Ardea Biosciences, Inc./DE
Form 8-K
January 31, 2012

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the

Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 31, 2012

Ardea Biosciences, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**1-33734**	**94-3200380**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification No.)**

4939 Directors Place

San Diego, California **92121**
(Address of principal executive offices) **(Zip Code)**
Registrant s telephone number, including area code: (858) 652-6500

N/A

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

¨ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

¨ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

¨ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

¨ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02 Results of Operations and Financial Condition.

We estimate that our cash, cash equivalents and short-term investments, available-for-sale were approximately $96.0 million as of December 31, 2011. This amount is preliminary, unaudited, subject to change upon completion of our year-end audit, and may differ from what will be reflected in our audited consolidated financial statements as of and for the year ended December 31, 2011. Additional information and disclosures would be required for a more complete understanding of our financial position and results of operations as of December 31, 2011.

The information in this Item 2.02 shall not be deemed filed for purposes of Section 18 of the Securities Exchange Act of 1934, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, except as shall be expressly set forth by specific reference in such a filing.

Item 8.01 Other Events.

We are filing the following information with the Securities and Exchange Commission for the purpose of updating certain aspects of our publicly disclosed descriptions of our business.

Company Overview

We are a biotechnology company focused on the development of small-molecule therapeutics for the treatment of serious diseases. The current status of our development programs is as follows:

Product Portfolio

Product Candidate	Target Indication	Development Status
Lesinurad (RDEA594)	Gout	Phase 3 ongoing
RDEA3170	Gout	Phase 1 ongoing
BAY 86-9766 (RDEA119)	Cancer	Phase 2 ongoing

GOUT

Gout is a painful, debilitating and progressive disease caused by abnormally elevated levels of uric acid in the blood stream, a condition called hyperuricemia. While gout is a treatable condition, there are limited treatment options, and a number of adverse effects are associated with most current therapies.

Drugs currently used to treat the underlying cause of gout work by lowering blood or serum uric acid (sUA) levels and are referred to as urate-lowering therapies (ULTs). Approximately 90 percent of gout patients are considered to have a defect in their ability to excrete sufficient amounts of uric acid and are classified as under-excreters of uric acid, which leads to excessive levels of sUA.

Lesinurad

Lesinurad, our most advanced product candidate, previously called RDEA594, is an inhibitor of URAT1, a transporter in the kidney that regulates uric acid excretion from the body. Lesinurad has been shown to normalize the amount of uric acid excreted by gout patients. Since the majority of gout patients are under-excreters , normalizing uric acid excretion by moderating URAT1 transporter activity with lesinurad may provide the most physiologically appropriate means of reducing sUA levels. In addition, because increasing the excretion of sUA is additive to the effects of ULTs that decrease the production of uric acid, such as allopurinol and febuxostat (Uloric®, Takeda Pharmaceutical Company Limited), lesinurad in combination with such drugs has the potential to treat the significant portion of the gout patient population that is not adequately treated with existing therapies.

Approximately 3.1 million gout patients in the U.S. are prescribed ULTs annually. Allopurinol, the most commonly prescribed ULT in the U.S., currently accounts for more than 90 percent of U.S. unit sales of all ULTs. However, in recent controlled clinical studies, only about 30 to 40 percent of gout patients responded adequately to allopurinol, defined as achieving sUA levels of less than 6 mg/dL, the medically recommended target. Febuxostat, the most recently approved, orally-administered ULT in the U.S., has similar response rates in clinical practice according to a 2010 BioTrends Research Group, Inc. report. We are developing lesinurad to be used in combination with allopurinol to treat the large number of patients who do not reach target sUA levels taking allopurinol alone, and in combination with febuxostat in patients with tophaceous gout, a condition characterized by the presence of disfiguring deposits of uric acid crystals in and around the joints. We are also developing lesinurad to be used as a monotherapy for those patients who are intolerant to either allopurinol or febuxostat.

Lesinurad has been evaluated in a comprehensive Phase 2 development program designed to demonstrate its clinical utility. Results from this program have shown the following:

Positive results from the main portion of a 28-day Phase 2b study (Study 203) in 208 allopurinol-refractory gout patients demonstrated that adding lesinurad to allopurinol produced highly statistically significant reductions in sUA of up to 30 percent at the highest lesinurad dose tested, compared to a 3 percent increase on allopurinol plus placebo. This resulted in a response rate of 79 percent for the 600 mg dose using the more rigorous intent-to-treat analysis, which considers all patients without efficacy results at week 4 as non-responders, including those who discontinue for any reason. Using a last observation carried forward analysis, which was the method utilized for the U.S. Food and Drug Administration, or FDA, approval of febuxostat, 87 percent of patients taking the combination reached the medically recommended target of reducing sUA to below 6 mg/dL at the highest dose tested. Response rates on this study increased in a dose-related manner and were highly clinically and statistically significant at all dose levels when compared to allopurinol alone.

Results from the ongoing extension period of Study 203 demonstrated consistent, sustained reductions in sUA levels, with 90 percent of patients on combination therapy at week 44 reaching the medically recommended target of 6 mg/dL and 81 percent reaching less than 5 mg/dL. In addition, at the lowest dose of 200 mg, patients experienced continued sUA reductions out to 16 weeks and a 27 percent decline in sUA at week 44. The combination of lesinurad and allopurinol was generally well tolerated in the main 28-day dosing period and has been generally well tolerated in the ongoing extension period. No significant safety concerns and no dose-related side effects have been observed with the combination.

In a 21-day, Phase 1b clinical pharmacology study evaluating the use of lesinurad in combination with febuxostat (Study 111) in 21 gout patients with hyperuricemia (sUA greater than or equal to 8 mg/dL), 100 percent of patients receiving the combination of lesinurad and febuxostat achieved sUA levels below the medically recommended target level of 6 mg/dL, compared to 67 percent and 56 percent for patients receiving 40 mg and 80 mg, respectively, of febuxostat alone. At the highest combination doses tested (600 mg lesinurad combined with 80 mg febuxostat), 100 percent of patients reached sUA levels below 4 mg/dL, with 58 percent achieving levels below 3 mg/dL. No patient achieved these reduced sUA levels on either dose of febuxostat alone. The combination of lesinurad and febuxostat was also generally well tolerated, with no serious adverse events or discontinuations due to adverse events and no clinically relevant drug interactions between lesinurad and febuxostat observed.

In a 20-patient, 21-day Phase 1b clinical pharmacology study evaluating the use of lesinurad in combination with 300 mg of allopurinol (Study 110) in gout patients with hyperuricemia (sUA greater than or equal to 8mg/dL), 100 percent of patients at all combination doses evaluated achieved sUA levels below the target of 6 mg/dL, compared to 20 percent of patients on allopurinol alone. The combination of lesinurad and allopurinol was generally well tolerated, with no serious adverse events or discontinuations that were considered possibly related to lesinurad or the combination.

When administered as a single agent in a 28-day, Phase 2b study (Study 202), lesinurad was generally well tolerated and produced significant reductions in uric acid in the blood. In this randomized, double-blind, placebo-controlled, dose-escalation study of 123 gout patients with hyperuricemia, uric acid levels decreased and response rates increased in a dose-related manner and were highly clinically and statistically significant at the two highest doses tested. At the highest dose, the response rate was 60 percent, compared to 0 percent for placebo ($p < 0.0001$). Lesinurad was also generally well tolerated in this study, with no serious adverse events and only two discontinuations due to adverse events on lesinurad.

Results from multiple studies have indicated that the activity of lesinurad is not diminished in patients with mild to moderate renal impairment. Lesinurad was generally well tolerated in these studies with a similar safety profile in subjects with normal or impaired renal function.

Results from a thorough QT study of 54 healthy subjects in which lesinurad was administered as a single therapeutic dose of 400 mg and as a single supratherapeutic dose of 1600 mg demonstrated no signal for lesinurad on any ECG interval, including cardiac repolarization.

Based on findings thus far, single doses of lesinurad from 5 mg to 1600 mg given alone, and multiple doses of lesinurad from 100 mg to 600 mg given either alone or in combination with allopurinol or febuxostat, appear to be generally well tolerated.

We have initiated a Phase 3 development program for lesinurad that includes the following main studies:

An open-label, Phase 4 interventional study of allopurinol in gout patients, called LASSO. Given the low response rate typically observed with allopurinol and its well-established side effect profile, we expect a significant number of patients from this study will be eligible to enroll directly into our Phase 3 studies.

A combination study in North America of lesinurad in allopurinol standard of care inadequate responders, called CLEAR #1 a Phase 3, randomized, placebo-controlled trial of lesinurad added to allopurinol in patients not reaching target sUA levels with allopurinol alone. Patients will be dosed for a total of 12 months in this study. The primary endpoint will be the proportion of subjects with sUA levels below 6.0 mg/dL after six months of dosing. Key secondary endpoints will include an assessment of gout flare rate and tophus resolution after 12 months of dosing.

An identical global combination study of lesinurad in allopurinol standard of care inadequate responders, called CLEAR #2 a Phase 3, randomized, placebo-controlled trial of lesinurad added to allopurinol in patients not reaching target sUA levels with allopurinol alone. Patients will be dosed for a total of 12 months in this study. The primary endpoint will be the proportion of subjects with sUA levels below 6.0 mg/dL after six months of dosing. Key secondary endpoints will include an assessment of gout flare rate and tophus resolution after 12 months of dosing.

A global monotherapy study of lesinurad in gout patients for whom allopurinol or febuxostat treatment is not advised, or contraindicated, called LIGHT a Phase 3, randomized, placebo-controlled trial of lesinurad as monotherapy in gout patients for whom febuxostat or allopurinol treatment is contraindicated due to factors such as intolerance, co-morbidities, or the risk of significant drug interactions. Patients will be dosed for a total of six months in this study and the primary endpoint will be the proportion of subjects with sUA levels below 6.0 mg/dL after the end of the dosing period.

A global combination study of lesinurad and febuxostat in patients with tophaceous gout, called CRYSTAL a randomized, placebo-controlled study of lesinurad in combination with 80 mg febuxostat for the treatment of hyperuricemia in gout patients with tophi. Patients will be dosed for a total of 12 months in this study. The primary endpoint will be the proportion of subjects with sUA levels below 5.0 mg/dL after six months of dosing. Key secondary endpoints will include the proportion of patients with resolution of tophi, an assessment of gout flare rate and quality of life measurements after 12 months of dosing.

We will need to successfully complete these pivotal Phase 3 clinical trials of lesinurad, as well as potential additional non-pivotal clinical trials, in order to be approved for marketing by the FDA and other regulatory authorities around the world.

RDEA3170

We are also developing RDEA3170, a next-generation inhibitor of the URAT1 transporter for the chronic treatment of gout. Based on preclinical results, RDEA3170 demonstrates many of the same positive attributes as lesinurad, but with greater potency against the URAT1 transporter. Initial results have shown sustained reductions in sUA of up to 60 percent after a single 40 mg dose of RDEA3170 was administered to healthy volunteers in a Phase 1 study.

CANCER

Mitogen-activated ERK kinase (MEK) is believed to play an important role in cancer cell proliferation, programmed cell death and the spread of cancer from one organ or body part to another non-adjacent organ or body part. BAY 86-9766, formerly known as RDEA119, is a potent and highly selective inhibitor of MEK currently in Phase 2 development for the treatment of cancer.

Preclinical and clinical data suggest that BAY 86-9766 (RDEA119) has favorable properties, including once-daily oral dosing and excellent selectivity. In addition, BAY 86-9766 (RDEA119) has been shown to suppress tumor cell growth *in vitro* and *in vivo.* Preclinical *in vitro* and *in vivo* oncology studies of BAY 86-9766 (RDEA119) have demonstrated significant potential synergy across multiple tumor types when used in combination with other anti-cancer agents, including sorafenib (Nexavar®, Bayer HealthCare AG (Bayer) and Onyx Pharmaceuticals, Inc.).

We have completed a Phase 1 study of BAY 86-9766 (RDEA119) as a single agent in advanced cancer patients with different tumor types and we have identified the maximum tolerated dose (MTD) of BAY 86-9766 (RDEA119) in a Phase 1/2 study in combination with sorafenib. Dosing in the MTD expansion cohort of the Phase 1/2 study is ongoing.

Phase 1 results to date in refractory patients with advanced solid tumors have demonstrated that BAY 86-9766 (RDEA119) is generally well tolerated and a number of patients have achieved stable disease or partial response to treatment. A Phase 2 study of BAY 86-9766 (RDEA119) in combination with sorafenib as first-line therapy for primary liver cancer and a Phase 1/2 study of BAY 86-9766 (RDEA119) in combination with gemcitabine in patients with advanced pancreatic cancer are ongoing and are being conducted by our global development and commercialization licensee, Bayer. See Bayer Relationship below.

Market Opportunity

We believe that there is a significant market opportunity for our product candidates, should they be successfully developed, approved and commercialized.

We believe that there is a significant need for new products for the treatment and prevention of gout as many chronic gout sufferers are unable to achieve target reductions in uric acid with current treatments.

There have been only two new products approved in the United States for the treatment of gout in the last 40 years. According to Decision Resources, an estimated 19.7 million adults in seven major markets (the United States, Japan, France, Germany, Italy, Spain and United Kingdom) suffer from gout. The prevalence of gout is increasing in the United States. According to the Annals of Rheumatic Diseases, there was a 288% increase in gout-related hospitalizations from 1988 to 2005 and over $11.2 billion in gout-related hospital costs were incurred in 2005 in the United States.

We are developing products for the treatment of hyperuricemia and gout that inhibit URAT1. We believe there may also be opportunities to develop uric acid-lowering agents to treat diseases other than gout. Evidence suggests that hyperuricemia may also have systemic consequences, including an increased risk for kidney dysfunction, elevated C-reactive protein, hypertension and possibly other cardiovascular risk factors.

We believe that there is growing interest in targeted therapies, including kinase inhibitors, for the treatment of both cancer and inflammatory disease. Worldwide sales of products used in the treatment of cancer were $52.4 billion in 2009, according to IMS Health Incorporated, fueled by strong acceptance of innovative and effective targeted therapies. In addition to cancer, MEK appears to play a role in inflammatory diseases, and we believe that BAY 86-9766 (RDEA119) and our next generation MEK inhibitors, if successfully developed, approved and commercialized, could help address these growing markets.

Bayer Relationship

In April 2009, we entered into the License Agreement with Bayer to develop and commercialize our small-molecule MEK inhibitors, including BAY 86-9766 (RDEA119), for all indications. Potential payments under the License Agreement could total up to $407.5 million, including the $35.0 million non-refundable license fee and the $15.0 million development milestone for initiation of Phase 2 studies of BAY 86-9766 (RDEA119) that we have received to date. We will also be eligible to receive low double-digit royalties on worldwide sales of products under the License Agreement. Under the terms of the License Agreement, we were responsible for completion of the Phase 1 and Phase 1/2 studies that were underway when we entered into it. Bayer is responsible for reimbursing us for third-party development costs associated with these studies, as well as a portion of the personnel costs of employees involved in the development of BAY 86-9766 (RDEA119), up to a specified amount. Thereafter, Bayer is responsible for the further development and commercialization of BAY 86-9766 (RDEA119) and any of our other MEK inhibitors. BAY 86-9766 (RDEA119) is currently being evaluated in a Phase 2 study in combination with sorafenib in patients with hepatocellular carcinoma and a Phase 1/2 study in combination with gemcitabine in patients with advanced pancreatic cancer.

Valeant Relationship

In December 2006, we acquired intellectual property and other assets from Valeant Research & Development, Inc., or Valeant, related to RDEA806, a non-nucleoside reverse transcriptase inhibitor (NNRTI) that had been developed for the treatment of human immunodeficiency virus, or HIV, and our next generation NNRTI program, as well as BAY 86-9766 (RDEA119) and our next generation MEK inhibitor program. In consideration for the assets purchased from Valeant, and subject to the satisfaction of certain conditions, Valeant received certain rights, including the right to receive from us development- and regulatory-based contingent event-based payments and sales-based royalty payments. There is one set of potential contingent event-based payments totaling up to $25.0 million for RDEA806 and the next generation NNRTI program, and a separate set of potential contingent event-based payments totaling up to $17.0 million for BAY 86-9766 (RDEA119) and the next generation MEK inhibitor program. As of December 31, 2010, the first, and only Phase 2 development-based contingent event-based payment related to BAY 86-9766 (RDEA119) had been achieved and the Company recorded $1.0 million to research and development expense in the fourth quarter of 2010. The $1.0 million payment to Valeant was subsequently made in January 2011, reducing the total of potential development- and regulatory-based contingent event-based payments related to BAY 86-9766 (RDEA119) and our next-generation MEK

inhibitor program to $16.0 million. The royalty rates on the products covered by our agreement with Valeant are in the mid-single digits.

Forward-Looking Statements

Statements contained in this Current Report on Form 8-K regarding matters that are not historical facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Such statements include, but are not limited to, statements regarding the safety and efficacy of our product candidates, the progress, timing and results of clinical trials and research and development efforts involving our product candidates, the submission and timing of applications for regulatory approvals, our ability to obtain and maintain regulatory approvals for our product candidates, our expectations with regard to our intellectual property position and our ability to successfully protect our intellectual property, our plans to conduct future clinical trials or research and development efforts, estimates of the potential markets for our product candidates, our operating and growth strategies, industry, planned products, and our expected future revenues, operations and expenditures and projected cash needs, our expectations about partnering, acquisitions, licensing and marketing, including receipt of payments under any such arrangements, our estimated cash and cash equivalents and short-term investments and economic conditions, both generally and those specifically related to the biotechnology industry. These and other risks and uncertainties are described more fully under the headings Risk Factors in our most recently filed SEC documents, including its Quarterly Report on Form 10-Q for the quarter ended September 30, 2011. Except as required by law, all forward-looking statements contained in this Current Report on Form 8-K speak only as of the date on which they were made. We undertake no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ARDEA BIOSCIENCES, INC.

By: /s/ Christian Waage
Christian Waage
General Counsel

Date: January 31, 2012