deliver to you the debt securities, common stock or preferred stock that you purchased upon exercise. If you exercise fewer than all of the warrants represented by a warrant certificate, a new warrant certificate will be issued to you for the unexercised amount of warrants. Holders of warrants will be required to pay any tax or governmental charge that may be imposed in connection with transferring the underlying securities in connection with the exercise of the warrants.

Amendments and Supplements to the Warrant Agreements

We may amend or supplement a warrant agreement without the consent of the holders of the applicable warrants to cure ambiguities in the warrant agreement, to cure or correct a defective provision in the warrant agreement, or to provide for other matters under the warrant agreement that we and the warrant agent deem necessary or desirable, so long as, in each case, such amendments or supplements do not materially adversely affect the interests of the holders of the warrants.

Warrant Adjustments

Unless the applicable prospectus supplement or free writing prospectus states otherwise, the exercise price of, and the number of securities covered by, a common stock warrant or preferred stock warrant will be adjusted proportionately if we subdivide or combine our common stock or preferred stock, as applicable. In addition, unless the prospectus supplement or free writing prospectus states otherwise, if we, without receiving payment:

issue capital stock or other securities convertible into or exchangeable for common stock or preferred stock, or any rights to subscribe for, purchase or otherwise acquire any of the foregoing, as a dividend or distribution to holders of our common stock or preferred stock;

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pay any cash to holders of our common stock or preferred stock other than a cash dividend paid out of our current or retained earnings or other than in accordance with the terms of the preferred stock;

issue any evidence of our indebtedness or rights to subscribe for or purchase our indebtedness to holders of our common stock or preferred stock; or

issue common stock or preferred stock or additional stock or other securities or property to holders of our common stock or preferred stock by way of spinoff, split-up, reclassification, combination of shares or similar corporate rearrangement,

then the holders of common stock warrants and preferred stock warrants, as applicable, will be entitled to receive upon exercise of the warrants, in addition to the securities otherwise receivable upon exercise of the warrants and without paying any additional consideration, the amount of stock and other securities and property such holders would have been entitled to receive had they held the common stock or preferred stock, as applicable, issuable under the warrants on the dates on which holders of those securities received or became entitled to receive such additional stock and other securities and property.

Except as stated above or as otherwise set forth in the applicable prospectus supplement or free writing prospectus, the exercise price and number of securities covered by a common stock warrant and preferred stock warrant, and the amounts of other securities or property to be received, if any, upon exercise of those warrants, will not be adjusted or provided for if we issue those securities or any securities convertible into or exchangeable for those securities, or securities carrying the right to purchase those securities or securities convertible into or exchangeable for those securities.

Holders of common stock warrants and preferred stock warrants may have additional rights under the following circumstances:

certain reclassifications, capital reorganizations or changes of the common stock or preferred stock, as applicable;

certain share exchanges, mergers, or similar transactions involving us and which result in changes of the common stock or preferred stock, as applicable; or

certain sales or dispositions to another entity of all or substantially all of our property and assets.

If one of the above transactions occurs and holders of our common stock or preferred stock are entitled to receive stock, securities or other property with respect to or in exchange for their securities, the holders of the common stock warrants and preferred stock warrants then outstanding, as applicable, will be entitled to receive upon exercise of their warrants the kind and amount of shares of stock and other securities or property that they would have received upon the applicable transaction if they had exercised their warrants immediately before the transaction.

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**DESCRIPTION OF CERTAIN PROVISIONS OF DELAWARE LAW
AND OUR CERTIFICATE OF INCORPORATION AND BY-LAWS**

We are organized as a Delaware corporation. The following is a summary of our certificate of incorporation and by-laws and certain provisions of the Delaware General Corporation Law, or the DGCL. Because it is a summary, it does not contain all the information that may be important to you. If you want more information, you should read our entire certificate of incorporation and by-laws, copies of which are filed with the SEC as exhibits to the registration statement of which this prospectus is a part. See "Where You Can Find More Information," or refer to the provisions of Delaware law.

Classification of Directors

Our by-laws provide that, except as otherwise required by specific provisions of the certificate of incorporation relating to the rights of holders of any class or series of preferred stock to elect additional directors under specified circumstances, the number of our directors may be fixed from time to time by a resolution adopted by a majority of our board but must not be less than one. Our board is not classified into classes. A director may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors, subject to the rights of any series of preferred stock then outstanding.

Special Meetings

Except as otherwise required by law and subject to the rights of holders of any class or series of preferred stock, special meetings of the stockholders may only be called by our President or by our board. No business other than that stated in the notice of meeting may be transacted at any special meeting of stockholders.

Limitation of Liability and Indemnification

Our certificate of incorporation provides that we shall indemnify our directors and officers to the fullest extent that Delaware law permits. Our certificate of incorporation also provides that we, by action of our board, may provide indemnification to our employees and agents with the same scope and effect as the indemnification of our officers and directors. Delaware law permits a corporation to indemnify any director, officer, employee or agent made or threatened to be made a party to any pending or completed proceeding if the person acted in good faith and in a manner that the person reasonably believed to be in the best interests of the corporation and, with respect to any criminal proceeding, had no reasonable cause to believe that his or her conduct was unlawful.

Our certificate of incorporation limits the liability of our directors to the fullest extent permitted by the DGCL. Delaware law provides that directors will not be personally liable for monetary damages for breach of their fiduciary duties as directors, except liability for:

any breach of their duty of loyalty to the corporation or its stockholders,

acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law,

unlawful payments of dividends or unlawful stock repurchases or redemptions, or

any transaction from which the director derived an improper personal benefit.

The effect of this provision may be to reduce the likelihood of derivative litigation against directors for breach of their duty of care, even though the action, if successful, might otherwise have benefited us and our stockholders. This provision has no effect on any non-monetary remedies that may be available to us or our stockholders, nor does it relieve us or our officers or directors from compliance with federal or state securities laws.

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Each of our directors and executive officers is party to an indemnification agreement that provides specific contractual assurance that the indemnification protection promised by certificate of incorporation and by-laws will be available.

As permitted by our certificate of incorporation, we have purchased and maintain insurance on behalf of our directors and officers for any expense, liability or loss incurred by them arising out of their actions in that capacity if we would have the power to indemnify such person against such expense, liability or loss under the DGCL.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the SEC such indemnification is against public policy and is therefore unenforceable.

Section 203 of the Delaware General Corporation Law

Section 203 of the DGCL prohibits a defined set of transactions between a Delaware corporation, such as us, and an "interested stockholder." An interested stockholder is defined as a person who, together with any affiliates or associates of such person, beneficially owns, directly or indirectly, 15% or more of the outstanding voting stock of a Delaware corporation. This provision may prohibit business combinations between an interested stockholder and a corporation for a period of three years after the date the interested stockholder becomes an interested stockholder. The term "business combination" is broadly defined to include mergers, consolidations, sales or other dispositions of assets having a total value in excess of 10% of the consolidated assets of the corporation, and some other transactions that would increase the interested stockholder's proportionate share ownership in the corporation.

This prohibition is effective unless:

either the business combination or the transaction that resulted in the interested stockholder becoming an interested stockholder is approved by our board prior to the time the interested stockholder becomes an interested stockholder,

the interested stockholder owns at least 85% of our voting stock, other than stock held by directors who are also officers or by qualified employee stock plans, upon completion of the transaction in which it becomes an interested stockholder, or

the business combination is approved by a majority of our board and by the affirmative vote of 66²/₃% of the outstanding voting stock that is not owned by the interested stockholder.

In general, the prohibitions do not apply to business combinations with persons who were interested stockholders prior to the corporation becoming subject to Section 203.

Stock Exchange Listing

Our common stock is listed on the Nasdaq Global Market. The trading symbol for our common stock is "AMAG."

Transfer Agent

American Stock Transfer & Trust Company is the transfer agent for our common stock.

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LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee or depository or warrant agent maintain for this purpose as the "holders" of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as "indirect holders" of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement or free writing prospectus. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depository on behalf of other financial institutions that participate in the depository's book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Global securities will be registered in the name of the depository or its participants. Consequently, for global securities, we will recognize only the depository as the holder of the securities, and we will make all payments on the securities to the depository. The depository passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depository and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a global security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depository's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not holders, of the securities.

Street Name Holders

We may terminate a global security or issue securities that are not issued in global form. In these cases, investors may choose to hold their securities in their own names or in "street name." Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we or any applicable trustee or depository will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we or any such trustee or depository will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee or third party employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who

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hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with depository participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of an indenture, or for other purposes. In such an event, we would seek approval only from the legal holders, and not the indirect holders, of the securities. Whether and how the holders contact the indirect holders is up to the legal holders.

Special Considerations For Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form because the securities are represented by one or more global securities or in street name, you should check with your own institution to find out:

how it handles securities payments and notices;

whether it imposes fees or charges;

how it would handle a request for the holders' consent, if ever required;

whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;

how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and

if the securities are global securities, how the depository's rules and procedures will affect these matters.

Global Securities

A global security is a security which represents one or any other number of individual securities held by a depository. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we issue to, deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depository. Unless we specify otherwise in the applicable prospectus supplement or free writing prospectus, The Depository Trust Company, New York, New York, known as DTC, will be the depository for all global securities issued under this prospectus.

A global security may not be transferred to or registered in the name of anyone other than the depository, its nominee or a successor depository, unless special termination situations arise. We describe those situations below under " Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depository, or its nominee, will be the sole registered owner and holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depository or with another institution that does. Thus, an investor whose security is represented by

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a global security will not be a holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement or free writing prospectus for a particular security indicates that the security will be issued as a global security, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations For Global Securities

As an indirect holder, an investor's rights relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a legal holder of securities and instead deal only with the depositary that holds the global security.

If securities are issued only as a global security, an investor should be aware of the following:

An investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below;

An investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;

An investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;

An investor may not be able to pledge his or her interest in the global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;

The depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in the global security. We and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in the global security. We and the trustee also do not supervise the depositary in any way;

The depositary may, and we understand that DTC will, require that those who purchase and sell interests in the global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and

Financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in the global security, may also have their own policies affecting payments, notices and other matters relating to the securities. There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When A Global Security Will Be Terminated

In a few special situations described below, a global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own

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name, so that they will be direct holders. We have described the rights of holders and street name investors above.

A global security will terminate when the following special situations occur:

if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;

if we notify any applicable trustee that we wish to terminate that global security; or

if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The prospectus supplement or free writing prospectus may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement or free writing prospectus. When a global security terminates, the depositary, and not we or any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

PLAN OF DISTRIBUTION

We may sell the securities in and outside the United States (a) through underwriters or dealers, (b) directly to purchasers, including our affiliates, (c) through agents or (d) through a combination of any of these methods. The applicable prospectus supplement or free writing prospectus will include the following information:

the terms of the offering;

the names of any underwriters or agents;

the name or names of any managing underwriter or underwriters;

the purchase price of the securities;

the net proceeds from the sale of the securities;

any delayed delivery arrangements;

any underwriting discounts, commissions and other items constituting underwriters' compensation;

any initial public offering price;

any discounts or concessions allowed or reallocated or paid to dealers; and

any commissions paid to agents.

The sale of the securities may be effected in transactions (a) on any national or international securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, (b) in the over-the-counter market, (c) in transactions otherwise than on such exchanges or in the over-the-counter market or (d) through the writing of options.

The distribution of offered securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices related to the market prices, or at negotiated prices.

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Sale Through Underwriters or Dealers

If underwriters are used in the sale of any of these securities, the underwriters will acquire the securities for their own account. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless we inform you otherwise in any prospectus supplement or free writing prospectus, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. We may grant underwriters an option to purchase additional securities to cover over-allotment, if any, in connection with the distribution. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchases of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters who are qualified market makers on the Nasdaq Global Market may engage in passive market making transactions in our common stock, preferred stock, warrants and debt securities, as applicable, on the Nasdaq Global Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the securities. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell these securities for public offering and sale may make a market in those securities, but they will not be obligated to and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

If dealers are used in the sale of securities, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. We will include in the prospectus supplement or free writing prospectus the names of the dealers and the terms of the transaction.

Direct Sales and Sales Through Agents

We may sell the securities directly, and not through underwriters or agents. We may also sell the securities through agents designated from time to time. In the prospectus supplement or free writing prospectus, we will name any agent involved in the offer or sale of the offered securities, and we will describe any commissions payable to the agent. Unless we inform you otherwise in the prospectus

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supplement or free writing prospectus, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. We will describe the terms of any such sales in the prospectus supplement or free writing prospectus.

We may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement or free writing prospectus indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement or free writing prospectus, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be identified in the applicable prospectus supplement or free writing prospectus (or a post-effective amendment).

Delayed Delivery Contracts

If we so indicate in the prospectus supplement or free writing prospectus, we may authorize agents, underwriters or dealers to solicit offers from certain types of institutions to purchase securities from us at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the prospectus supplement or free writing prospectus. The prospectus supplement or free writing prospectus will describe the commission payable for solicitation of those contracts.

General Information

We may have agreements with the agents, dealers and underwriters to indemnify them against certain civil liabilities, including liabilities under the Securities Act, or to contribute with respect to payments that the agents, dealers or underwriters may be required to make. Agents, dealers and underwriters may be customers of, engage in transactions with or perform services for us in the ordinary course of their businesses.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

VALIDITY OF THE OFFERED SECURITIES

Certain legal matters with respect to the securities offered hereby have been passed upon by Cooley Godward Kronish LLP, Boston, Massachusetts. As of the date of this prospectus, certain attorneys with the firm of Cooley Godward Kronish LLP beneficially own an aggregate of approximately 700 shares of our common stock.

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EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2008 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information we incorporate by reference is considered part of this prospectus. Statements in this prospectus regarding the contents of any contract or other document may not be complete. You should refer to the copy of the contract or other document filed as an exhibit to the registration statement. Later information filed with the SEC will update and supersede information we have included or incorporated by reference in this prospectus.

We incorporate by reference the documents listed below, which have been filed with the SEC (other than Current Reports or portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K):

1. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2008;
2. Our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2009;
3. Our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2009;
4. Our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2009;
5. Our Current Reports on Form 8-K as filed on December 22, 2009, December 17, 2009, October 8, 2009, September 4, 2009, July 1, 2009, May 8, 2009, April 30, 2009 (solely with respect to Item 8.01 therein), and January 28, 2009;
6. The description of our common stock, which is registered under Section 12 of the Exchange Act, in our registration statement on Form 8-A as filed on June 26, 2006, including any amendment or report filed for the purpose of updating such descriptions; and
7. The description of our Series A Junior Participating Preferred Stock Purchase Rights, or the rights, contained in our registration statement on Form 8-A registering the rights under Section 12 of the Exchange Act, filed with the SEC on September 4, 2009, including any amendments or reports filed for the purpose of updating that description.

We also incorporate by reference any filings made after the date of the initial filing of the registration statement of which this prospectus forms a part including filings made prior to the effectiveness of the registration statement, made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until the offering of the securities made by this prospectus is completed or terminated.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus is delivered, upon the written or oral request of that person, a copy of any and all of the information that has been incorporated in this prospectus by reference other than exhibits unless those exhibits are specifically incorporated by reference into the documents. Requests for these copies should be directed to our investor relations department at the following address and telephone number: AMAG Pharmaceuticals, Inc., 100 Hayden Avenue, Lexington, Massachusetts, 02421; (617) 498-3300.

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WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other information with the SEC. You may read and copy the reports, proxy statements and other information that we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for information about the operation of its Public Reference Room and for its prescribed rates to obtain copies of such material. The SEC also maintains an Internet site that contains reports, proxy and information statements and other information regarding registrants, like us, that file electronically with the SEC. The address of the SEC's Internet site is <http://www.sec.gov>. Our Internet site is <http://www.amagpharma.com>. Information contained on our Internet site is not a part of this prospectus.

This prospectus provides you with a general description of the common stock, preferred stock, debt securities and warrants being registered. This prospectus is part of a registration statement that we have filed with the SEC. To see more detail, you should read the registration statement and the exhibits and schedules filed with, or incorporated by reference into, our registration statement.

This registration statement, including the exhibits contained or incorporated by reference therein, can be read at the SEC web site or at the SEC office referred to above. Any statement made or incorporated by reference in this prospectus concerning the contents of any contract, agreement or other document is only a summary of the actual contract, agreement or other document. If we have filed or incorporated by reference any contract, agreement or other document as an exhibit to the registration statement, you should read the exhibit for a more complete understanding of the document or matter involved. Each statement regarding a contract, agreement or other document is qualified in its entirety by reference to the actual document.

**DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION
FOR SECURITIES ACT LIABILITY**

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the DGCL, the certificate of incorporation or the by-laws of registrant, indemnification agreements entered into between registrant and its directors and executive officers, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

