Anthera Pharmaceuticals Inc
Form 10-K
March 14, 2012

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2011

OR

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

For the transition period from to
Commission file number: 001-34637

ANTHERA PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**20-1852016**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
25801 Industrial Boulevard, Suite B Hayward, California	**94545**
(Address of Principal Executive Offices)	(Zip Code)

(510) 856-5600
(Registrant's telephone number, including area code)

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

Title of Each Class	**Name of Each Exchange on Which Registered**
Common Stock, par value $0.001 per share	The NASDAQ Stock Market LLC

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

None

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

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

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

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

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

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

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

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

The aggregate market value of the registrant's common stock held by non-affiliates as of June 30, 2011 was approximately $246,165,752, based upon the closing sales price of the registrant's common stock as reported on the NASDAQ Global Market. Shares of common stock held by each executive officer and director and by each person who owns 10 percent or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for any other purpose.

As of January 31, 2012, the number of outstanding shares of the registrant's common stock, par value $0.001 per share, was 40,991,360.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the registrant's 2012 Annual Meeting of Stockholders will be filed with the Securities and Exchange Commission within 120 days after the registrant's fiscal year ended December 31, 2011 and are incorporated by reference in Part III of this report.

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ANTHERA PHARMACEUTICALS, INC.

FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2011

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements regarding future events and our future results that are subject to the safe harbors created under the Securities Act of 1933, as amended (the "Securities Act"), and the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Forward-looking statements relate to future events or our future financial performance. We generally identify forward-looking statements by terminology such as "may," "will," "would," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "assume," "intend," "potential," "continue" or other similar words or the negative of these terms. These statements are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors described in "Risk Factors" and elsewhere in this report. Accordingly, you should not place undue reliance upon these forward-looking statements. We cannot assure you that the events and circumstances reflected in the forward-looking statements will be achieved or occur, the timing of events and circumstances and actual results could differ materially from those projected in the forward looking statements. Forward-looking statements contained in this report include, but are not limited to, statements about:

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

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

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

our expectations regarding federal, state and foreign regulatory requirements;

the therapeutic benefits and effectiveness of our product candidates;

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

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

our intention to seek to establish strategic collaborations or partnerships for the development or sale of our product candidates;

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

the timing of commercializing our product candidates;

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

anticipated trends and challenges in our potential markets;

our ability to attract and retain key personnel; and

other factors discussed elsewhere in this report.

The forward-looking statements made in this report relate only to events as of the date on which the statements are made. We have included important factors in the cautionary statements included in this report, particularly in the section entitled "Risk Factors" that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. Except as required by law, we do not assume any intent to update any forward-looking statements after the date on which the statement is made, whether as a result of new information, future events or circumstances or otherwise.

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PART I

ITEM 1. BUSINESS

Unless the context otherwise requires, we use the terms "Anthera Pharmaceuticals," "Anthera," "we," "us," "the Company" and "our" in this report to refer to Anthera Pharmaceuticals, Inc. and its subsidiaries. We use various trademarks, service marks and trade names in our business, including without limitation "Anthera Pharmaceuticals" and "Anthera." This report also contains trademarks, services marks and trade names of other businesses that are the property of their respective holders.

Overview

Anthera Pharmaceuticals, Inc. is a biopharmaceutical company focused on developing and commercializing products to treat serious diseases associated with inflammation. We currently have one Phase 2 clinical program, blisibimod. Two of our product candidates, varespladib and varespladib sodium, are designed to inhibit a novel enzyme target known as secretory phospholipase A_2, or $sPLA_2$. Elevated levels of $sPLA_2$ have been implicated in a variety of acute inflammatory conditions, including acute coronary syndrome and acute chest syndrome associated with sickle cell disease, as well as in chronic diseases, including stable coronary artery disease, or CAD. In addition, blisibimod targets elevated levels of B-lymphocyte stimulator, or BLyS, also known as B-cell Activating Factor, or BAFF, which has been associated with a variety of B-cell mediated autoimmune diseases, including systemic lupus erythematosus, or lupus, lupus nephritis, or LN, vasculitis, rheumatoid arthritis, multiple sclerosis, Sjögren's Syndrome, Graves' Disease and others.

On March 9, 2012, an independent data safety monitoring board (DSMB) recommended stopping the Company's VISTA-16 clinical study for varespladib. After review of the totality of evidence, including the emerging unblinded data from VISTA-16, the DSMB was unanimous in its view that there was cogent evidence to recommend early termination of the trial. According to the DSMB, the chief reason is the inability of VISTA-16 to detect a statistically significant benefit of the drug on the prespecified primary and secondary endpoints even if the trial continues to its scheduled termination. We believe that the DSMB's decision was based on the belief that the risk profile of the drug would not outweigh any benefit. As a result, we have closed enrollment in the study and informed all investigators to remove patients from therapy immediately. We have also closed enrollment in our IMPACTS-2 clinical study for varespladib sodium.

While data continues to be made available to us, and while we continue to assess these data, based on the DSMB recommendation we expect that we will not engage in any further development activities of our $sPLA_2$ portfolio.

We were incorporated in Delaware in 2004. Our corporate headquarters are located at 25801 Industrial Boulevard, Suite B, Hayward, California 94545 and our telephone number is (510) 856-5600.

We have worldwide rights to develop and commercialize our products in all indications and markets, with the exception of Japan where Shionogi & Co., Ltd. retains commercial rights to our $sPLA_2$ product candidates. Our current development plans are focused on acute treatment and orphan indications that may provide an accelerated and cost-efficient path to regulatory approval and commercialization. We believe that certain of these markets can be commercialized through a limited specialty sales force. In addition, we believe that our product candidates can also address market opportunities in chronic indications and we may seek development and commercialization partners to address chronic, non-specialty and international markets.

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Inflammation and Diseases

The inflammatory process is a powerful and essential early line of defense for protection against injury and to repair body tissue. As a result, it is tightly regulated by the body to ensure appropriate activation and prompt resolution. However, under certain circumstances, the normal process can malfunction, leading to acute or chronic inflammation or inappropriate activation directed against the body's own tissues. All of these circumstances can cause significant damage to cells and tissues, leading to a range of inflammatory disorders, such as cardiovascular and autoimmune diseases.

Our $sPLA_2$ Inhibition Portfolio

Building upon our knowledge of the regulation of inflammatory pathways and the growing body of evidence that links inflammation to multiple disease states, we believe that we have developed a leadership position in the field of $sPLA_2$ inhibition. Our $sPLA_2$ inhibitors have been studied in a number of inflammatory disorders in multiple therapeutic areas. The effect of our $sPLA_2$ inhibitors on $sPLA_2$ concentration and activity have been implicated in acute coronary syndrome and acute chest syndrome associated with sickle cell disease. We currently have the two most advanced $sPLA_2$ inhibitors in clinical development.

Our first product candidate, varespladib (an oral prodrug of varespladib sodium), is a broad-spectrum inhibitor of $sPLA_2$ enzymes, including type IIa, V and X. The American Heart Association defines acute coronary syndrome as any group of clinical symptoms related to acute myocardial ischemia, including unstable angina, or UA. Varespladib, when combined with Lipitor (atorvastatin), is one of only a few therapeutics in development with the potential to offer a unique and synergistic treatment approach targeting systemic inflammation, elevated lipid levels and the inflammatory path of atherosclerosis as part of physician-directed standard of care. Through its novel mechanism of action, varespladib may have applications in a broad range of acute and chronic cardiovascular diseases. Based on the successful results of our completed Phase 2b, FRANCIS, clinical study, we initiated enrollment in a Phase 3 clinical study, VISTA-16, in patients with acute coronary syndrome in June 2010. In March 2012, we closed enrollment in the study and informed all investigators to remove patients from therapy based on the recommendation from an independent data safety monitoring board.

Our second product candidate, varespladib sodium, is an intravenously administered inhibitor of $sPLA_2$,which we may evaluate in a Phase 2 clinical study for the prevention of acute chest syndrome associated with sickle cell disease. Acute chest syndrome is a form of inflammation-induced lung failure and is the most common cause of death in patients with sickle cell disease. Given that there are currently no approved drugs for the prevention of acute chest syndrome associated with sickle cell disease, we have received orphan drug designation and fast track status from the FDA for varespladib sodium. In March 2012, we closed enrollment in our IMPACTS-2 study for varespladib sodium and informed all investigators to remove patients from therapy based on the recommendation from an independent data safety monitoring board.

We also have a broad series of additional $sPLA_2$ inhibitors designed with distinct chemical scaffolds in preclinical development. These product candidates are intended to provide new $sPLA_2$ inhibitors for our existing target indications as well as new candidates for other therapeutic areas. Our lead candidate within the series, A-003, is chemically distinct from varespladib sodium and varespladib and has shown increased potency against the target enzymes and higher drug exposure after dosing in preclinical studies. As a result, A-003 may confer beneficial pharmacodynamic effects in patients and can be formulated for oral or intravenously administered use.

We have explored the use of our varespladib and varespladib sodium $sPLA_2$ inhibitors as both topical and inhalation therapies in animal models for the treatment of atopic dermatitis and asthma, respectively. Results from a standard mouse model of edema demonstrated that topically administered varespladib was equivalent to the marketed immunosuppressant Elidel in resolving inflammation. In a sheep model of

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allergen-induced asthma, inhaled varespladib sodium demonstrated an improvement in lung function similar to inhaled steroids.

While data continues to be made available to us, and while we continue to assess these data, based on the DSMB recommendation to stop the VISTA-16 study for varespladib, we expect that we will not engage in any further development activities of our $sPLA_2$ portfolio.

$sPLA_2$ Biology

$sPLA_2$ is a family of enzymes directly involved in the acute and chronic steps of an inflammatory response. $sPLA_2$ activity is highly elevated during the early stages of inflammation, and its acute effects serve to substantially amplify the inflammatory process. The $sPLA_2$ enzyme catalyzes the first step in the arachidonic acid pathway of inflammation, one of the main metabolic processes for the production of inflammatory mediators, which, when amplified, are responsible for causing damage to cells and tissue. Specifically, $sPLA_2$ breaks down phospholipids that result in the formation of fatty acids such as arachidonic acid. Arachidonic acid is subsequently metabolized to form several pro-inflammatory and thrombogenic molecules.

In cardiovascular diseases such as acute coronary syndrome, elevated levels of $sPLA_2$ mass and $sPLA_2$ activity have acute and chronic implications on disease progression and patient outcomes. In published studies and our own clinical studies, significant elevations in $sPLA_2$ activity and mass have been seen from 24 hours to two weeks following an event constituting acute coronary syndrome and can persist for up to an additional 12 weeks thereafter. Shortly after a heart attack, $sPLA_2$ is dramatically elevated, amplifying inflammation that is associated with more frequent and secondary cardiovascular events. This resulting elevated level of inflammation is problematic for acute coronary syndrome patients who are already at higher risk of complications during the weeks following their initial event. For example, increased inflammation can destabilize vulnerable vascular lesions or atherosclerotic plaque, destroy damaged but viable cardiac cells and adversely modify lipids, any of which may lead to the recurrence of a major adverse cardiovascular event, or MACE.

Historical and recent clinical results have demonstrated circulating levels of $sPLA_2$ are significantly correlated with a well-established inflammatory marker, C-reactive protein, or CRP. These and other clinical studies have also demonstrated that $sPLA_2$ independently predicts coronary events in patients that have recently experienced an acute coronary syndrome and patients with stable CAD independent of other standard risk factors. In a stable cardiovascular patient, $sPLA_2$ not only sustains chronic vascular inflammation as discussed earlier, but it also adversely remodels lipoproteins such as low-density lipoprotein cholesterol, or LDL-C. $sPLA_2$ interacts with LDL-C in a series of reactions that result in smaller, more pro-atherogenic and pro-inflammatory LDL-C particles. Moreover, these modified lipoproteins have a reduced affinity for LDL-C receptors, which are responsible for removal of cholesterol from the body. As a result, LDL-C remains in circulation longer and has a greater tendency to deposit in the artery wall. This increased LDL-C deposition and sustained chronic vascular inflammation may contribute to the development of atherosclerosis.

The family of $sPLA_2$ enzymes includes at least three forms that play a role in inflammation and the development of cardiovascular disease or lung injury. While $sPLA_2$ enzymes are a member of the broader phospholipase family that includes a lipoprotein associated phospholipase A_2, or $Lp\text{-}PLA_2$, there are important distinctions. Although both are present in blood, $Lp\text{-}PLA_2$ is mostly bound to LDL-C and high-density lipoprotein, or HDL, while $sPLA_2$ enzymes are not. Based on our clinical studies, we believe that our $sPLA_2$ inhibitor, varespladib, can be distinguished from other PLA_2 enzyme inhibitors such as those targeted at inhibiting $Lp\text{-}PLA_2$ because varespladib treatment:

Reduces known markers of inflammation including $sPLA_2$, CRP, oxidized LDL-C, and interleukin-6 in ACS patients;

is synergistic with HMG-CoA reductase inhibitors, or statins, including Lipitor (atorvastatin), in reducing LDL-C, total cholesterol and non-HDL cholesterol in patients with CAD;

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lowers circulating small, dense and pro-atherogenic, or plaque-building LDL-C particles, while Lp-PLA_2 inhibition has not demonstrated similar effects; and

reduces plaque volume and aneurysms in standard rodent models of atherosclerosis and has demonstrated synergistic reductions of plaque volume in standard rodent models of atherosclerosis when used in combination with statins.

In diseases such as acute chest syndrome, a very serious form of lung injury associated with sickle cell disease, $sPLA_2$ acts acutely on a number of substrates that amplify the inflammatory disease process. Sickle cell disease is a genetic disorder which leads to the structural alteration, or "sickling," of otherwise healthy red blood cells. Patients with sickle cell disease experience periods of intense pain known as vaso-occlusive crisis, or VOC, as structurally altered red blood cells bind together and occlude small blood vessels that supply blood and nutrients to vital tissue and bone. $sPLA_2$ levels are dramatically elevated in sickle cell patients during an episode of VOC as well as within 24 to 48 hours of the onset of acute chest syndrome. During VOC, microscopic fat emboli, or droplets of fat from the bone marrow, are prevalent and can break free and become lodged in the lung. These emboli are substrates for $sPLA_2$ enzymes and provide fuel for an already established inflammatory response, increasing lung injury. In addition, $sPLA_2$ has been demonstrated to degrade human lung surfactant, a component necessary in maintaining appropriate lung function, which further complicates lung injury.

We believe that early intervention with a drug designed to inhibit $sPLA_2$ activity may offer a unique opportunity to reduce the complications associated with certain inflammatory diseases such as acute coronary syndrome in cardiovascular patients and acute chest syndrome in patients with sickle cell disease.

Our BAFF Antagonism Portfolio

BAFF has been associated with a wide range of B-cell mediated autoimmune diseases including lupus, LN, rheumatoid arthritis, multiple sclerosis, Sjögren's Syndrome, Graves' Disease and others. The role of BAFF in lupus and rheumatoid arthritis has recently been validated in multiple clinical studies with other BAFF antagonists. We are advancing the development of our BAFF inhibitor molecule, blisibimod, a selective peptibody, to exploit its broad potential clinical utility in autoimmune diseases. A peptibody is a novel fusion protein that is distinct from an antibody. We have worldwide rights to blisibimod in all potential indications. We have initiated PEARL-SC, the Phase 2b clinical study of blisibimod, for the treatment of Systemic Lupus Erythematosus (lupus). Lupus patients suffer from a chronic autoimmune disease, which often leads to severe skin rash, fatigue, joint pain, major organ complications and cardiovascular disease.

Blisibimod demonstrates anti-BAFF activity and has shown statistically significant reductions in B-cells in two Phase 1 clinical studies in patients with lupus. We believe blisibimod may offer a number of potential differentiations over the currently marketed BAFF antagonist, Benlysta, as well as other novel B-cell directed therapies including:

convenient, at-home, patient-administered subcutaneous dosing with a range of dosing frequencies including monthly and weekly;

the ability to inhibit the activity of both membrane-bound and soluble BAFF;

a Phase 2 clinical design which utilizes more stringent restrictions to background medication, a shorter time-point to the primary endpoint, and requiring larger disease reduction in the SELENA/SLEDAI clinical efficacy measurement tool; and

a novel molecular structure, which may confer differentiating pharmacokinetic and pharmacodynamic characteristics, potentially providing efficacy and dosing benefits, as well as manufacturing benefits and lower cost of goods based on a bacterial fermentation manufacturing process; and

multiple binding domains achieve highest reported affinity for inhibition of BAFF.

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Product Development Programs

We have focused our product development programs on anti-inflammatory therapeutics for cardiovascular diseases, lupus and other serious diseases for which we believe that current treatments are either inadequate or non-existent. Our current product development programs are listed in the table below and can be found online at *clinicaltrials.gov*.

We have historically spent a significant portion of our resources on research and development. Our research and development expenses were $85.3, $29.5, and $8.4 million for the years ended December 31, 2011, 2010, and 2009, respectively.

Varespladib

Varespladib is an orally administered pro-drug of varespladib sodium, which is a broad-spectrum, once-daily inhibitor of the IIa, V and X iso-forms of the $sPLA_2$ enzyme that has demonstrated potent anti-inflammatory, lipid-lowering and lipid-modulating treatment effects in multiple clinical studies. We commenced the Phase 3 VISTA-16 study to evaluate varespladib in combination with atorvastatin therapy, for the short-term (16-week) treatment of acute coronary syndrome. We have an agreement with the FDA on a Special Protocol Assessment, or SPA for the VISTA-16 study. During 2011, we revised operational aspects of our SPA and received agreement from the FDA on June 29, 2011. A SPA provides an opportunity for the clinical study sponsor to receive feedback from the FDA regarding the potential adequacy of a clinical study to meet certain regulatory and scientific requirements if conducted in accordance with the SPA agreement. A SPA is not a guarantee of an approval of a product candidate or any permissible claims about the product candidate.

To date, over 3,000 patients and healthy volunteers in at least 15 previous clinical studies have been exposed to varespladib. Varespladib was generally well-tolerated in studies where patients were exposed to a maximum of 48 weeks of therapy. Varespladib has been studied in combination with Lipitor (atorvastatin) in our Phase 2b clinical study, FRANCIS, in acute coronary syndrome patients and two earlier Phase 2 clinical studies, PLASMA and PLASMA-2, in stable CAD patients, the majority of whom were on various statin therapies.

We currently have all worldwide product rights to varespladib, except in Japan where Shionogi & Co., Ltd. retains rights. We originally licensed our $sPLA_2$ inhibitor portfolio, including varespladib and varespladib sodium, from Eli Lilly & Company, or Eli Lilly, and Shionogi & Co., Ltd. in July 2006.

In March 2012, an independent data safety monitoring board recommended stopping the Company's VISTA-16 clinical study for varespladib due to a lack of efficacy that could not be reasonably overcome in the remainder of the trial. As a result, the Company has closed enrollment in the study and informed all investigators to remove patients from therapy. Based on the DSMB recommendation we expect that we will not engage in any further development activities of our $sPLA_2$ portfolio.

Market Opportunity Acute Coronary Syndrome

According to the American Heart Association, over 18 million people in the United States have experienced a cardiac event that constitutes acute coronary syndrome and an estimated 1.5 million Americans will have a new or recurrent heart attack. In addition, the American Heart Association estimates that worldwide, cardiovascular disease kills an estimated 17.5 million people each year. According to British Heart Foundation statistics, CAD, which often leads to acute coronary syndrome or heart attacks, accounts for 1.9 million deaths in Europe annually. According to the World Health Organization, or the WHO, cardiovascular disease is the most common cause of death in the western world and a major cause of hospital admissions. In addition, the American Heart Association provides that for people over the age of 40, 20% of them will die within one year following an initial heart attack, and over 33% of them will die within the first five years of an initial heart attack. These numbers are expected

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to increase given an aging population, as well as the rising epidemics of diabetes and obesity, two conditions known to increase the risk of acute coronary syndrome.

The American Heart Association defines acute coronary syndrome as any group of clinical signs and symptoms related to acute myocardial ischemia. Acute myocardial ischemia can often present as chest pain due to insufficient blood supply to the heart muscle that results from CAD. Acute coronary syndrome covers a spectrum of clinical conditions that include ST-elevated myocardial infarction, or STEMI, non-ST-elevated myocardial infarction, or NSTEMI, and UA. Both STEMI and NSTEMI are forms of a heart attack, where damage to the heart muscle occurs due to ischemia, which is lack of blood flow to tissues due to a blockage of a vessel. Typically, UA results in chest pain from ischemia, but does not cause permanent damage to the heart muscle.

Furthermore, for any patient who experiences an acute coronary syndrome, the risk of a secondary MACE is significantly increased immediately following the initial event. Large clinical outcome studies such as MIRACL and PROVE-IT have previously reported, and data from our own FRANCIS Phase 2b clinical study supports, the 16-week placebo rate of secondary MACE in acute coronary syndrome patients to be between 6.1% and 14.8%. Recent published clinical studies involving anti-platelet and anti-coagulant therapies in ACS patients including PLATO, APPRAISE-2 TRA-CER and ATLAS-ACS have reported 16-week placebo rate of secondary MACE in acute coronary syndrome patients to be between approximately 4.5% and 8.0%. These studies do not include the incidence of unstable angina as part of the composite end point. Unstable angina, included as a component of the MACE endpoint in the VISTA-16 clinical study, represented approximately 30% of the total MACE at 16 weeks in the FRANCIS clinical study with varespladib.

Current treatments for CAD other than interventional procedures include a variety of medications such as aspirin, statins, anti-platelet and anti-coagulant therapeutics. These medications are used to offer both acute and chronic benefits to patients. For patients presenting with acute coronary syndrome, therapeutics are administered quickly to improve blood flow to the heart and limit the risk associated with continued ischemia and thrombosis, which is the formation of a blood clot inside a vessel, which obstructs blood flow. In addition, interventional procedures and other medications, such as statins that are initiated early primarily for lipid benefits, are continued in an attempt to provide chronic protection against secondary MACE through improvement in lipid profiles such as lowering LDL-C.

Inflammation in Cardiovascular Disease

In patients experiencing an acute coronary syndrome, the relationship between higher levels of inflammation, as measured by CRP, $sPLA_2$ and interleukin-6, or IL-6, and increased risk for MACE has been demonstrated extensively. In numerous clinical studies with a variety of therapeutic interventions, reductions in CRP have been correlated with reductions in subsequent MACE.

CRP is one of the most commonly used marker of inflammation. It has been correlated with adverse cardiovascular outcomes in multiple clinical studies. Although a causative role for CRP has not been established, inflammation is known to promote acute coronary syndrome and CRP may play a direct role in both vascular inflammation as well as plaque rupture.

Statins reduce the level of CRP and other markers of inflammation in patients with stable CAD. In April 2001, the Journal of the American Medical Association published results from the MIRACL study describing the effect of statins in acute coronary syndrome, where inflammation is greatly elevated. 3,086 were randomized within 96 hours of their index event to treatment with high-dose Lipitor (atorvastatin) or placebo. Lipitor (atorvastatin) significantly reduced secondary MACE after 16 weeks. A second paper from the same study, published in Circulation in 2003, described the rapid decline of inflammatory markers in patients on statin treatment that was associated with reduced MACE. After 16 weeks, Lipitor (atorvastatin) reduced CRP levels by 34%.

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In 2005, the New England Journal of Medicine published data from the PROVE-IT study. A total of 3,745 patients were randomized to either intensive statin therapy with 80 mg Lipitor (atorvastatin) or moderate statin therapy with 40 mg pravastatin. Patients with low CRP or LDL-C had fewer MACE than those with higher levels of either CRP or LDL-C. Patients who had both LDL-C < 70 mg/dL and CRP < 1 mg/L had the fewest number of secondary events overall.

LDL-C in Cardiovascular Disease

The direct relationship between lower LDL-C levels and reduced risk for major cardiovascular events has been consistently demonstrated for over a decade in 18 outcome studies involving over 119,000 patients. Results from large clinical outcome studies demonstrate achieving incrementally lower LDL-C levels reduces the risk of future cardiovascular events and provides continued patient benefit. As a result, the lipid treatment guidelines have been revised to establish more aggressive LDL-C treatment goals over time. The most recent guidelines from the National Cholesterol Education Program's Adult Treatment Panel III, or NCEP ATP III, updated in 2004 advocate treatment goals for LDL-C below 100 mg/dL for high-risk patients and 70 mg/dL for very high-risk patients. Given the breadth of more recent clinical data available, we believe that future treatment guidelines from the NCEP will likely establish new LDL-C treatment goals that apply the 70 mg/dL standard or lower to a broader population of at-risk patients. Patients enrolled in our FRANCIS Phase 2b clinical study and our Phase 3 acute coronary syndrome study represent high-risk patients as defined by the NCEP.

In order to achieve these more aggressive LDL-C targets, doctors prescribe other approved lipid-lowering therapies such as cholesterol absorption inhibitors, nicotinic acid and fish oils in combination with statins to further reduce LDL-C. Still, many acute coronary syndrome patients who represent the NCEP ATP III guideline categories of high-risk and very high-risk do not achieve these recommended lipid goals despite maximum lipid-lowering therapies. Moreover, substantial residual risk remains even among the group of patients who do achieve these aggressive LDL-C goals suggesting additional biological mechanisms, including inflammation, may be relevant.

This is exemplified in a November 2008 publication in the New England Journal of Medicine that detailed the results from a 17,000 patient, multinational, primary prevention study named JUPITER. The study randomized patients with relatively normal levels of LDL-C, but elevated levels of inflammation based on CRP, to statin or placebo therapy. The JUPITER study was stopped early because those patients randomized to statin therapy demonstrated a statistically significant reduction in CRP, which also translated to a statistically significant reduction in cardiovascular events versus those on placebo. The reduction in events was well in excess of that which would be predicted from historical data evaluating LDL-C reductions alone. While these results were generated in a primary prevention setting, we believe that the benefits of reducing inflammation may prove to be even more meaningful in settings where patients are in a hyper-inflammatory state, such as following an acute coronary syndrome. As a result of these studies, we believe that there is a substantial need for novel therapies that provide meaningful reductions in inflammation while also improving LDL-C levels in high-risk cardiovascular patients beyond the benefits of statin therapy. Therefore, it is our belief that targeting inflammation and elevated LDL-C with $sPLA_2$ inhibition during the early phase of an acute coronary syndrome will further improve patient outcomes.

Pivotal VISTA-16 Study Acute Coronary Syndrome

In 2008, based on the results from Phase 2 stable CAD studies, as discussed below, we met with the FDA to discuss the next steps of clinical development of varespladib during our end of Phase 2 meeting. As a result of that meeting and the results from our Phase 2b acute coronary syndrome study, we submitted a SPA to the FDA for the Phase 3 VISTA-16 study of varespladib for the short-term (16-week) treatment of patients who have recently experienced an acute coronary syndrome. We reached agreement with the FDA on all aspects of the VISTA-16 study protocol, including patient inclusion/exclusion criteria, study size, statistical considerations, efficacy endpoints, study duration, randomization and lipid management strategies.

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In June 2010, we initiated enrollment in the VISTA-16 clinical study. Pursuant to our SPA agreement with the FDA, our multinational, randomized, double-blind, placebo-controlled Phase 3 acute coronary syndrome VISTA-16 study will enroll up to 6,500 patients. The study was conducted in up to 17 countries and up to 500 centers.

The primary endpoint of the VISTA-16 study was to determine whether 16 weeks of once-daily treatment with varespladib plus a dose of Lipitor (atorvastatin) is superior to placebo plus Lipitor (atorvastatin) in the time to the first occurrence of the combined endpoint of cardiovascular death, non-fatal myocardial infarction, non-fatal stroke or documented UA with objective evidence of ischemia requiring hospitalization as defined by recent FDA draft guidance.

On July 22, 2009, the Center for Drug Education and Research division of the FDA issued draft recommendations for standardized definitions for cardiovascular outcomes trials. The VISTA-16 clinical study endpoint definitions conform to these guidelines.

Components of VISTA-16 Primary (MACE) Endpoint

Cardiovascular Death

Non-Fatal Myocardial Infarction

Non-Fatal Stroke

Documented UA with Objective Evidence of Ischemia Requiring Hospitalization

A secondary endpoint for the VISTA-16 study was to determine whether varespladib plus a dose of Lipitor (atorvastatin) is superior to placebo plus Lipitor (atorvastatin) as measured in the time to the first occurrence of the combined endpoint of all cause mortality, non-fatal myocardial infarction, non-fatal stroke or documented UA with objective evidence of ischemia requiring hospitalization. A comparison between treatment groups will also be made for each component of the primary efficacy endpoint. Additionally, the time to multiple occurrences of any non-fatal component of the composite primary endpoint will also be explored. The biomarkers CRP, IL-6, LDL-C and $sPLA_2$ will also be evaluated at each time point of the clinical study.

Interim Biomarker Analysis from VISTA-16

After a minimum of 1,000 patients were enrolled in the VISTA-16 study, an independent statistician not involved with the conduct of the VISTA-16 study conducted a biomarker analysis to ensure patient levels of inflammation, as measured by $sPLA_2$, CRP and IL-6, and lipid levels, as measured by LDL-C, had met pre-specified reductions versus placebo at various time-points. These markers of inflammation and lipid levels are established in the clinical community and pharmaceutical industry as independent predictors of cardiovascular risk. The intention of this biomarker analysis was to ensure results observed in the VISTA-16 were consistent with findings from the FRANCIS Phase 2b clinical study. At the end of this analysis, the independent statistician recommended continuation of the VISTA-16 study based on a pre-specified algorithm.

Data Safety Monitoring Board Meetings

Since the beginning of the VISTA-16 clinical study, the DSMB has met six (6) times to review all available patient safety and outcome data.

On March 9, 2012, the DSMB recommended stopping the VISTA-16 study due to a lack efficacy that could not be reasonably overcome in the remainder of the trial. After review of the totality of evidence, including the emerging unblinded data from VISTA-16, the DSMB was unanimous in its view that there was cogent evidence to recommend early termination of the trial. The DSMB indicated that the chief reason is the inability of VISTA-16 to detect a statistically significant benefit of the drug on the

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prespecified primary and secondary endpoints even if the trial continues to its scheduled termination. The Company believes that the DSMB's decision was based on the belief that the risk profile of the drug would not outweigh any benefit. As a result, the Company has closed enrollment in the study and informed all investigators to remove patients from therapy.

While data continues to be made available to us, and while we continue to assess these data, based on the DSMB recommendation we expect that we will not engage in any further development activities of our $sPLA_2$ portfolio.

Historical Clinical Studies

Phase 2b Acute Coronary Syndrome Study FRANCIS (Fewer Recurrent Acute coronary events with Near-term Cardiovascular Inflammation Suppression)

In July 2008, we initiated a randomized, double-blind, placebo-controlled Phase 2b clinical study that enrolled 625 acute coronary syndrome patients across 35 centers in three countries. Given the drug's combined anti-inflammatory, lipid-lowering and lipid-modulating effects, we evaluated the effects of varespladib in acute coronary syndrome patients with high levels of inflammation and dyslipidemia. The clinical study was designed to evaluate the safety and efficacy of varespladib when co-administered with the highest dose (80 mg) of Lipitor (atorvastatin). The clinical study randomized all patients to a minimum of 24 weeks of treatment with either 500 mg once-daily of varespladib or placebo in combination with 80 mg Lipitor (atorvastatin) and physician-directed standard of care.

Patients were eligible for enrollment if they had a diagnosis of UA, NSTEMI or STEMI. In addition, they must have had one of the following risk factors: diabetes, body mass index (BMI) ≥ 25 kg/m2, CRP ≥ 2 mg/L (NSTEMI/STEMI) or CRP ≥ 3 mg/L (UA) and presence of three (pre-defined) characteristics of metabolic syndrome. Subjects must have been randomized within ≤ 96 hours of hospital admission for the index event, or, if already hospitalized, within 96 hours of index event diagnosis. Any percutaneous revascularization was required to occur prior to randomization. In addition, because we wanted to assess the effects of varespladib with the highest available dose of Lipitor (atorvastatin), patients were not allowed to use any other lipid-lowering therapies during the clinical study. Follow-up visits for evaluation occurred post-randomization at weeks two, four, eight, 12, 16, 20, 24 and then monthly thereafter until clinical study completion. All enrolled subjects remained on treatment until all subjects had been treated for a minimum of 24 weeks or until the occurrence of MACE. Patients randomized into the FRANCIS study had baseline characteristics such as LDL-C indexed-event risk factors and demographics similar to other studies of this type. All patients who completed the clinical study received a final evaluation.

The primary efficacy endpoint evaluated the change in LDL-C after 500 patients completed eight weeks of treatment. LDL-C is the most widely recognized surrogate for predicting cardiovascular risk where percentage reductions in LDL-C have been highly correlated with reductions in future cardiovascular risk. Secondary endpoints included:

- changes in established markers of inflammation such as $sPLA_2$, CRP and IL-6; and
- the occurrence of secondary MACE (for purposes of this clinical study, all-cause mortality, non-fatal myocardial infarction, documented UA requiring urgent hospitalization, revascularization occurring ≥ 60 days post the index event or non-fatal stroke).

Results of the primary endpoint demonstrated a statistically significant incremental LDL-C reduction of 5.7% ($p = 0.0023$) in varespladib treated patients versus those treated with 80 mg Lipitor (atorvastatin) alone after eight weeks of therapy. A p-value is a probability with a value ranging from 0 to 1, which indicates the likelihood that a clinical study is different between treatment and control groups. P-values below 0.05 are typically referred to as statistically significant. A statistically significant difference was

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observed in LDL-C reduction from baseline as early as two weeks after treatment. The treatment effect was maintained throughout the observation period.

Secondary endpoints measured effects of varespladib on $sPLA_2$, CRP and IL-6 levels, which are well-established markers of inflammation. While the FRANCIS study was not designed to demonstrate statistically significant changes in CRP and IL-6, the results were consistent with previous studies, which demonstrated improvement across these biomarkers and achieved statistical significance at some time points.

$sPLA_2$ concentrations were statistically significantly reduced from the earliest time point of two weeks through the 16-week time point ($p < 0.0001$) as compared to high-dose statin atorvastatin (80mg) therapy alone. While our first $sPLA_2$ measurement in this clinical study occurred at two weeks, data from previous clinical studies utilizing varespladib or varespladib sodium demonstrated reductions in $sPLA_2$ as early as two days following treatment. At the end of the study $sPLA_2$ levels were reduced by 6.4% in the atorvastatin only arm and by 78.5% in the varespladib plus atorvastatin arm ($p<0.0001$). At the 16-week time-point in the FRANCIS clinical study sPLA2 levels were reduced by 12.1% in the atorvastatin only arm and by 62.0% in the varespladib plus atorvastatin arm ($p<0.0001$).

In addition, treatment-related reductions in CRP and IL-6 levels were also greater in varespladib treated patients compared to those treated with placebo at all time points in the clinical study. The percent decrease in CRP at week two was nearly two-fold greater among varespladib and 80 mg Lipitor (atorvastatin) treated patients than those treated with placebo and 80 mg Lipitor (atorvastatin) alone (-39% versus -20%, $p = 0.183$), and at week 16, the difference between treatment groups was statistically significant (-82% versus -73%, $p = 0.0067$). At weeks two, four, eight and 16, varespladib treated patients had numerically reduced levels of CRP versus patients treated with placebo.

The percent decrease in IL-6 in patients on varespladib at week two was more than three times the reduction in IL-6 in patients on placebo (-18% versus -5.1%, $p = 0.18$).

Treatment with varespladib resulted in more subjects with LDL-C levels lower than 70 mg/dL and lower than 50 mg/dL than those on placebo (80 mg Lipitor (atorvastatin) and physician-directed standard of care) alone at eight, 16 and 24 weeks of treatment. As discussed above, the NCEP ATP III guidelines have established an LDL-C of 70 mg/dL as an optional target for very high-risk patients. As indicated in the table below, the data suggests varespladib treatment helps patients achieve their LDL-C target levels more quickly and maintain them longer than with high-dose statin (80 mg Lipitor (atorvastatin)) therapy alone.

Finally, given the importance of reducing inflammation as well as LDL-C following an acute coronary syndrome event, we examined the proportion of patients in the clinical study that were able to achieve both LDL-C levels less than 70 mg/dL and CRP levels below 1 mg/L. Significantly more patients at week four and week 16 ($p = 0.02$ and $p = 0.01$) reached this combined target when treated with varespladib and 80 mg Lipitor (atorvastatin) than with placebo and 80 mg Lipitor (atorvastatin) alone. (The actual proportion of subjects in the varespladib group was 25% and 16% in the placebo group). Additionally, in the PROVE-IT study a comparable proportion (16%) of patients treated with 80 mg Lipitor (atorvastatin) achieved these goals.

We also conducted an exploratory analysis of MACE in the clinical study. At 16 weeks, there were 14 (4.2%) MACE in the varespladib treated group as compared to 19 (6.1%) in the placebo group. At the completion of the clinical study, all patients had received at least six months of therapy and there were 23 (7.4%) MACE in the varespladib treated group as compared to 24 (7.7%) MACE in the placebo group. While the MACE analysis was not designed to demonstrate any statistical differences between the two treatment groups, we believed these results to be encouraging and provide guidance on the appropriate design of the VISTA-16 study.

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Overall, varespladib was generally well-tolerated in this clinical study and no imbalance was seen in dropouts due to drug effects. After completing patient treatment, overall exposure to varespladib was a mean of 30 weeks and median of 34 weeks. In total, 485 total patients completed six months of treatment, with 167 subjects completing 40 weeks and 70 completing 44 weeks. There was no imbalance of overall adverse events between the treatment arms. During the clinical study, at week four and week eight, occasional mild and transient elevations in liver enzymes, defined as elevations three times the upper limit of normal, were seen among more patients taking varespladib, but the frequency and magnitude of the elevations were not meaningfully different between the active and control groups at the end of the clinical study. The frequency of the elevations was also similar to that reported for Lipitor (atorvastatin) and other currently approved lipid-lowering agents. Furthermore, there were no effects on blood pressure or the QT interval, an electro-cardiographic safety endpoint.

Summary data from FRANCIS was presented at the American College of Cardiology meeting in 2010 and the detailed results from the study were published in the Journal of the American College of Cardiology in September 2010.

Phase 2 Stable Coronary Artery Disease Study PLASMA (Phospholipase Levels and Serological Markers of Atherosclerosis): Varespladib Twice-Daily Versus Placebo

Our Phase 2 PLASMA study was designed to confirm the safety and effect of varespladib on $sPLA_2$ concentration, other inflammatory biomarkers and lipids in patients with stable CAD. In October 2007, we completed a randomized, double-blind, placebo-controlled study evaluating four doses of varespladib administered twice-daily versus placebo among 396 patients with stable CAD from 38 centers in two countries. The clinical study enrolled patients more than 12 weeks after a myocardial infarction or six weeks after an episode of UA. The varespladib doses tested were 50 mg, 100 mg, 250 mg and 500 mg administered twice per day. Following randomization, patients were treated for eight weeks and safety and efficacy evaluations were conducted at weeks two, four and eight. Physician-directed standard of care therapies were permitted during the clinical study, including 259 patients who were on background statin therapy.

The primary endpoint of the clinical study was the change in $sPLA_2$ concentration from baseline to week eight in varespladib, across all doses, versus placebo patients. Secondary endpoints in the clinical study included the change in lipids, including LDL-C, lipoprotein subclasses and certain inflammatory biomarkers, from baseline to each of weeks two, four and eight.

Our Phase 2 PLASMA results were selected for a late-breaking presentation at the American Cardiology Conference and published in the Lancet journal in February 2009. Results from the clinical study demonstrated that treatment with varespladib led to statistically significant reductions in $sPLA_2$, LDL-C and various plaque-building and pro-inflammatory forms of LDL-C. In patients receiving varespladib, there were incremental reductions in CRP versus placebo (-55.6% versus -24.8%, $p = 0.47$) from baseline to eight weeks.

Among all patients treated with varespladib, median $sPLA_2$ concentration decreased by 86.7% from baseline to week eight, as compared to 4.8% in the placebo group ($p < 0.0001$). Median $sPLA_2$ concentration decreased among the varespladib groups in a dose-dependent manner.

At week eight, across all dosage groups, LDL-C was reduced by 9.7% versus placebo ($p = 0.0035$). In a subgroup of patients taking statins with LDL-C > 70 mg/dL, LDL-C was reduced by 12.0% ($p = 0.0065$) versus placebo at the eight week time point. Notably, the reductions in LDL-C appear to be driven primarily by a shift in the distribution of LDL-C particles with fewer pro-atherogenic, pro-inflammatory small LDL-C particles present in the circulation. In addition, statistically significant reductions from baseline to week eight were seen in total cholesterol and non-HDL cholesterol in the overall clinical study population treated with varespladib.

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Varespladib was generally well-tolerated among all patients treated. In general, adverse effects were mild or moderate with no imbalance of adverse events in the varespladib groups as compared to placebo. The most common adverse effects seen in the varespladib groups were headache (6.4%) and nausea (5.4%). There were mild and transient elevations of liver function tests, defined as elevations three times the upper limit of normal, in patients taking varespladib.

Phase 2 Stable Coronary Artery Disease Study PLASMA-2 (Phospholipase Levels and Serological Markers of Atherosclerosis -2): Once-Daily of Varespladib Versus Placebo

Based on data from our first PLASMA study, we initiated a second Phase 2 clinical study (PLASMA-2) to evaluate the effect of once-daily varespladib treatment on inflammatory and lipid biomarkers. In December 2007, we completed a randomized, double-blind, placebo-controlled Phase 2 clinical study evaluating two doses of varespladib versus placebo amongst 138 patients with stable CAD. The clinical study, conducted in the United States, involved 13 clinical sites. Following randomization to one of two doses of varespladib or placebo, patients were treated for eight weeks with safety and efficacy evaluations at weeks two, four and eight. Physician-directed standard of care therapies were permitted during the clinical study, including 123 patients (89.1%) who were on background statin therapy.

The primary endpoint of the clinical study was a comparison between once-daily doses of varespladib and placebo in changes in $sPLA_2$ concentration at week eight. Secondary endpoints in the clinical study included measurements of lipids including LDL-C and certain other inflammatory biomarkers from baseline to each of weeks two, four and eight.

Results of the primary endpoint, $sPLA_2$, were statistically significant and consistent with those generated from the first PLASMA study described above. Patients on varespladib demonstrated a 77.8% reduction in $sPLA_2$ concentration as compared to an increase of 8.3% in placebo treated patients ($p < 0.0001$). Pharmacokinetic data indicated that once-daily dosing with varespladib would be sufficient to achieve over 90% inhibition of $sPLA_2$ mass and activity over a 24-hour period.

The anti-inflammatory, lipid-lowering and lipid-modulating effects of varespladib treatment were consistent with those seen in the first PLASMA study: LDL-C was decreased by 8.3% compared to 0.7% in placebo ($p = 0.014$). Due to the small size of this clinical study and the low baseline inflammation present in these patients, no meaningful changes with CRP could be detected between the active and control groups. As was observed in the first clinical study, there were statistically significant reductions from baseline to week eight in total cholesterol and non-HDL cholesterol in the overall clinical study population treated with varespladib.

The adverse effect profile for varespladib was consistent with earlier studies and there was no imbalance of adverse events among the varespladib groups and placebo. Varespladib was generally well-tolerated. The most common effects seen in the varespladib groups were diarrhea (6.7%), nausea (5.6%), any increase in alanine aminotransferase (5.6%), which is an enzyme that indicates liver cell injury, and any increase in aspartate aminotransferase (5.6%), which is another enzyme that indicates liver cell injury. However, mild and transient elevations of these liver enzymes, defined as elevations three times the upper limit of normal, were infrequent in patients taking varespladib.

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Placebo-corrected Percent Decrease from Baseline to Week Eight in Biomarkers

	$sPLA_2$	LDL Cholesterol	Total Cholesterol	Non-HDL Cholesterol	Oxidized LDL-C
PLASMA (All doses varespladib)	81.9% ($p < 0.0001$)	9.7% ($p = 0.0035$)	4.9% ($p = 0.0069$)	7.2% ($p = 0.0009$)	5.4% ($p = 0.0065$)
PLASMA-2 (500 mg varespladib)*	86.1% ($p < 0.0001$)	13.9% ($p = 0.0007$)	9.2% ($p = 0.0006$)	14.2% ($p = 0.0001$)	7.3% (pNS)( )

*

Dose selected for Phase 3

Probability not significant

Investigator-Sponsored Phase 2 Percutaneous Intervention Study SPIDER-PCI ($sPLA_2$ Inhibition to Decrease Enzyme Release After PCI): Varespladib Once-Daily Versus Placebo for up to 10 Days.

In May 2007, Dr. Vladimir Dzavik at University Health Network Hospital in Toronto, Ontario, Canada initiated an investigator sponsored study with varespladib in patients undergoing a percutaneous intervention, or PCI. The primary endpoint of this study was to determine if inhibition of $sPLA_2$ with varespladib will result in a decrease in peri-PCI myocardial necrosis, or heart muscle damage, as measured by elevations of myocardial enzyme markers creatine kinase-MB, or CK-MB, or troponin I. The study was to enroll a maximum of 164 patients who were scheduled to undergo PCI. Elevated levels of troponin I following PCI are associated with an increase in in-hospital complications and, in one study, were an independent predictor of major cardiac events. After PCI, circulating levels of $sPLA_2$ increase and patients with higher levels have an increased risk of events after a two-year follow-up. This study explores the notion that $sPLA_2$ inhibition may reduce myocardial damage after PCI and improve patient outcomes.

As of August 2009, enrollment and dosing in the SPIDER-PCI investigator study were completed with 144 patients evaluated for purposes of assessing the primary endpoint. On December 11, 2009, we received a statistical analysis of the patient evaluations, which showed that the primary endpoint of the study, a reduction in the elevation of CK-MB or troponin I above the upper limit of normal at six to eight hours or 18 to 24 hours, was not met (varespladib patients 57% versus placebo patients 51%, $p = 0.55$). However, the results showed statistically significant reductions of $sPLA_2$ as early as 18 hours post-PCI procedure, which persisted throughout the five days of dosing (-93.0%, $p < 0.001$). Consistent with results from other clinical studies with varespladib, there were numerical reductions in CRP from baseline versus placebo at three to five days (-82.1%, $p = 0.23$).

Previous Experience at Eli Lilly and Shionogi & Co., Ltd.

Eli Lilly and Shionogi & Co., Ltd. previously conducted a series of clinical studies evaluating varespladib and varespladib sodium in various inflammatory conditions. In total, at least 17 Phase 1 and Phase 2 clinical studies evaluated varespladib and varespladib sodium as a treatment in sepsis, rheumatoid arthritis, asthma and ulcerative colitis, an inflammatory bowel disease. Results from these studies provide a large body of safety data for varespladib and varespladib sodium with more than 1,000 healthy volunteers and subjects receiving treatment.

Throughout these studies, varespladib was generally well-tolerated.

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Non-Clinical Studies with Varespladib and varespladib sodium

Approximately 150 preclinical pharmacology and toxicology studies have been completed with varespladib and varespladib sodium, including two-year rat and mouse carcinogenicity studies, one-year primate study and three-month rat study in combination with Lipitor (atorvastatin).

Blisibimod

Blisibimod is a peptibody antagonist of the BAFF cytokine that is initially being developed as a treatment for lupus. BLyS, also known as B-cell activating factor, or BAFF, is a tumor necrosis family member and is critical to the development, maintenance and survival of B-cells. It is primarily expressed by macrophages, monocytes and dendritic cells and interacts with three different receptors on B-cells including BAFF receptor, or BAFF-R, B-cell maturation, or BCMA, and transmembrane activator and cyclophilin ligand interactor, or TACI. The BAFF-R receptor is expressed primarily on peripheral B-cells.

Two randomized, dose-ranging, placebo-controlled Phase 1 clinical studies for blisibimod in 104 lupus patients have already been completed. Results from these studies demonstrated blisibimod generated anti-BAFF activity and showed statistically significant reductions in B-cells of 50-70% ($p < 0.001$) in lupus patients across multiple subcutaneous and intravenous formulations.

In 2009, after successfully reactivating our Investigational New Drug Application, or IND, we initiated a Phase 2b clinical study with blisibimod for the treatment of lupus in July 2010 called PEARL-SC. Enrollment in this study is now complete (N=547) and we anticipate completing the study in 2012. We may also study blisibimod in other B-cell mediated autoimmune diseases such as vasculitis, Sjögren's Syndrome or orphan indications such as myasthenia gravis and pemphigus. We continue to actively pursue a partnership with major pharmaceutical companies to develop and commercialize blisibimod.

We intend to advance the development of our BAFF targeting molecule, blisibimod, a selective peptibody, to exploit its broad clinical utility in autoimmune diseases. Blisibimod, as a peptibody directed against BAFF, was developed as an alternative to antibodies and is produced in *Escherichia coli* bacterial culture versus antibodies that are produced in mammalian cell culture. In addition, blisibimod offers a number of potential differentiations over other anti-BAFF compounds, as well as other novel B-cell directed therapies, including:

- convenient, at-home, patient-administered subcutaneous dosing with a range of dosing frequencies including monthly and weekly;
- ability to inhibit the activity of both membrane-bound and soluble BAFF, which may confer differentiating pharmacodynamic characteristics;
- non-glycosylated peptibody that is produced in a bacterial fermentation manufacturing process, which may reduce the potential to be immunogenic and may provide manufacturing benefits and lower cost of goods; and
- multiple binding domains achieve highest reported affinity for inhibition of BAFF.

Market Opportunity

Lupus is an autoimmune disorder that involves inflammation that causes swelling, pain and tissue damage throughout the body. Lupus can affect any part of the body, but especially the skin, heart, brain, lungs, joints and the kidneys. The course of the disease is unpredictable, with periods of illness, called flares alternating with remission. The Lupus Foundation estimates that approximately 1.5 million people in the United States and five million worldwide suffer from lupus. Although lupus may affect people of either sex, women are 10 times more likely to suffer from the disease than men, according to the Lupus Foundation.

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Patients with active lupus may have a broad range of symptoms related to the inflammation. Inflammation of the brain may cause seizures and other neurologic abnormalities. Inflammation of the heart may cause heart failure or sudden death. Lung inflammation causes shortness of breath. Lupus may also cause swollen joints and severe rash. In addition, LN may lead to requiring kidney dialysis or transplantation.

Although the cause of lupus is still not completely understood, B-cell activation and autoantibody production are known to be central to the process. Evidence has emerged that over-expression of BAFF plays an important role in this disease process. In preclinical studies, transgenic mice created to over-express BAFF begin to exhibit symptoms similar to lupus. In addition, treatment of these same mice with BAFF antagonists appears to ameliorate the disease.

PEARL-SC Phase 2b Clinical Study in Patients with Lupus

Based on positive results among 104 patients in our Phase 1a and 1b clinical studies, we initiated a Phase 2b clinical study in lupus patients called PEARL-SC. Enrollment in PEARL-SC is now complete. PEARL-SC is a randomized, placebo-controlled, Phase 2b study which enrolled 547 patients in 11 countries at 72 clinical sites. Subjects were randomized into three active subcutaneous treatment arms and one placebo treatment arm for a minimum of 24 weeks and a maximum of 52 weeks.

The primary endpoint of the PEARL-SC study is clinical improvement at 24 weeks in a SLE responder index a composite responder index evaluating various patient and physician reported clinical disease activity including a SELENA/SLEDAI improvement of five (5) points or greater, no increase in a physician's global assessment of more than 0.3 points, with no new BILAG A or two new BILAG B organ domain flares. Secondary endpoints will include safety, improvement in other clinical assessment scores, clinical response in patients with various baseline disease severities, resolution of fatigue, steroid utilization and time to flare.

In November 2011, we completed an interim biomarker analysis of changes in B-Cells in patients enrolled in the PEARL-SC clinical study. After analysis by an independent statistician, data from the ongoing PEARL-SC study indicated that weekly and monthly subcutaneous doses of blisibimod resulted in statistically significant reductions of B-cells. Elevations in these B-cells have been associated with an increased risk of disease activity in lupus patients. These findings are consistent with data from previous clinical studies of blisibimod.

Open Label Extension Clinical Study in Patients enrolled in PEARL-SC

Upon completion of PEARL-SC, patients may be invited to enroll in an open-label extension study in which patients will receive active study drug (blisibimod) for the primary objective of monitoring long-term safety. The open-label extension study is already underway and enrolling patients.

Future Development of Blisibimod

Blisibimod Manufacturing Strategy

In December 2011, we completed the technology transfer from Amgen and manufacturing scale up to 3,000 liters at our contract manufacturing organization, or CRO (Fujifilm Diosynth Bioservices or "Fujifilm"). Two (2) batches of blisibimod produced under US FDA good manufacturing procedures, or GMP, at the 3,000 liter scale passed all physical quality specifications and comparability assessments. Data from our first 3,000 liter manufacturing campaign was submitted to the US FDA, and after having received no comments from the US FDA, product from this batch was released for use in the PEARL-SC study. With the completion of the last batch of blisibimod in 2011, we believe we now have sufficient clinical material, both placebo and blisibimod, to complete dosing on the PEARL-SC study.

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The following chart outlines the basic manufacturing steps required for the production of blisibimod.

Vial Breakage during the PEARL-SC Clinical Study

In November 2010, we suspended enrollment in the PEARL-SC clinical study after reports of broken vials at clinical sites. After informing the US FDA and a thorough inspection of all product vials, the study was re-opened for enrollment in January of 2011. It was determined the vial breakage was due to low temperature shipping conditions. Appropriate changes were incorporated and there have been no further reports of broken vials.

Blisibimod Regulatory Strategy

In July 2010, we received clearance from the FDA to begin recruitment of lupus patients into the PEARL-SC clinical study. Subsequent to this clearance, the FDA requested additional information regarding characterization and qualification of the manufactured vials of blisibimod. In addition, the FDA requested minor changes to aspects of the PEARL-SC study including collection of ECG testing at the end of dosing and a recommendation for a corticosteroid tapering strategy. Neither of these changes are considered material to the conduct of the PEARL-SC study. The FDA also recommended we submit to the IND various analytical and comparability data from our recently completed manufacturing lot of blisibimod and a comparability proposal for purposes of soliciting their input prior to implementation. We submitted a response to the FDA in October 2010.

In October 2011, we filed a proposed amendment to the FDA for the PEARL-SC clinical study to modify the primary efficacy SLE response index and to include an option for an interim efficacy analysis. Enrollment in the PEARL-SC study is completed.

Historical Clinical Studies

Prior to our in-licensing of blisibimod, Amgen completed two Phase 1 clinical studies of blisibimod in lupus patients to evaluate the safety and pharmacokinetics of single and multiple doses of the drug using intravenous and subcutaneous formulations. Prior to conducting Phase 1 clinical studies in lupus patients, Amgen conducted a pre-Phase 1 clinical study in lupus patients. In Amgen's pre-Phase 1 clinical study, individual B-cell subsets, such as mature naïve B-cells, activated B-cells and memory B-cells, all therapeutic targets for blisibimod, were quantified in order to characterize the specific B-cell subset abnormalities associated with lupus.

The randomized, placebo-controlled, dose-escalation Phase 1a clinical study evaluated blisibimod as a single intravenous or subcutaneous therapy among 56 lupus patients. Intravenous doses included 1, 3 and 6 mg/kg, and subcutaneous doses included 0.1, 0.3, 1 and 3 mg/kg. The primary endpoint was to assess the safety and tolerability of single dose administrations of blisibimod. Secondary endpoints were designed to assess the plasma pharmacokinetic profile and immunogenicity of blisibimod. Results from this clinical study indicated the safety and tolerability of blisibimod administered as single dose of intravenous or subcutaneous was comparable to placebo. Single doses of blisibimod exhibited linear pharmacokinetics after both intravenous and subcutaneous administration. There were comparable adverse events between the blisibimod and placebo groups with no deaths reported. In addition, no neutralization antibodies were seen across all doses. The most common adverse events were nausea (15%), headache (10%), upper respiratory tract infection (10%) and diarrhea (8%).

Blisibimod was evaluated in a randomized, placebo-controlled, multi-dose Phase 1b clinical study as an intravenous or subcutaneous therapy among 63 lupus patients. The intravenous dose was 6 mg/kg, and

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subcutaneous doses included 0.3, 1 and 3 mg/kg. Patients received their doses of blisibimod or placebo once-weekly for four weeks. The primary endpoint was to assess the safety and tolerability of multiple dose administrations of blisibimod. Secondary endpoints were designed to assess the plasma pharmacokinetic profile and immunogenicity of blisibimod after multiple doses. Results showed that multiple doses of blisibimod exhibited dose-proportional pharmacokinetics after both intravenous and subcutaneous administration. Further, results demonstrated a dose-dependent decrease in total B-cells as early as 15 days of treatment, and total B-cell reduction (up to approximately 60-70% of baseline) reached its nadir after about 160 days of therapy. By six months after treatment, the B-cell populations had returned to baseline levels.

An experimental analysis was also conducted to assess B-cell subsets in patients following multiple doses. Results demonstrated that blisibimod selectively modulates certain B-cell subsets and induced trends toward normalizing the B-cell abnormalities that were observed in lupus patients in the pre-Phase 1 clinical study.

Results indicated that the tolerability of blisibimod administered as multiple doses of intravenous or subcutaneous administration was generally comparable to placebo. There were no deaths reported between the blisibimod and placebo groups. Few neutralization antibodies were seen, and all resolved in subsequent visits. Based on these results and published data from competitor studies, we initiated a Phase 2b clinical study evaluating blisibimod in lupus patients during the second half of 2010.

Varespladib Sodium

Varespladib sodium is an intravenously administered, potent, broad-spectrum inhibitor of $sPLA_2$, including forms IIa, V and X. Varespladib is being evaluated for the prevention of acute chest syndrome associated with sickle cell disease in at-risk patients. Substantial scientific evidence implicates $sPLA_2$ activity in the development of acute chest syndrome associated with sickle cell disease, as well as other forms of acute lung injury. The FDA granted orphan drug and fast-track designation for varespladib sodium for the prevention of acute chest syndrome in at-risk patients. We currently retain all worldwide product rights, except in Japan where Shionogi & Co., Ltd. retains rights. We also licensed varespladib sodium from Eli Lilly and Shionogi & Co., Ltd. in July 2006.

$sPLA_2$ levels increase in advance of acute chest syndrome episodes and can be used alongside the presence of fever to strongly predict an impending episode. There is a strong correlation between levels of CRP and $sPLA_2$ in this patient population. Patients with acute chest syndrome associated with sickle cell disease can exhibit levels of $sPLA_2$ that can be 100 times greater than normal.

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Market Opportunity

Sickle cell disease is a lifelong genetic, blood disorder typically diagnosed during early childhood. According to the Sickle Cell Information Center, in the United States, over 70,000 people currently suffer from the disease and approximately 1,000 children are born with the disease annually. According to Medtech Insight, in Europe, there are over 200,000 people suffering from the disease, and the numbers increase dramatically in Africa, where, according to the WHO, 200,000 children alone are born with sickle cell disease each year. Life expectancy for these patients is significantly shortened, with most expected to live only until their mid-40s.

The disease is characterized by structurally altered red blood cells that assume an abnormal shape, similar to a sickle, and produce an altered form of hemoglobin. These altered red blood cells have a shortened life-cycle, become stiff and have difficulty passing through the body's small blood vessels. At times, these abnormal cells may obstruct or block blood flow through small blood vessels, leading to significant damage in tissue and bone. This damage is more commonly labeled as VOC. During VOC, blockage occurs within the circulation of the long bones, causing microscopic bone damage. Fragments of bone or bone fat may break free and embolize to the lungs, causing lung injury.

VOC is a common trigger for the more serious complication of acute chest syndrome associated with sickle cell disease. Acute chest syndrome exhibits symptoms and characteristics similar to acute lung injury. There are an estimated 10,000 episodes of acute chest syndrome associated with sickle cell disease per year in the United States. It represents the most common cause of death in sickle cell patients and the second most common cause of hospitalization among such patients. A majority of sickle cell patients will experience at least one episode of acute chest syndrome and repeated episodes can result in progressive lung disease. The disorder is most common in the two- to four- year age group and gradually declines in incidence with age.

There are no marketed therapies targeting acute chest syndrome associated with sickle cell disease. The most common treatment regimen includes heavy doses of corticosteroids, opiates, transfusion and antibiotics while the patient suffers through the attack. In addition, hydroxyurea, a chemotherapy, was found to reduce the frequency of VOC and the need for blood transfusions in adult patients with sickle cell disease. However, all of these therapeutics are associated with significant adverse effects while only offering limited patient benefit.

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Phase 2B IMPACTS-2 Clinical Study: Prevention of Acute Chest Syndrome in Patients with Sickle Cell Disease

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* May be discharged before Day 5 if VOC resolved

In January 2012, we initiated a multinational, randomized, double-blind, placebo-controlled Phase 2b clinical study that will enroll up to 150 patients with sickle cell disease who are at an elevated risk of developing acute chest syndrome as a result of fever, VOC and CRP 5.0 mg/L at the time of hospitalization. Patients will be randomized to receive a continuous infusion of varespladib sodium or placebo for 48 hours after randomization.

The primary endpoint of this study will be freedom from acute chest syndrome as determined by physician assessment and independent review of chest X-rays. This study represents a unique treatment approach for a small, orphan indication. As a result the appropriateness of the design and endpoints of this study for purposes of registration will only be known at the conclusion of the study and upon submission to the FDA.

On March 9, 2012, an independent data safety monitoring board recommended stopping the Company's VISTA-16 clinical study for varespladib due to a lack efficacy that could not be reasonably overcome in the remainder of the trial. As a result, the Company has closed enrollment in the study and informed all investigators to remove patients from therapy immediately. The Company believes that the DSMB's decision was based on the belief that the risk profile of the drug would not outweigh any benefit. The Company has also closed enrollment in its IMPACTS-2 clinical study for varespladib sodium.

While data continues to be made available to us, and while we continue to assess these data, based on the DSMB recommendation to stop the VISTA-16 study for varespladib, we expect that we will not engage in any further development activities of our $sPLA_2$ portfolio.

Historical Clinical Studies

Phase 2 Acute Chest Syndrome in Hospitalized Patients with Sickle Cell Disease Study Investigation of the Modulation of Phospholipase in Acute Chest Syndrome, or IMPACTS.

In January 2007, we initiated a randomized, double-blind, placebo-controlled Phase 2 clinical study to assess the safety and tolerability of escalating doses of varespladib sodium when administered as a 48-hour continuous infusion. The clinical study was designed to enroll up to 75 patients across approximately

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30 sites in the United States. This clinical study enrolls hospitalized sickle cell disease patients at risk for acute chest syndrome on the basis of VOC, fever and serum $sPLA_2$ concentration level greater than 50 mg/mL. The primary endpoint for the clinical study was designed to assess safety and tolerability. Secondary endpoints included the absence of acute chest syndrome, suppression of $sPLA_2$, reduced need for blood transfusions and assessment of pharmacokinetics.

The first group of patients was randomized 2:1 to receive low dose varespladib sodium or placebo as a 48-hour continuous infusion. A pre-specified interim analysis was conducted in February 2009 after the 30th patient completed treatment to examine safety and adjust dosing schedules. The interim data was balanced between two dosing arms of 30 55 µg/kg/hr (n = 11) and 55 µg/kg/hr (n = 6). Interim results indicated serum levels of varespladib sodium when dosed at 55 µig/kg/hr reduced $sPLA_2$ activity levels by more than 80% from baseline within 48 hours. Furthermore, the prevention of acute chest syndrome associated with sickle cell disease appeared to be related to the level of $sPLA_2$ activity. The DSMB recommended the clinical study continue based on safety and tolerability. In addition, given the safety profile, the DSMB approved the addition of a higher dose group of 110 µg/kg/hr via continuous infusion during the second half of the clinical study. We believe that the data suggests varespladib sodium can suppress $sPLA_2$ at levels that may prevent the complication of acute chest syndrome associated with sickle cell disease.

Reductions of $sPLA_2$ activity from baseline and incidence of acute chest syndrome (including placebo patients and patients receiving varespladib sodium. Exploratory analysis to determine correlation between degree of $sPLA_2$ suppression and incidence of acute chest syndrome.

48-Hour $sPLA_2$ Activity as a Percentage of Baseline	**0.0% < 25.0%**	**≥ 25% ≥ 50%**	**≥ 50% ≥ 75%**	**≥ 75%**
Number of Subjects	7	7	3	12
Number of Subjects Developing Acute Chest Syndrome (%)	0(0)	2(28)	1(33)	4(25)

Our Strategy

Our objective is to develop and commercialize our product candidates to treat serious diseases associated with inflammation, including autoimmune diseases. To achieve these objectives, we intend to initially focus on the following activities.

Advancing Clinical Development of Blisibimod

We are advancing the development of blisibimod to exploit the broad potential clinical utility of BAFF antagonism. We have completed enrollment in the Phase 2b clinical study known as PEARL-SC in lupus patients. We may opportunistically enter into collaborations with third parties for development of this compound in lupus or in other B-cell mediated diseases, such as multiple sclerosis, rheumatoid arthritis or Sjögren's Syndrome, that may benefit from BAFF antagonism, including securing corporate partners whose capabilities complement ours.

Developing Commercial Strategies Designed to Maximize Our Product Candidates' Market Potential.

Our primary product candidate is focused on highly-specialized physician segments, such as rheumatologists. We believe that we can build a small, focused sales force capable of marketing our products effectively in acute care and orphan indications such as acute coronary syndrome and acute chest syndrome associated with sickle cell disease. In other chronic indications such as CAD, we intend to seek commercial collaborations with companies that have a large, dedicated sales force focused on general practitioners and cardiologists and we plan to seek commercialization partners for products in non-specialty and international markets.

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Competition

Our industry is highly competitive and subject to rapid and significant technological change. Our potential competitors include large pharmaceutical and biotechnology companies, specialty pharmaceutical and generic drug companies, academic institutions, government agencies and research institutions. We believe that key competitive factors that will affect the development and commercial success of our product candidates are efficacy, safety and tolerability profile, reliability, convenience of dosing, price and reimbursement.

Many of our potential competitors, including many of the organizations named below, have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of product candidates, obtaining FDA and other regulatory approvals of products and the commercialization of those products. Accordingly, our competitors may be more successful than we may be in obtaining FDA approval for drugs and achieving widespread market acceptance. Our competitors' drugs may be more effective, or more effectively marketed and sold, than any drug we may commercialize and may render our product candidates obsolete or non-competitive before we can recover the expenses of developing and commercializing any of our product candidates. We anticipate that we will face intense and increasing competition as new drugs enter the market and advanced technologies become available. Finally, the development of new treatment methods for the diseases we are targeting could render our drugs non-competitive or obsolete.

Approved Categories of Drugs

Statins Treatment with varespladib is designed to offer anti-inflammatory benefits for acute coronary syndrome patients that are additive to treatment with statins. However, statin therapy is thought to confer some element of anti-inflammatory benefit as monotherapy. In certain circumstances, it is possible the anti-inflammatory benefits of statin monotherapy with products such as Lipitor (atorvastatin), which is marketed by Pfizer Inc., Crestor (rosuvastatin), which is marketed by AstraZeneca UK Limited and Zocor (simvastatin), which is marketed by Merck & Co., Inc. may be viewed as competitive to that offered by varespladib.

Other Lipid-Lowering Therapies Increasingly, additional lipid-lowering agents are being administered either in combination with statins or as monotherapy to help acute coronary syndrome patients reduce levels of LDL-C. Varespladib has demonstrated LDL-C lowering benefits when tested as monotherapy and in combination with statin therapy. To the extent acute coronary syndrome patients need additional LDL-C lowering, varespladib may compete for use with other approved agents such as Vytorin, which is a fixed dose combination therapy combining ezetimibe and Zocor, Tricor (fenofibrate tablets) and Niaspan (niacin), both of which are marketed by Abbott Laboratories, Zetia (ezetimibe) and fish oils (omega-3).

Lupus

Human Genome Sciences, Inc.'s and partner GlaxoSmithKline plc's Benlysta (belimumab) was approved in 2011 by the FDA for the treatment of lupus. It is the first novel therapy approved in the last fifty years. Current therapies such as non-steroidal anti-inflammatory drugs, or NSAIDs, corticosteroids and immunosuppressants generally act to hold back broadly the proliferation of many types of cells, including white blood cells. However, use of these agents is associated with significant adverse events and broad immune suppression.

Several new biological agents under development have targeted BAFF (or BLyS) and other B-cell related pathways for the treatment of lupus. These product candidates include Benlysta (belimumab) from Human Genome Sciences, Inc., LY2127399 from Eli Lilly and Company, atacicept, or TACI-Ig, from ZymoGenetics Inc. and epratuzumab from Immunomedics, Inc., as well as others acting via non B-cell mechanisms, such as Lupuzor from Cephalon. We believe that blisibimod may offer potential differentiation from these agents, including demonstrated dosing flexibility with both subcutaneous and

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intravenous delivery; selective modulation and reduction of relevant B-cell types in lupus patients; the ability to inhibit the activity of both membrane-bound and soluble BAFF; its smaller size as compared to a full antibody, which may confer differentiating pharmacokinetic and pharmacodynamic characteristics; and distinct patent protection based on a novel and proprietary technology developed and commercialized by Amgen, which may also confer potential manufacturing advantages with lower cost of goods based on a bacterial fermentation manufacturing process.

Compound	Stage	Company	Indications	Notes
Benlysta (belimumab) (intravenous and subcutaneous)	Approved	Human Genome Sciences, Inc./GlaxoSmithKline plc	Lupus	Monoclonal antibody against BAFF, an agent that demonstrated partial reduction in B-cells Inhibits soluble BAFF only Positive results reported in two Phase 3 clinical studies
LY2127399 (subcutaneous)	Phase 3	Eli Lilly and Company	Lupus, Rheumatoid Arthritis, Multiple Myelomas	Monoclonal antibody against BAFF inhibits soluble and membrane-bound BAFF Recent positive results in RA study
Atacicept (intravenous)	Phase 3	ZymoGenetics Inc./Merck Serono S.A.	Lupus	Fusion protein against BAFF and APRIL; Phase 3 clinical study in lupus on-going
Epratuzumab (intravenous)	Phase 3	Immunomedics, Inc./UCB S.A.	Lupus, Non-Hodgkin's Lymphoma	Humanized antibody against CD-22, an agent that specifically targets B-cells and leads to partial depletion of peripheral B-cells Initiating Phase 3 clinical study
Lupuzor (subcutaneous)	Phase 3	Cephalon, Inc./ImmuPharma PLC	Lupus	Modulates CD 4 T cells Positive Phase 2b clinical study results reported

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Intellectual Property

Our policy is to pursue, maintain and defend patent rights, developed internally and licensed from third parties, to protect the technology, inventions and improvements that are commercially important to the development of our business. We also rely on trade secrets that may be important to the development of our business.

Our success will depend significantly on our ability to:

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

Varespladib

As of the date of this report, our licensed varespladib and varespladib sodium patent portfolio includes:

- 13 U.S. patents;
- One pending U.S. non-provisional patent application;
- Six European, or EP, patents, each validated in one or more of Austria, Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Liechtenstein, Luxembourg, the Netherlands, Portugal, Spain, Sweden, Switzerland and the United Kingdom;
- 20 non-EP foreign patents in Argentina, Australia, Brazil, Canada, China, Finland, India, Malaysia, Mexico, the Philippines, South Korea, Taiwan and Turkey; and
- Two pending non-EP foreign patent applications in Brazil and Thailand.

We hold exclusive worldwide licenses from Eli Lilly and Shionogi & Co., Ltd. to all of these patents and patent applications with the exception of licensing rights in Japan, which Shionogi & Co., Ltd. retains. These licenses are described below under " Licenses." The patents and applications described above contain claims directed to varespladib and varespladib sodium compositions of matter and to various methods of making and using varespladib and varespladib sodium, including methods of treating various inflammatory conditions. The U.S. patents are currently scheduled to expire between 2014 and 2021. The primary U.S. composition of matter patent for varespladib and varespladib sodium currently expires in August 2014. This patent is expected to be eligible for a Hatch-Waxman term restoration of up to five years, which could extend the expiration date to August 2019. We intend to pursue pediatric exclusivity as well, which could add an additional six months to the patent term. The primary European composition of matter patent currently expires in March 2015. This patent is expected to be eligible for a Supplementary Protection Certificate of up to five years, which could extend the expiration date to March 2020.

As of the date of this report, our internally developed varespladib and varespladib sodium patent portfolio includes:

One issued U.S. patent;

Five pending U.S. non-provisional patent applications;

Two pending Patent Cooperation Treaty, or PCT, patent applications;

Pending national phase applications arising from a third PCT application in the European Patent Offices, the Eurasian Patent Organization and 16 other countries (Australia, Brazil, Canada, China,

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Hong Kong, India, Indonesia, Israel, Japan, Malaysia, Mexico, New Zealand, The Philippines, Singapore, South Africa, South Korea and Vietnam);

One issued patent in South Africa;

Pending national phase applications arising from a fourth PCT application in the European Patent Office, the Eurasian Patent Organization and 19 other countries; and

Pending national phase applications arising from a fifth PCT application in the European Patent Office, Brazil, Canada, China, India and Japan.

We own, and therefore hold all worldwide rights in and to, these patent applications, which contain claims directed to varespladib and varespladib sodium compositions of matter and methods of treating various cardiovascular indications.

Several of the pending U.S. and non-U.S. patent applications include disclosure relating to the combination of varespladib and varespladib sodium with various cardiovascular drugs, including statins. Pending claims in these applications are directed to both compositions of matter and methods. Any patents issuing from these applications would expire between 2028 and 2030.

A-003

As of the date of this report, our licensed A-003 patent portfolio includes:

Two U.S. patents;

One pending U.S. non-provisional patent application (also listed above as covering varespladib and varespladib sodium);

Five EP patents (two also listed above as covering varespladib and varespladib sodium), each validated in one or more of Albania, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, the Netherlands, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland and the United Kingdom;

14 non-EP foreign patents (six also listed above as covering varespladib and varespladib sodium) in Argentina, Australia, Canada, China, India, Mexico, South Korea and Taiwan; and

One pending non-EP foreign patent application in Brazil (also listed above as covering varespladib and varespladib sodium).

We hold exclusive worldwide licenses from Eli Lilly and Shionogi & Co., Ltd. to these patents and patent applications with the exception of licensing rights in Japan, which Shionogi & Co., Ltd. retains. These licenses are described below under "Licenses." The patents and applications listed above contain claims directed to A-003 compositions of matter and to various methods of making and using A-003, including methods of treating various inflammatory indications. The issued U.S. patents are currently scheduled to expire between 2017 and 2018.

As of the date of this report, our internally developed A-003 patent portfolio includes:

Two U.S. non-provisional patent applications (both also listed above as covering varespladib and varespladib sodium);

National phase applications in the European Patent Office, the Eurasian Patent Organization and 17 other countries (Australia, Brazil, Canada, China, Hong Kong, India, Indonesia, Israel, Japan, Malaysia, Mexico, New Zealand, The

Philippines, Singapore, South Africa, South Korea and Vietnam);

National phase applications arising from a first PCT application in the Eurasian Patent Organization and *10* other countries (Australia, Canada, China, Hong Kong, Israel, Malaysia,

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Mexico, the Philippines, South Korea and Vietnam) (all also listed above as covering varespladib and varespladib sodium);

National phase applications arising from a second PCT application in Japan and Singapore (both also listed above as covering varespladib and varespladib sodium); and

National phase application arising from a third PCT application in Japan (also above as covering varespladib and varespladib sodium).

We own, and therefore hold all worldwide rights in and to, these patent applications, which contain claims directed to A-003 compositions of matter and methods of treating various cardiovascular indications.

New $sPLA_2$ Compounds

As of the date of this report, our new $sPLA_2$ compound patent portfolio includes 28 licensed U.S. patents and two EP patents not listed above as covering varespladib sodium, varespladib or A-003. We hold exclusive worldwide licenses from Eli Lilly and Shionogi & Co., Ltd. to these patents and patent applications with the exception of licensing rights in Japan, which Shionogi & Co., Ltd. retains. These licenses are described below under " Licenses." The patents and applications listed above contain claims directed to various $sPLA_2$ second generation compounds, as well as methods of making and using these new $sPLA_2$ compounds. The issued U.S. patents are currently scheduled to expire between 2013 and 2024.

Blisibimod

As of the date of this report, our blisibimod patent portfolio includes:

Two U.S. patents;

One pending U.S. non-provisional patent application;

One EP patent validated in Albania, Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, the Netherlands, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom;

Two pending EP patent applications;

Thirteen non-EP foreign patents in Australia, China, Estonia, Eurasia (validated in all nine Eurasian countries), Hong Kong, Japan, New Zealand, the Philippines, Singapore, South Korea and South Africa; and

Twelve pending non-EP foreign patent applications in Brazil, Bulgaria, China, the Czech Republic, Hong Kong, Hungary, Israel, Mexico, Norway, Poland, Serbia and Slovakia.

We hold exclusive worldwide licenses from Amgen to all of these patents and patent applications. In addition, we hold a non-exclusive worldwide license to one pending U.S. non-provisional patent application, one EP patent, one pending EP patent application, ten non-EP foreign patents, and over 30 pending non-EP foreign patent applications relating to general peptibody compositions and formulations.

The U.S. patents are currently scheduled to expire in May 2022. One of the U.S. patents is expected to be eligible for a Hatch-Waxman term restoration of up to five years, which could extend the expiration date to May 2027. We intend to pursue pediatric exclusivity as well, which could add an additional six months to the patent term. The European patent is currently scheduled to expire May 2022. This patent is expected to be eligible for a Supplementary Protection Certificate of up to five years, which could extend the expiration date to May 2027.

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The U.S. patent system permits the filing of provisional and non-provisional patent applications. A non-provisional patent application is examined by the U.S. Patent Office, or USPTO, and can mature into a patent once the USPTO determines that the claimed invention meets the standards for patentability. A provisional patent application is not examined, and automatically expires 12 months after its filing date. As a result, a provisional patent application cannot mature into a patent. The requirements for filing a provisional patent application are not as strict as those for filing a non-provisional patent application. Provisional applications are often used, among other things, to establish an early filing date for a subsequent non-provisional patent application.

The filing date of a non-provisional patent application is used by the USPTO to determine what information is prior art when it considers the patentability of a claimed invention. If certain requirements are satisfied, a non-provisional patent application can claim the benefit of the filing date of an earlier filed provisional patent application. As a result, the filing date accorded by the provisional patent application may remove information that otherwise could preclude the patentability of an invention.

We are aware of two families of third party United States patents and pending foreign applications that contain broad claims related to BLyS or BAFF binding polypeptides. Based on our analyses, if these patents were asserted against us, we do not believe that blisibimod would be found to infringe any valid claim of these patents. If we were to challenge the validity of any issued United States patent in court, we would need to overcome the presumption of validity that attaches to every United States patent by presenting clear and convincing evidence as to the invalidity of the patent's claims. There is no assurance that a court would find in our favor on questions of infringement or validity, and we could incur substantial costs in litigation if we are required to defend against patent suits brought by third parties or if we initiate these suits. If third party patents are determined to be valid and construed to cover blisibimod, the development and commercialization of this program could be affected, subjecting us to potential liability for damages and in addition may require us to obtain a license to continue marketing the affected product. Such a license may not be available on commercially acceptable terms, if at all.

Depending upon the timing, duration and specifics of FDA approval of varespladib, blisibimod, varespladib sodium, A-003 or one or more new $sPLA_2$ compounds, one or more of the U.S. patents listed above may be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Act. See " Regulatory Matters Patent Term Restoration and Marketing Exclusivity."

A-101

A-101 is novel compound developed to treat cardiovascular disease.

As of the date of this report, our internally developed A-101 patent portfolio includes:

One pending U.S. non-provisional patent application.

We own, and therefore hold all worldwide rights in and to, the patent application, which contains claims directed to A-101 compositions of matter and methods of treating various cardiovascular indications.

Licenses

Eli Lilly and Shionogi & Co., Ltd.

In July 2006, we entered into a license agreement with Eli Lilly and Shionogi & Co., Ltd., pursuant to which we obtained an exclusive license in all countries except for Japan to certain technology and compounds relating to $sPLA_2$ inhibitors. The licensed technology was largely developed under a research and development agreement between Eli Lilly and Shionogi & Co., Ltd., which was entered into between the parties in August 1992 and terminated in December 2004.

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Under the agreement, we obtained exclusive rights to (i) use licensed patent rights and know-how to identify and develop $sPLA_2$ inhibitors, (ii) develop, make, have made, use, import, offer for sale and sell licensed compounds and pharmaceutical formulations thereof, including varespladib, varespladib sodium, A-003 and other $sPLA_2$ inhibitors and (iii) grant sublicenses. The licensed patent rights include a specific set of previously filed U.S. and foreign patents and applications, as well as any applications filed after the execution date by Eli Lilly or Shionogi & Co., Ltd. that relate to licensed know-how. Certain patents and applications within the licensed patent rights are defined as "core patents." Although the agreement does not allow us to sell or offer for sale licensed products in Japan, it does allow us to conduct preclinical and clinical studies in Japan in support of applications for marketing authorization outside of Japan, and to make and have made licensed products in Japan for use or sale outside of Japan. Eli Lilly and Shionogi & Co., Ltd. retain the right to use licensed products for research purposes only. Eli Lilly also retains the right to conduct studies of specific compounds in animals for research purposes, but only with our prior written approval. In addition, Shionogi & Co., Ltd. retains the non-exclusive right to make and have made licensed products for supply to us, as well as its rights to continue research, development and marketing of licensed technology in Japan.

Upon entering into the license agreement, we assumed control of all prosecution and maintenance of core patents prosecuted and maintained by Eli Lilly prior to the agreement. All core patents prosecuted and maintained by Shionogi & Co., Ltd. prior to the agreement remained under the control of Shionogi & Co., Ltd. Licensed patent rights that were not classified as core remained under the control of Eli Lilly and Shionogi & Co., Ltd. However, control of certain of these patents and applications has since been transferred to us following the decision by Eli Lilly or Shionogi & Co., Ltd. to discontinue prosecution and maintenance.

Upon entering into the license agreement, we made one-time payments of cash in the amount of $250,000 and issued shares of convertible preferred stock with a total aggregate value of $2.3 million to Eli Lilly and Shionogi & Co., Ltd. We are required to make various milestone payments and to pay tiered royalty payments on net sales, which increase as a percentage as net sales increase. Both the milestone and royalty payment schedules vary depending on the specific formulation (e.g., oral versus intravenously administered). For varespladib, we are required to pay up to $32.0 million upon achievement of certain approval and post-approval sales milestones. For varespladib sodium, we are required to pay up to $3.0 million upon achievement of certain clinical development milestones and up to $25.0 million upon achievement of certain approval and post-approval sales milestones. For other product formulations that we are not currently developing, we would be required to pay up to $2.0 million upon achievement of certain clinical development milestones and up to $35.5 million upon achievement of certain approval and post-approval sales milestones. Our royalty payments vary based upon type of formulation and annual net sales, but generally range from the mid-single digits to the low double digits. Our royalty payment obligations for a particular licensed product in a particular country begin on the date of the first commercial sale of the licensed product in that country, and end upon the later of 10 years from the date of first commercial sale in that country or the first date on which a generic version of the licensed product reaches a 25% total market share in that country.

The license agreement will remain in effect for the length of our royalty obligation on a product-by-product and country-by-country basis, unless we elect to terminate earlier or until termination by mutual agreement. Upon expiration of the agreement, our license will remain in effect and will convert to an irrevocable, perpetual royalty-free license. If we fail to meet our obligations under the agreement, Eli Lilly or Shionogi & Co., Ltd. can terminate the agreement, resulting in a loss of our exclusive rights to the licensed technology.

Amgen

In December 2007, we entered into a license agreement with Amgen, which was amended in October 2009, pursuant to which we obtained an exclusive worldwide license to certain technology and compounds

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relating to blisibimod, as well as a non-exclusive worldwide license to technology relating to certain peptibody compositions of matter and formulations.

Under the agreement, we obtained exclusive rights under the licensed patents and know-how to research, develop, make, have made, use, sell, offer for sale and import pharmaceutical products containing blisibimod, as well as the right to grant sublicenses. The licensed patents included a specific set of previously filed U.S. and foreign patents and applications, as well as any applications filed after the execution date by Amgen and covering licensed know-how. During the period of the agreement, we are responsible for the filing, prosecution, defense and maintenance of all exclusively licensed blisibimod patents and applications. Amgen retains the right to review all documents relating to said filing, prosecution, defense and maintenance, and we are required to incorporate all reasonable comments or suggestions that Amgen makes with regard to these documents.

During the seven-year period after execution of the agreement, Amgen is prohibited from clinically developing or commercializing any BAFF peptibody. Similarly, we are prohibited during the term of the agreement from clinically developing or commercializing any molecule other than blisibimod that modulates BAFF as the primary intended therapeutic mechanism of action.

We paid a first installment fee of $3.0 million and a second installment fee of $3.0 million. In addition, we are required to make various milestone payments upon the achievement of certain development, regulatory and commercial objectives, including payment upon initiation of the first Phase 3 clinical study for any blisibimod formulation. We are also required to pay up to $10.0 million upon achievement of certain pre-approval clinical development milestones and up to $23.0 million upon achievement of certain post-approval milestones. Furthermore, we are required to make tiered quarterly royalty payments on net sales, which increase as a percentage from the high single digits to the low double digits as net sales increase. Our royalty payment obligations for a particular product in a particular country begin on the date of the first commercial sale of the licensed product in that country, and end upon the later of 10 years from the date of first commercial sale in that country or the expiration date of the last valid claim of a licensed patent that covers the manufacture, use or sale, offer to sell or import of the product.

The license agreement will remain in effect until we elect to terminate, or until termination for material breach by either party or insolvency on our part. Under these terms, Amgen can terminate the agreement if we fail to meet our obligations, resulting in a loss of our exclusive rights to the licensed technology.

Manufacturing and Supply

We currently rely on contract manufacturers to produce drug substances and drug products required for our clinical studies under cGMP with oversight by our internal managers. We plan to continue to rely upon contract manufacturers and, potentially, collaboration partners to manufacture commercial quantities of our product candidates if and when approved for marketing by the FDA. Should a supplier or a manufacturer on which we have relied to produce a product candidate provide us with a faulty product or such product is later recalled, we would likely experience significant delays and material additional costs.

Sales and Marketing

Given our stage of development, we have not developed a commercial organization or distribution capabilities. We expect that we would develop these capabilities once we receive Phase 3 data in contemplation of FDA approval and the commercial launch of our product candidates. In order to commercialize any of our product candidates, we must develop these capabilities internally or through collaboration with third parties. In selected therapeutic areas where we feel that any approved products can be commercialized by a specialty sales force that calls on a limited and focused group of physicians, we may seek to commercialize these product candidates alone. In therapeutic areas that require a large sales force selling to a large and diverse prescribing population, we currently plan to partner with third parties to

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commercialize our product candidates while retaining rights to co-promote our products to a select audience of high prescribing physicians in the United States, thereby supplementing or enhancing the efforts of a commercial partner. We also plan to seek commercialization partners for products in non-specialty and international markets.

In North America and Western Europe, patients in the target markets for our product candidates are largely managed by medical specialists in the areas of cardiology and internal medicine. Historically, companies have experienced substantial commercial success through the deployment of specialized sales forces that can address a majority of key prescribers, particularly within the cardiovascular disease marketplace. Therefore, we expect to utilize a specialized sales force in North America for the sales and marketing of product candidates that we may successfully develop. Based upon sales models, we estimate that we could effectively promote (supplementing a commercial partner's sales efforts) the treatment of acute coronary syndrome to 3,000 cardiologists with approximately 300 sales representatives in North America and Western Europe. Outside of North America, and in situations or markets where a more favorable return may be realized through licensing commercial rights to a third party, we may license a portion or all of our commercial rights in a territory to a third party in exchange for one or more of the following: up-front payments, research funding, development funding, milestone payments and royalties on drug sales.

We intend to build the commercial infrastructure necessary to bring our product candidates to market alone or in collaboration with a co-development or co-promotion partner. In addition to a specialty sales force, sales management, internal sales support and an internal marketing group, we will need to establish capabilities to manage key accounts, such as managed care organizations, group-purchasing organizations, specialty pharmacies and government accounts. We may also choose to employ medical sales liaisons personnel to support the product.

Regulatory Matters

Government Regulation and Product Approval

Government authorities in the United States at the federal, state and local level and other countries, extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, marketing, export and import of products such as those we are developing. Our product candidates must be approved by the FDA through the new drug application, or NDA, process, and our biological product candidate, blisibimod, must be approved by the FDA through the biologics license application, or BLA, process before they may legally be marketed in the United States.

United States Drug Development Process

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and implementing regulations and biological products under both the FDCA and the Public Health Service Act, or the PHSA, and implementing regulations. The process of obtaining regulatory approvals and compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process, or after approval, may subject an applicant to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties.

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

- completion of preclinical laboratory tests, animal studies and formulation studies according to Good Laboratory Practices regulations;
- submission to the FDA of an IND, which must become effective before human clinical studies may begin;
- performance of adequate and well-controlled human clinical studies according to Good Clinical Practices, or GCP, to establish the safety and efficacy of the proposed drug or biological product for its intended use;
- submission to the FDA of an NDA for a new drug or BLA for a biological product;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the drug or biological product is produced to assess compliance with cGMP; and
- FDA review and approval of the NDA or BLA.

The testing and approval process requires substantial time, effort and financial resources and we cannot be certain that any approvals for our product candidates will be granted on a timely basis, if at all.

Once a pharmaceutical or biological product candidate is identified for development, it enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity, formulation and stability, as well as animal studies to assess its potential safety and efficacy. An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data and any available clinical data or literature, to the FDA as part of the IND. The sponsor will also include a protocol detailing, among other things, the objectives of the initial clinical study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated if the initial clinical study lends itself to an efficacy evaluation. Some preclinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA places the clinical study on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical study can begin. Clinical holds may also be imposed by the FDA at any time before or during clinical studies due to safety concerns or non-compliance.

All clinical studies must be conducted under the supervision of one or more qualified investigators in accordance with GCP regulations. These regulations include the requirement that all research subjects provide informed consent. Further, an institutional review board, or IRB, must review and approve the plan for any clinical study before it commences at any institution. An IRB considers, among other things, whether the risks to individuals participating in the studies are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the information regarding the clinical study and the consent form that must be provided to each clinical study subject or to his or her legal representative and must monitor the clinical study until completed.

Each new clinical protocol and any amendments to the protocol must be submitted to the FDA for review, and to the IRBs for approval. Protocols detail, among other things, the objectives of the clinical study, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety.

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

- *Phase 1.* The product is initially introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products

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for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.

Phase 2. Involves studies in a limited patient population to identify possible adverse effects and safety risks to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage and schedule.

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

Progress reports detailing the results of the clinical studies must be submitted at least annually to the FDA and safety reports must be submitted to the FDA and the investigators for serious and unexpected adverse events. Phase 1, Phase 2 and Phase 3 testing may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend or terminate a clinical study at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical study at its institution if the clinical study is not being conducted in accordance with the IRB's requirements or if the drug or biological product has been associated with unexpected serious harm to patients.

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

U.S. Review and Approval Processes

The results of product development, preclinical studies and clinical studies, along with descriptions of the manufacturing process, analytical tests conducted on the drug or biological product, proposed labeling and other relevant information, are submitted to the FDA as part of an NDA for a new drug or BLA for a biological product, requesting approval to market the product. The submission of an NDA or BLA is subject to the payment of a substantial user fee; a waiver of such fee may be obtained under certain limited circumstances.

In addition, under the Pediatric Research Equity Act of 2003, or PREA, which was reauthorized under the Food and Drug Administration Amendments Act of 2007, an NDA or BLA or supplement to an NDA or BLA must contain data to assess the safety and effectiveness of the drug or biological product for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of data or full or partial waivers. Unless otherwise required by regulation, PREA does not apply to any drug or biological product for an indication for which orphan designation has been granted.

The FDA reviews all NDAs and BLAs submitted to ensure that they are sufficiently complete for substantive review before it accepts them for filing. The FDA may request additional information rather than accept a NDA or BLA for filing. In this event, the NDA or BLA must be re-submitted with the additional information. The re-submitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is cGMP-compliant to assure and preserve the product's identity,

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strength, quality and purity. The FDA reviews a BLA to determine, among other things, whether the product is safe, has an acceptable purity profile and is adequately potent, and whether its manufacturing meets standards designed to assure the product's continued identity, sterility, safety, purity and potency. Before approving an NDA or BLA, the FDA will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. The FDA may refer the NDA or BLA to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions. An advisory committee is a panel of experts who provide advice and recommendations when requested by the FDA on matters of importance that come before the agency. The FDA is not bound by the recommendation of an advisory committee but it generally follows such recommendations.

The approval process is lengthy and difficult and the FDA may refuse to approve an NDA or BLA if the applicable regulatory criteria are not satisfied or may require additional clinical data or other data and information. Even if such data and information is submitted, the FDA may ultimately decide that the NDA or BLA does not satisfy the criteria for approval. Data obtained from clinical studies are not always conclusive and the FDA may interpret data differently than we interpret the same data. The FDA will issue a complete response letter if the agency decides not to approve the NDA or BLA in its present form. The complete response letter usually describes all of the specific deficiencies in the NDA or BLA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical studies. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the NDA or BLA, addressing all of the deficiencies identified in the letter, or withdraw the application

If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. In addition, the FDA may require Phase 4 testing which involves clinical studies designed to further assess a drug or biological product's safety and effectiveness after NDA or BLA approval and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized.

Patent Term Restoration and Marketing Exclusivity

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

Market exclusivity provisions under the FDCA can also delay the submission or the approval of certain competitor applications. The FDCA provides a five-year period of non-patent marketing exclusivity

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within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical studies necessary to demonstrate safety and effectiveness. HR 3590 provides 12 years of data exclusivity for innovator biologics. During this exclusivity period, competitors are barred from relying on the innovator's safety and efficacy data to gain FDA approval. Therefore, a competitor seeking to obtain marketing approval during this exclusivity period would be required to conduct its own preclinical and clinical studies.

Pediatric exclusivity is another type of exclusivity in the United States. Pediatric exclusivity, if granted, adds an additional six months to an existing exclusivity or statutory delay in approval resulting from a patent certification. This six-month exclusivity, which runs from the end of other exclusivity protection or patent delay, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study. The current pediatric exclusivity provision was reauthorized in September 2007.

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making a drug or biological product available in the United States for this type of disease or condition will be recovered from sales of the product. Orphan product designation must be requested before submitting an NDA or BLA. After the FDA grants orphan product designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan product designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications to market the same drug or biological product for the same indication, except in very limited circumstances, for seven years. Competitors, however, may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product, but for a different indication for which the orphan product has exclusivity. Orphan product exclusivity could also block the approval of one of our products for seven years if a competitor obtains approval of the same drug or biological product as defined by the FDA or if our product candidate is determined to be contained within the competitor's product for the same indication or disease. If a drug or biological product designated as an orphan product receives marketing approval for an indication broader than what is designated, it may not be entitled to orphan product exclusivity.

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The FDA also administers a clinical research grants program, whereby researchers may compete for funding to conduct clinical studies to support the approval of drugs, biologics, medical devices and medical foods for rare diseases and conditions. A product does not have to be designated as an orphan product to be eligible for the grant program. An application for an orphan grant should propose one discrete clinical study to facilitate FDA approval of the product for a rare disease or condition. The clinical study may address an unapproved new product or an unapproved new use for a product already on the market.

Expedited Development and Review Programs

The FDA has a fast track program that is intended to expedite or facilitate the process for reviewing new drugs and biological products that meet certain criteria. Specifically, new drugs and biological products are eligible for fast track designation if they are intended to treat a serious or life-threatening condition and demonstrate the potential to address unmet medical needs for the condition. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. For a fast track product, the FDA may consider for review on a rolling basis sections of the NDA or BLA before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA or BLA, the FDA agrees to accept sections of the NDA or BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA or BLA.

A fast track product may also be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. A fast track product is eligible for priority review if it has the potential to provide safe and effective therapy where no satisfactory alternative therapy exists or a significant improvement in the treatment, diagnosis or prevention of a disease compared to marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug or biological product designated for priority review in an effort to facilitate the review. Additionally, a fast track product may be eligible for accelerated approval. Drug or biological products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval, which means that they may be approved on the basis of adequate and well-controlled clinical studies establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict a clinical benefit, or on the basis of an effect on a clinical endpoint other than survival or irreversible morbidity. As a condition of approval, the FDA may require that a sponsor of a drug or biological product receiving accelerated approval perform adequate and well-controlled post-marketing clinical studies. Fast track designation, priority review and accelerated approval do not change the standards for approval but may expedite the development or approval process.

We have been granted fast track designation for our product candidate, varespladib sodium, for the prevention of acute chest syndrome associated with sickle cell disease in at-risk patients. Even though we have received fast track designation for varespladib sodium, the FDA may later decide that varespladib sodium no longer meets the conditions for qualification. In addition, obtaining fast track designation may not provide us with a material commercial advantage.

Post-Approval Requirements

Any drug or biological products for which we receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with FDA promotion and advertising requirements. The FDA strictly regulates labeling, advertising, promotion and other types of information on products that are placed on the market. Drugs and biological products may be promoted only for the approved indications and in accordance with the provisions of the approved label. Further, manufacturers of drugs and biological

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products must continue to comply with cGMP requirements, which are extensive and require considerable time, resources and ongoing investment to ensure compliance. In addition, changes to the manufacturing process generally require prior FDA approval before being implemented and other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

Drug and biological product manufacturers and other entities involved in the manufacturing and distribution of approved drugs or biological products are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. The cGMP requirements apply to all stages of the manufacturing process, including the production, processing, sterilization, packaging, labeling, storage and shipment of the drug or biological product. Manufacturers must establish validated systems to ensure that products meet specifications and regulatory standards, and test each product batch or lot prior to its release.

Manufacturers of biological products must also report to the FDA any deviations from cGMP that may affect the safety, purity or potency of a distributed product; or any unexpected or unforeseeable event that may affect the safety, purity or potency of a distributed product. The regulations also require investigation and correction of any deviations from cGMP and impose documentation requirements.

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

The FDA may withdraw a product approval if compliance with regulatory standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product may result in restrictions on the product or even complete withdrawal of the product from the market. Further, the failure to maintain compliance with regulatory requirements may result in administrative or judicial actions, such as fines, warning letters, holds on clinical studies, product recalls or seizures, product detention or refusal to permit the import or export of products, refusal to approve pending applications or supplements, restrictions on marketing or manufacturing, injunctions or civil or criminal penalties.

In addition, from time to time, legislation is drafted, introduced and passed in Congress that could significantly change the statutory provisions governing the approval, manufacturing and marketing of products regulated by the FDA. For example, in September 2007, the Food and Drug Administration Amendments Act of 2007 was enacted, giving the FDA enhanced post-market authority, including the authority to require post-market studies and clinical studies, labeling changes based on new safety information and compliance with a risk evaluation and mitigation strategy, or REMS, approved by the FDA. In determining whether a REMS is necessary, the FDA must consider the size of the population likely to use the drug or biological product, the seriousness of the disease or condition to be treated, the expected benefit of the product, the duration of treatment, the seriousness of known or potential adverse events for varespladib and whether the product is a new molecular entity. We have submitted a REMS as an appendix to the SPA. If the FDA determines our REMS is necessary, we must submit a REMS plan as part of an NDA or BLA. The FDA may require that a REMS include various elements, such as a medication guide, patient package insert, a communication plan to educate health care providers, limitations on who may prescribe or dispense the product, or other measures.

Failure to comply with any requirements under the new law may result in significant penalties. The new law also authorizes significant civil money penalties for the dissemination of false or misleading direct-to-consumer advertisements and allows the FDA to require companies to submit direct-to-consumer television drug advertisements for FDA review prior to public dissemination. Additionally, the new law expands the clinical study registry so that sponsors of all clinical studies, except for Phase 1 clinical studies,

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are required to submit certain clinical study information for inclusion in the clinical study registry data bank. In addition to new legislation, the FDA regulations and policies are often revised or reinterpreted by the agency in ways that may significantly affect our business and our products. It is impossible to predict whether further legislative or FDA regulation or policy changes will be enacted or implemented and what the impact of such changes, if any, may be.

Foreign Regulation

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

In the European Union, our products are subject to extensive regulatory requirements, which provide, among other things, that no medicinal product may be placed on the market of a European Union member state unless a marketing authorization has been issued by the European Medicines Agency or a national competent authority. European Union member states require both regulatory clearance by the national competent authority and a favorable ethics committee opinion prior to the commencement of a clinical study.

Under the European Union regulatory systems, we may submit marketing authorization applications either under a centralized or decentralized procedure. The centralized procedure provides for the grant of a single marketing authorization that is valid for all European Union member states. The centralized procedure is compulsory for medicines produced by certain biotechnological processes, products with a new active substance indicated for the treatment of certain diseases such as neurodegenerative disorder or diabetes and products designated as orphan medicinal products, and optional for those products which are highly innovative or for which a centralized process is in the interest of patients. The decentralized procedure of approval provides for approval by one or more other, or concerned, member states of an assessment of an application performed by one member state, known as the reference member state. Under the decentralized approval procedure, an applicant submits an application, or dossier, and related materials (draft summary of product characteristics, draft labeling and package leaflet) to the reference member state and concerned member states. The reference member state prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. Within 90 days of receiving the reference member state's assessment report, each concerned member state must decide whether to approve the assessment report and related materials. If a member state cannot approve the assessment report and related materials on the grounds of potential serious risk to public health, the disputed points may eventually be referred to the European Commission, whose decision is binding on all member states.

Reimbursement

Sales of pharmaceutical products depend significantly on the availability of third-party reimbursement. Third-party payors include government health administrative authorities, including at the federal and state level, managed care providers, private health insurers and other organizations. We anticipate third-party payors will provide reimbursement for our products. However, these third-party payors are increasingly challenging the price and examining the cost-effectiveness of medical products and services. In addition, significant uncertainty exists as to the reimbursement status of newly approved health care products. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness of our products. Our product candidates may not be considered cost-effective. It is time

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consuming and expensive for us to seek reimbursement from third-party payors. Reimbursement may not be available or sufficient to allow us to sell our products on a competitive and profitable basis.

In addition, the U.S. Congress and state legislatures from time to time propose and adopt initiatives aimed at cost containment, which could impact our ability to sell our products profitably. For example, in March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, and the associated reconciliation bill, which we refer to collectively as the Health Care Reform Law, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Effective October 1, 2010, the Health Care Reform Law revises the definition of "average manufacturer price" for reporting purposes, which could increase the amount of Medicaid drug rebates to states once the provision is effective. Further, beginning in 2011, the new law imposes a significant annual fee on companies that manufacture or import certain branded prescription drug products and biologic agents. Substantial new provisions affecting compliance also have been enacted, which may require us to modify our business practices with healthcare practitioners. We will not know the full effects of the Health Care Reform Law until applicable federal and state agencies issue regulations or guidance under the new law. Although it is too early to determine the effect of the Health Care Reform Law, the new law appears likely to continue the pressure on pharmaceutical pricing, especially under the Medicare program, and also may increase our regulatory burdens and operating costs.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, imposed new requirements for the distribution and pricing of prescription drugs for Medicare beneficiaries, and included a major expansion of the prescription drug benefit under a new Medicare Part D. Medicare Part D went into effect on January 1, 2006. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities which will provide coverage of outpatient prescription drugs. Part D plans include both stand-alone prescription drug benefit plans and prescription drug coverage as a supplement to Medicare Advantage plans. Unlike Medicare Part A and B, Part D coverage is not standardized. Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class. Any formulary used by a Part D prescription drug plan must be developed and reviewed by a pharmacy and therapeutic committee.

It is not clear what effect the MMA will have on the prices paid for currently approved drugs and the pricing options for new drugs approved after January 1, 2006. Government payment for some of the costs of prescription drugs may increase demand for products for which we receive marketing approval. However, any negotiated prices for our products covered by a Part D prescription drug plan will likely be lower than the prices we might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA may result in a similar reduction in payments from non-governmental payors.

There are also laws that govern a company's eligibility to participate in Medicare and Medicaid reimbursements. For example, a company may be debarred from participation if it is found to have violated federal anti-kickback laws, which could have a significant effect on a company's ability to operate its business.

The cost of pharmaceuticals continues to generate substantial governmental and third-party payor interest. We expect that the pharmaceutical industry will experience pricing pressures due to the trend toward managed healthcare, the increasing influence of managed care organizations, and additional legislative proposals. Indeed, we expect that there will continue to be a number of federal and state

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proposals to implement governmental pricing controls and limit the growth of healthcare costs, including the cost of prescription drugs. At the present time, Medicare is prohibited from negotiating directly with pharmaceutical companies for drugs. However, Congress is considering passing legislation that would lift the ban on federal negotiations. While we cannot predict whether such legislative or regulatory proposals will be adopted, the adoption of such proposals could harm our business, financial condition and results of operations.

Some third-party payors also require pre-approval of coverage for new or innovative drug therapies before they will reimburse healthcare providers that use such therapies. While we cannot predict whether any proposed cost-containment measures will be adopted or otherwise implemented in the future, the announcement or adoption of these proposals could have a material adverse effect on our ability to obtain adequate prices for our product candidates and operate profitably.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. In some countries, pricing negotiations with governmental authorities can take six to 12 months or longer after the receipt of marketing approval. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products.

Employees

As of December 31, 2011, we had 38 employees, eight of whom hold an M.D., Ph.D. or Pharm. D. All of our employees are engaged in administration, finance, clinical, regulatory and business development functions. None of our employees are represented by a labor union, and we believe that our relations with our employees are good.

Other Available Information

We are subject to the information requirements of the Exchange Act. Therefore, we file periodic reports, proxy statements and other information with the SEC, which may be obtained by visiting the Public Reference Room of the SEC at 100 F Street, NE, Washington, D.C. 20549 or by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically.

The mailing address of our headquarters is 25801 Industrial Blvd, Hayward, CA 94545, and our telephone number at that location is 510-856-5600. Our website is www.anthera.com. Through a link on the "Investors" section of our website (under "SEC Filings" in the "Financial Information" section), we make available, free of charge, the following filings as soon as reasonably practicable after they are electronically filed with or furnished to the SEC: our Annual Reports on Form 10-K; Quarterly Reports on Form 10-Q; Current Reports on Form 8-K; and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act.

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ITEM 1A. RISK FACTORS

Before you decide to invest in our common stock, you should carefully consider the risks described below, together with the other information contained in this Annual Report on Form 10-K, including the financial statements and the related notes that appear at the end of this report. We believe the risks described below are the risks that are material to us as of the date of this report. If any of the following risks occur, our business, financial condition, results of operations and future growth prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

Risks Related to Our Financial Condition and Capital Requirements

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

We are a development stage company with only seven years of operating history. We have focused primarily on developing our three product candidates, varespladib, blisibimod and varespladib sodium. We have financed our operations exclusively through equity offerings, private placements of convertible debt, and debt financings and we have incurred losses in each year since our inception in September 2004. As of December 31, 2011, we had an accumulated deficit of approximately $201.0 million. Substantially all of our losses resulted from costs incurred in connection with our product development programs and from general and administrative costs associated with our operations.

We expect to incur additional losses over the next several years, and these losses may increase if we cannot generate revenues. Our historical losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and working capital. We expect our development expenses, as well as our clinical product manufacturing expenses, to increase in connection with our Phase 2b clinical study named PEARL-SC for blisibimod and other clinical studies related to the development of blisibimod. In addition, we will incur additional costs of operating as a public company and, if we obtain regulatory approval for any of our product candidates, we may incur significant sales, marketing, in-licensing and outsourced manufacturing expenses as well as continued product development expenses. As a result, we expect to continue to incur significant and increasing losses for the foreseeable future.

We have never generated any revenue and may never be profitable.

Our ability to generate revenue and achieve profitability depends on our ability, alone or with collaborators, to successfully complete the development of our product candidates, conduct preclinical tests in animals and clinical studies in human beings, obtain the necessary regulatory approvals for our product candidates and commercialize any approved products. We have not generated any revenue from our development-stage product candidates, and we do not know when, or if, we will generate any revenue. The commercial success of our development-stage product candidates will depend on a number of factors, including, but not limited to, our ability to:

- obtain favorable results for and advance the development of our product candidate blisibimod for the treatment of B-cell mediated autoimmune diseases, including successfully launching and completing PEARL-SC or other clinical studies in patients with systemic lupus erythematosus, or lupus, or other indications related to the development of blisibimod;
- successfully execute our planned preclinical studies in animals and clinical studies in human beings for our other product candidates;
- obtain regulatory approval for blisibimod and our other product candidates;

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if regulatory approvals are obtained, begin the commercial manufacturing of our product candidates with our third-party manufacturers;

launch commercial sales and effectively market our product candidates, either independently or in strategic collaborations with third parties; and

achieve broad market acceptance of our product candidates in the medical community and with third-party payors.

All of our product candidates are subject to the risks of failure inherent in the development of therapeutics based on new technologies. Currently, we have three product candidates in clinical development: varespladib, blisibimod and varespladib sodium. These product candidates could fail in clinical studies if we are unable to demonstrate that they are effective or if they cause unacceptable adverse effects in the patients we treat. Failure of our product candidates in clinical studies would have a material adverse effect on our ability to generate revenue or become profitable. If we are not successful in achieving regulatory approval for our product candidates or are significantly delayed in doing so, our business will be materially harmed.

Additionally, all of our other product candidates are in preclinical development. Our drug discovery efforts may not produce any other viable or marketable product candidates.

Even if our product candidates are approved for commercial sale, the approved product candidate may not gain market acceptance or achieve commercial success. Physicians, patients, payors or the medical community in general may be unwilling to accept, utilize or recommend any of our products. We would anticipate incurring significant costs associated with commercializing any approved product. Even if we are able to generate product sales, which we cannot guarantee, we may not achieve profitability soon thereafter, if ever. If we are unable to generate product revenues, we will not become profitable and may be unable to continue operations without additional funding.

We will need substantial additional capital in the future to fund our operations. If additional capital is not available, we will have to delay, reduce or cease operations.

We will need to raise substantial additional capital to fund our operations and to develop our product candidates. Our future capital requirements could be substantial and will depend on many factors including:

the rate of progress of our Phase 2b clinical study named PEARL-SC or other studies for blisibimod;

the scope, size, rate of progress, results and costs of our preclinical studies, clinical studies and other development activities for one or more of our other product candidates;

manufacturing campaign for blisibimod clinical matters, including formulation development and product enhancement;

non-clinical activities that we may pursue parallel to clinical trials for each clinical compound;

the cost, timing and outcomes of regulatory proceedings;

payments received under any strategic collaborations;

the filing, prosecution and enforcement of patent claims;

the costs associated with commercializing our product candidates if they receive regulatory approval, including the cost and timing of developing sales and marketing capabilities, or entering into strategic collaboration with others relating to the commercialization of our product candidates; and

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revenues received from approved products, if any, in the future.

As of the date of this report, we anticipate that our existing cash, cash equivalents and short-term investments, will enable us to meet our obligations and sustain our operations through at least the next 12 months. Changing circumstances may cause us to consume capital significantly faster than we currently anticipate. Additional financing may not be available when we need it or may not be available on terms that are favorable to us. If adequate funds are not available to us on a timely basis, or at all, we may be required to:

terminate, reduce or delay preclinical studies, clinical studies or other development activities for one or more of our product candidates; or

terminate, reduce or delay our (i) establishment of sales and marketing capabilities, (ii) pursuit of strategic collaborations with others relating to the sales, marketing and commercialization of our product candidates or (iii) other activities that may be necessary to commercialize our product candidates, if approved for sale.

The timing of the milestone and royalty payments we are required to make to each of Eli Lilly and Company, Shionogi & Co., Ltd. and Amgen Inc. is uncertain and could adversely affect our cash flows and results of operations.

In July 2006, we entered into a license agreement with Eli Lilly and Company, or Eli Lilly, and Shionogi & Co., Ltd. to develop and commercialize certain secretory phospholipase A2, or sPLA2, inhibitors for the treatment of cardiovascular disease and other diseases. Pursuant to our license agreement with them, we have an obligation to pay to each of Eli Lilly and Shionogi & Co., Ltd. significant milestone and royalty payments based upon how we develop and commercialize certain sPLA2 inhibitors, including varespladib and varespladib sodium, and our achievement of certain significant corporate, clinical and financial events. For varespladib, we are required to pay up to $32.0 million upon achievement of certain approval and post-approval sales milestones. For varespladib sodium, we are required to pay up to $3.0 million upon achievement of certain clinical development milestones and up to $25.0 million upon achievement of certain approval and post-approval sales milestones. For other product formulations that we are not currently developing, we would be required to pay up to $2.0 million upon achievement of certain clinical development milestones and up to $35.5 million upon achievement of certain approval and post-approval sales milestones.

In addition, in December 2007, we entered into a license agreement with Amgen Inc., or Amgen, pursuant to which we obtained an exclusive worldwide license to certain technology and compounds relating to blisibimod. Pursuant to our license agreement with Amgen, we are required to make various milestone payments upon our achievement of certain development, regulatory and commercial objectives for any blisibimod formulation. We are required to pay up to $10.0 million upon achievement of certain pre-approval clinical development milestones and up to $23.0 million upon achievement of certain post-approval milestones. We are also required to make tiered quarterly royalty payments on net sales, which increase as a percentage from the high single digits to the low double digits as net sales increase. The timing of our achievement of these events and corresponding milestone payments becoming due to Eli Lilly, Shionogi & Co., Ltd. and Amgen is subject to factors relating to the clinical and regulatory development and commercialization of certain sPLA2 inhibitors or blisibimod, as applicable, many of which are beyond our control. We may become obligated to make a milestone payment during a period in which we do not have the cash on hand to make such payment, which could require us to delay our clinical studies, curtail our operations, scale back our commercialization and marketing efforts, seek funds to meet these obligations at terms unfavorable to us or default on our license agreements, which could result in license termination.

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Our limited operating history makes it difficult to evaluate our business and prospects.

We were incorporated in September 2004. Our operations to date have been limited to organizing and staffing our company, acquiring product and technology rights, conducting product development activities for our primary product candidates, varespladib, blisibimod and varespladib sodium, and performing research and development. We have not yet demonstrated an ability to obtain regulatory approval for or commercialize a product candidate. Consequently, any predictions about our future performance may not be as accurate as they could be if we had a history of successfully developing and commercializing pharmaceutical products.

Risks Associated with Development and Commercialization of Our Product Candidates

We depend substantially on the success of our product candidates which are still under clinical development. We cannot assure you that these product candidates or any of our other product candidates will receive regulatory approval or be successfully commercialized.

To date, we have not obtained marketing approval for, or marketed, distributed or sold any product candidates. The success of our business depends primarily upon our ability to develop and commercialize our product candidates successfully.

Our lead product candidate is blisibimod, which has completed several Phase 1 clinical studies and has completed enrollment in a Phase 2b clinical study. In July 2010, we received clearance from the FDA to begin recruitment of lupus patients into the PEARL-SC Phase 2b clinical study. In November 2010, we placed a voluntary hold on the PEARL-SC study due to problems found with vials. Patient enrollment in the study was temporarily suspended and dosing was discontinued in patients who were enrolled in the study while we conducted an analysis of the problem. We resolved the issues found with the vials in December 2010. After analysis, simulation and consultation with industry experts, we determined that shipping on dry ice was the root cause of the issue. Shipping logistics were modified and we reinitiated enrollment in PEARL-SC and dosing in January 2011. We have received no reports of patient-related side effects or problems with drug administration that could be attributed to the vial problem. On October 24, 2011 we filed a proposed amendment to the FDA for the PEARL-SC clinical study to modify the primary efficacy SLE response index and to include an option for an interim efficacy analysis.

Our product candidates are prone to the risks of failure inherent in drug development. Before obtaining regulatory approvals for the commercial sale of any product candidate for a target indication, we must demonstrate with substantial evidence gathered in preclinical and well-controlled clinical studies, and, with respect to approval in the United States, to the satisfaction of the FDA and, with respect to approval in other countries, similar regulatory authorities in those countries, that the product candidate is safe and effective for use for that target indication and that the manufacturing facilities, processes and controls are adequate. Despite our efforts, our product candidates may not:

offer therapeutic or other improvement over existing, comparable therapeutics;

be proven safe and effective in clinical studies;

meet applicable regulatory standards;

be capable of being produced in sufficient quantities at acceptable costs;

be successfully commercialized; or

obtain favorable reimbursement.

We are not permitted to market our varespladib and varespladib sodium product candidates in the United States until we receive approval of a new drug application, or NDA, or with respect to our blisibimod product candidate, approval of a biologics license application, or BLA, from the FDA, or in any

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foreign countries until we receive the requisite approval from such countries. We have not submitted an NDA or BLA or received marketing approval for any of our product candidates.

Preclinical testing and clinical studies are long, expensive and uncertain processes. We may spend several years completing our testing for any particular product candidate, and failure can occur at any stage. Negative or inconclusive results or adverse medical events during a clinical study could also cause the FDA or us to terminate a clinical study or require that we repeat it or conduct additional clinical studies. Additionally, data obtained from a clinical study are susceptible to varying interpretations and the FDA or other regulatory authorities may interpret the results of our clinical studies less favorably than we do. The FDA and equivalent foreign regulatory agencies have substantial discretion in the approval process and may decide that our data are insufficient to support a marketing application and require additional preclinical, clinical or other studies.

Any termination or suspension of, or delays in the commencement or completion of, clinical testing of our product candidates could result in increased costs to us, delay or limit our ability to generate revenue and adversely affect our commercial prospects.

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

- obtaining regulatory approval to commence a clinical study or complying with conditions imposed by a regulatory authority regarding the scope or design of a clinical study;
- reaching agreement on acceptable terms with prospective clinical research organizations, or CROs, and study sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and study sites;
- manufacturing, including manufacturing sufficient quantities of a product candidate or other materials for use in clinical studies;
- obtaining institutional review board, or IRB, approval or the approval of other reviewing entities to conduct a clinical study at a prospective site;
- recruiting and enrolling patients to participate in clinical studies for a variety of reasons, including size of patient population, nature of clinical study protocol, the availability of approved effective treatments for the relevant disease and competition from other clinical study programs for similar indications;
- severe or unexpected drug-related adverse effects experienced by patients in a clinical study; and
- retaining patients who have initiated a clinical study, but may withdraw due to treatment protocol, adverse effects from the therapy, lack of efficacy from the treatment, personal issues or who are lost to further follow-up.

Clinical studies may also be delayed, suspended or terminated as a result of ambiguous or negative interim results, or results that are inconsistent with earlier results. For example, while an independent statistician has completed an analysis of various biomarkers of cardiovascular risk and determined that treatment with once-daily varespladib met the pre-specified criteria for the VISTA-16 study to proceed, an independent DSMB reviewing the clinical data from the VISTA-16 study may recommend the clinical study discontinue based on safety and tolerability. In addition, a clinical study may be suspended or terminated by us, the FDA, the IRB or other reviewing entity overseeing the clinical study at issue, any of

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our clinical study sites with respect to that site, or other regulatory authorities due to a number of factors, including:

- failure to conduct the clinical study in accordance with regulatory requirements or our clinical protocols;
- inspection of the clinical study operations or study sites by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;
- unforeseen safety issues or any determination that a clinical study presents unacceptable health risks; and
- lack of adequate funding to continue the clinical study, including the incurrence of unforeseen costs due to enrollment delays, requirements to conduct additional clinical studies and increased expenses associated with the services of our CROs and other third parties.

Product development costs to us and our collaborators will increase if we have delays in testing or approval of our product candidates or if we need to perform more or larger clinical studies than planned. For example, we may need to increase our sample size for our VISTA-16 study for varespladib if the overall major adverse cardiovascular event, or MACE, rate is lower than expected. We typically rely on third-party clinical investigators at medical institutions and health care facilities to conduct our clinical studies and, as a result, we may face additional delaying factors outside our control.

Additionally, changes in regulatory requirements and policies may occur and we may need to amend clinical study protocols to reflect these changes. Amendments may require us to resubmit our clinical study protocols to IRBs for reexamination, which may impact the costs, timing or successful completion of a clinical study. If we experience delays in completion of, or if we, the FDA or other regulatory authorities, the IRB or other reviewing entities, or any of our clinical study sites suspend or terminate any of our clinical studies, the commercial prospects for our product candidates may be harmed and our ability to generate product revenues will be delayed. In addition, many of the factors that cause, or lead to, termination or suspension of, or a delay in the commencement or completion of, clinical studies may also ultimately lead to the denial of regulatory approval of a product candidate. Also, if one or more clinical studies are delayed, our competitors may be able to bring products to market before we do, and the commercial viability of our product candidates could be significantly reduced.

Because the results of preclinical testing or earlier clinical studies are not necessarily predictive of future results, varespladib, blisibimod, varespladib sodium or any other product candidate we advance into clinical studies may not have favorable results in later clinical studies or receive regulatory approval.

Success in preclinical testing and early clinical studies does not ensure that later clinical studies will generate adequate data to demonstrate the efficacy and safety of an investigational drug or biologic. A number of companies in the pharmaceutical and biotechnology industries, including those with greater resources and experience, have suffered significant setbacks in Phase 3 clinical studies, even after seeing promising results in earlier clinical studies. Despite the results reported in earlier clinical studies for our product candidates, including varespladib, blisibimod and varespladib sodium, we do not know whether any Phase 3 or other clinical studies we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market any of our product candidates. If later stage clinical studies do not produce favorable results, our ability to achieve regulatory approval for any of our product candidates may be adversely impacted. Even if we believe that our product candidates have performed satisfactorily in preclinical testing and clinical studies, we may nonetheless fail to obtain FDA approval for our product candidates.

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If we breach the license agreements for our primary product candidates, we could lose the ability to continue the development and commercialization of our primary product candidates.

We are party to an agreement with Eli Lilly and Shionogi & Co., Ltd. containing exclusive, worldwide licenses, except for Japan, of the composition of matter, methods of making and methods of use for certain sPLA2 inhibitors. We are also party to an agreement with Amgen containing exclusive, worldwide licenses of the composition of matter and methods of use for blisibimod. These agreements require us to make timely milestone and royalty payments, provide regular information, maintain the confidentiality of and indemnify Eli Lilly, Shionogi & Co., Ltd. and Amgen under the terms of the agreements.

If we fail to meet these obligations, our licensors may terminate our exclusive licenses and may be able to re-obtain licensed technology and aspects of any intellectual property controlled by us that relate to the licensed technology that originated from the licensors. Our licensors could effectively take control of the development and commercialization of varespladib, blisibimod and varespladib sodium after an uncured, material breach of our license agreements by us or if we voluntarily terminate the agreements. While we would expect to exercise all rights and remedies available to us, including seeking to cure any breach by us, and otherwise seek to preserve our rights under the patents licensed to us, we may not be able to do so in a timely manner, at an acceptable cost or at all. Any uncured, material breach under the licenses could result in our loss of exclusive rights and may lead to a complete termination of our product development and any commercialization efforts for varespladib, blisibimod or varespladib sodium.

Our industry is subject to intense competition. If we are unable to compete effectively, our product candidates may be rendered non-competitive or obsolete.

The pharmaceutical industry is highly competitive and subject to rapid and significant technological change. Our potential competitors include large pharmaceutical and more established biotechnology companies, specialty pharmaceutical and generic drug companies, academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization. All of these competitors currently engage in, have engaged in or may engage in the future in the development, manufacturing, marketing and commercialization of pharmaceuticals and biotechnologies, some of which may compete with our present or future product candidates. It is possible that any of these competitors could develop technologies or products that would render our product candidates obsolete or non-competitive, which could adversely affect our revenue potential. Key competitive factors affecting the commercial success of our product candidates are likely to be efficacy, safety profile, reliability, convenience of dosing, price and reimbursement.

The market for inflammatory disease therapeutics is especially large and competitive. All of the sPLA2 inhibitor compounds we are currently developing, if approved, will face intense competition, either as monotherapies or in combination therapies. For lupus, Human Genome Sciences, Inc.'s and GlaxoSmithKline plc's BAFF antagonist monoclonal antibody, Benlysta, was recently approved by the FDA for treatment of lupus. Further, we are aware of companies with other products in development that are being tested for potential treatment of lupus, Bristol-Myers Squibb Company and Merck Serono S.A., whose dual BAFF/APRIL antagonist fusion protein, Atacicept, is in a Phase 3 clinical study for lupus; and Immunomedics, Inc. and UCB S.A., who recently reported favorable results for their CD-22 antagonist humanized antibody, epratuzumab, which completed a Phase 2b clinical study in lupus and has begun a Phase 3 study, and Eli Lilly's anti-BLYS monoclonal antibody, LY2127399, which has begun two Phase 3 studies.

Many of our potential competitors have substantially greater financial, technical and human resources than we do and significantly greater experience in the discovery and development of drug candidates, obtaining FDA and other regulatory approvals of products and the commercialization of those products. Accordingly, our competitors may be more successful than we may be in obtaining FDA approval for drugs

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and achieving widespread market acceptance. Our competitors' drugs may be more effective, have fewer adverse effects, be less expensive to develop and manufacture or be more effectively marketed and sold than any product candidate we may commercialize and may render our product candidates obsolete or non-competitive before we can recover the expenses of developing and commercializing any of our product candidates. We anticipate that we will face intense and increasing competition as new drugs enter the market and advanced technologies become available. These entities may also establish collaborative or licensing relationships with our competitors. Finally, the development of new treatment methods for the diseases we are targeting could render our drugs non-competitive or obsolete. All of these factors could adversely affect our business.

Our product candidates may cause undesirable adverse effects or have other properties that could delay or prevent their regulatory approval or limit the commercial profile of any approved label.

Undesirable adverse effects caused by our product candidates could cause us, IRBs or other reviewing entities, clinical study sites, or regulatory authorities to interrupt, delay or halt clinical studies and could result in the denial of regulatory approval by the FDA or other regulatory authorities. Phase 2 clinical studies conducted by us with our product candidates have generated differences in adverse effects and serious adverse events. The most common adverse effects seen with any of our product candidates versus placebo include diarrhea, headache, nausea and increases in alanine aminotransferase, which is an enzyme that indicates liver cell injury. The most common serious adverse events seen with any of our product candidates include death, VOC and congestive heart failure. While none of these serious adverse events were considered related to the administration of our product candidates by the clinical investigators, if serious adverse events that are considered related to our product candidates are observed in any Phase 3 clinical studies, our ability to obtain regulatory approval for our product candidates may be adversely impacted. Further, if any of our product candidates receives marketing approval and we or others later discover, after approval and use in an increasing number of patients, that our products could have adverse effect profiles that limit their usefulness or require their withdrawal (whether or not the therapies showed the adverse effect profile in Phase 1 through Phase 3 clinical studies), a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw their approval of the product;
- regulatory authorities may require the addition of labeling statements, such as warnings or contraindications;
- we may be required to change the way the product is administered, conduct additional clinical studies or change the labeling of the product;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product candidate and could substantially increase the costs of commercializing our product candidates.

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After the completion of our clinical studies, we cannot predict whether or when we will obtain regulatory approval to commercialize our product candidates and we cannot, therefore, predict the timing of any future revenue from these product candidates.

Even if we project positive clinical results and file for regulatory approval, we cannot commercialize any of our product candidates until the appropriate regulatory authorities have reviewed and approved the applications for such product candidates. We cannot assure you that the regulatory agencies will complete their review processes in a timely manner or that we will obtain regulatory approval for any product candidate we develop. Satisfaction of regulatory requirements typically takes many years, is dependent upon the type, complexity and novelty of the product and requires the expenditure of substantial resources. In addition, we may experience delays or rejections based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical studies and FDA regulatory review.

Even if our product candidates receive regulatory approval, they may still face future development and regulatory difficulties.

Even if U.S. regulatory approval is obtained, the FDA may still impose significant restrictions on a product's indicated uses or marketing or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. For example, the label ultimately approved for varespladib, if any, may include restrictions on use. Further, the FDA has indicated that long-term safety data on varespladib may need to be obtained as a post-market requirement. Our product candidates will also be subject to ongoing FDA requirements governing the labeling, packaging, storage, distribution, safety surveillance, advertising, promotion, recordkeeping and reporting of safety and other post-market information. In addition, manufacturers of drug products and their facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current good manufacturing procedures, or cGMP, regulations. If we or a regulatory agency discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. If we, our product candidates or the manufacturing facilities for our product candidates fail to comply with applicable regulatory requirements, a regulatory agency may:

issue warning letters or untitled letters;

seek an injunction or impose civil or criminal penalties or monetary fines;

suspend or withdraw regulatory approval;

suspend any ongoing clinical studies;

refuse to approve pending applications or supplements to applications filed by us;

suspend or impose restrictions on operations, including costly new manufacturing requirements; or

seize or detain products, refuse to permit the import or export of products, or require us to initiate a product recall.

The occurrence of any event or penalty described above may inhibit our ability to commercialize our products and generate revenue.

New legal and regulatory requirements could make it more difficult for us to obtain approvals for our product candidates and could limit or make more burdensome our ability to commercialize any approved products.

New federal legislation or regulatory requirements could affect the requirements for obtaining regulatory approvals of our product candidates or otherwise limit our ability to commercialize any

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approved products or subject our products to more rigorous post-approval requirements. For example, the FDA Amendments Act of 2007, or FDAAA, granted the FDA new authority to impose post-approval clinical study requirements, require safety-related changes to product labeling and require the adoption of risk management plans, referred to in the legislation as risk evaluation and mitigation strategies, or REMS. The REMS may include requirements for special labeling or medication guides for patients, special communication plans to health care professionals, and restrictions on distribution and use. Pursuant to the FDAAA, if the FDA makes the requisite findings, it might require that a new product be used only by physicians with specified specialized training, only in specified designated health care settings, or only in conjunction with special patient testing and monitoring. The legislation also included the following: requirements for providing the public information on ongoing clinical studies through a clinical study registry and for disclosing clinical study results to the public through such registry; renewed requirements for conducting clinical studies to generate information on the use of products in pediatric patients; and substantial new penalties, for example, for false or misleading consumer advertisements. Other proposals have been made to impose additional requirements on drug approvals, further expand post-approval requirements, and restrict sales and promotional activities. The new legislation, and the additional proposals if enacted, may make it more difficult or burdensome for us to obtain approval of our product candidates, any approvals we receive may be more restrictive or be subject to onerous post-approval requirements, our ability to successfully commercialize approved products may be hindered and our business may be harmed as a result.

If any of our product candidates for which we receive regulatory approval does not achieve broad market acceptance, the revenue that we generate from its sales, if any, will be limited.

The commercial success of our product candidates for which we obtain marketing approval from the FDA or other regulatory authorities will depend upon the acceptance of these products by the medical community, including physicians, patients and health care payors. The degree of market acceptance of any of our approved products will depend on a number of factors, including:

- demonstration of clinical safety and efficacy compared to other products;
- the relative convenience, ease of administration and acceptance by physicians and payors of blisibimod in the treatment of lupus;
- the prevalence and severity of any adverse effects;
- limitations or warnings contained in a product's FDA-approved labeling;
- availability of alternative treatments;
- pricing and cost-effectiveness;
- the effectiveness of our or any future collaborators' sales and marketing strategies;
- our ability to obtain and maintain sufficient third-party coverage or reimbursement from government health care programs, including Medicare and Medicaid; and
- the willingness of patients to pay out-of-pocket in the absence of third-party coverage.

If our product candidates are approved but do not achieve an adequate level of acceptance by physicians, health care payors and patients, we may not generate sufficient revenue from these products, and we may not become or remain profitable. In addition, our efforts to educate the medical community and third-party payors on the benefits of our product candidates may require significant resources and may never be successful.

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Our future success depends on our ability to retain our chief executive officer and other key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on Mr. Paul F. Truex, our President and Chief Executive Officer, Dr. Colin Hislop, our Senior Vice President and Chief Medical Officer and the other principal members of our executive team. The loss of the services of any of these persons might impede the achievement of our research, development and commercialization objectives. Recruiting and retaining qualified scientific personnel and possibly sales and marketing personnel will also be critical to our success. We may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific personnel from universities and research institutions. Failure to succeed in clinical studies may make it more challenging to recruit and retain qualified scientific personnel. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us.

Recently enacted and future legislation or regulatory reform of the health care system in the United States and foreign jurisdictions may affect our ability to sell our products profitably.

Our ability to commercialize our future products successfully, alone or with collaborators, will depend in part on the extent to which reimbursement for the products will be available from government and health administration authorities, private health insurers and other third-party payors. The continuing efforts of the U.S. and foreign governments, insurance companies, managed care organizations and other payors of health care services to contain or reduce health care costs may adversely affect our ability to set prices for our products which we believe are fair, and our ability to generate revenues and achieve and maintain profitability.

Specifically, in both the United States and some foreign jurisdictions, there have been a number of legislative and regulatory proposals to change the health care system in ways that could affect our ability to sell our products profitably. In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the Health Care Reform Law, a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms.

We will not know the full effects of the Health Care Reform Law until applicable federal and state agencies issue regulations or guidance under the new law. Although it is too early to determine the effect of the Health Care Reform Law, the new law appears likely to continue the pressure on pharmaceutical pricing, especially under the Medicare program, and also may increase our regulatory burdens and operating costs. We expect further federal and state proposals and health care reforms to continue to be proposed by legislators, which could limit the prices that can be charged for the products we develop and may limit our commercial opportunity.

Also in the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, also called the Medicare Modernization Act, or MMA, changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sales prices for drugs. In addition, this legislation authorized Medicare Part D prescription drug plans to use formularies where they can limit the number of drugs that will be covered in any therapeutic class. As a result of this legislation and the expansion of federal coverage of drug products, we expect that there will be additional pressure to contain and reduce costs. These cost reduction initiatives and other provisions of this legislation could

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decrease the coverage and price that we receive for any approved products and could seriously harm our business. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates, and any reduction in reimbursement that results from the MMA may result in a similar reduction in payments from private payors.

The continuing efforts of government and other third-party payors to contain or reduce the costs of health care through various means may limit our commercial opportunity. It will be time-consuming and expensive for us to go through the process of seeking reimbursement from Medicare and private payors. Our products may not be considered cost-effective, and government and third-party private health insurance coverage and reimbursement may not be available to patients for any of our future products or sufficient to allow us to sell our products on a competitive and profitable basis. Our results of operations could be adversely affected by the MMA, the Health Care Reform Law and additional prescription drug coverage legislation, by the possible effect of this legislation on amounts that private insurers will pay and by other health care reforms that may be enacted or adopted in the future. In addition, increasing emphasis on managed care in the United States will continue to put pressure on the pricing of pharmaceutical products. Cost control initiatives could decrease the price that we or any potential collaborators could receive for any of our future products and could adversely affect our profitability.

In some foreign countries, including major markets in the European Union and Japan, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take six to 12 months or longer after the receipt of regulatory marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical study that compares the cost-effectiveness of our product candidates to other available therapies. Such pharmacoeconomic studies can be costly and the results uncertain. Our business could be harmed if reimbursement of our products is unavailable or limited in scope or amount or if pricing is set at unsatisfactory levels.

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

The use of our product candidates in clinical studies and the sale of any products for which we obtain marketing approval expose us to the risk of product liability claims. Product liability claims might be brought against us by consumers, health care providers, pharmaceutical companies or others selling or otherwise coming into contact with our products. If we cannot successfully defend ourselves against product liability claims, we could incur substantial liabilities. In addition, regardless of merit or eventual outcome, product liability claims may result in:

impairment of our business reputation;

withdrawal of clinical study participants;

costs of related litigation;

distraction of management's attention from our primary business;

substantial monetary awards to patients or other claimants;

the inability to commercialize our product candidates; and

decreased demand for our product candidates, if approved for commercial sale.

Our product liability insurance coverage for our clinical studies may not be sufficient to reimburse us for all expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive, and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If and when we obtain marketing approval for any of

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our product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain this product liability insurance on commercially reasonable terms. On occasion, large judgments have been awarded in class action lawsuits based on drugs that had unanticipated adverse effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could decrease our cash and adversely affect our business.

If we use hazardous and biological materials in a manner that causes injury or violates applicable law, we may be liable for damages.

Our research and development activities involve the controlled use of potentially hazardous substances, including toxic chemical and biological materials. We could be held liable for any contamination, injury or other damages resulting from these hazardous substances. In addition, our operations produce hazardous waste products. While third parties are responsible for disposal of our hazardous waste, we could be liable under environmental laws for any required cleanup of sites at which our waste is disposed. Federal, state, foreign and local laws and regulations govern the use, manufacture, storage, handling and disposal of these hazardous materials. If we fail to comply with these laws and regulations at any time, or if they change, we may be subject to criminal sanctions and substantial civil liabilities, which may harm our business. Even if we continue to comply with all applicable laws and regulations regarding hazardous materials, we cannot eliminate the risk of accidental contamination or discharge and our resultant liability for any injuries or other damages caused by these accidents.

We rely on third parties to conduct, supervise and monitor our clinical studies, and those third parties may perform in an unsatisfactory manner, such as by failing to meet established deadlines for the completion of these clinical studies, or may harm our business if they suffer a catastrophic event.

We rely on third parties such as CROs, medical institutions and clinical investigators to enroll qualified patients and conduct, supervise and monitor our clinical studies. Our reliance on these third parties for clinical development activities reduces our control over these activities. Our reliance on these third parties, however, does not relieve us of our regulatory responsibilities, including ensuring that our clinical studies are conducted in accordance with good clinical practices, or GCP, and the investigational plan and protocols contained in the relevant regulatory application, such as the investigational new drug application, or IND. In addition, the CROs with whom we contract may not complete activities on schedule, or may not conduct our preclinical studies or clinical studies in accordance with regulatory requirements or our clinical study design. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, our efforts to obtain regulatory approvals for, and to commercialize, our product candidates may be delayed or prevented. In addition, if a catastrophe such as an earthquake, fire, flood or power loss should affect one of the third parties on which we rely, our business prospects could be harmed. For example, if a central laboratory holding all of our clinical study samples were to suffer a catastrophic loss of their facility, we would lose all of our samples and would have to repeat our studies.

Any failure by our third-party manufacturers on which we rely to produce our preclinical and clinical drug supplies and on which we intend to rely to produce commercial supplies of any approved product candidates may delay or impair our ability to commercialize our product candidates.

We have relied upon a small number of third-party manufacturers and active pharmaceutical ingredient formulators for the manufacture of our material for preclinical and clinical testing purposes and intend to continue to do so in the future. We also expect to rely upon third parties to produce materials required for the commercial production of our product candidates if we succeed in obtaining necessary regulatory approvals. If we are unable to arrange for third-party manufacturing sources, or to do so on

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commercially reasonable terms, we may not be able to complete development of our product candidates or market them.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured product candidates ourselves, including reliance on the third party for regulatory compliance and quality assurance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control (including a failure to synthesize and manufacture our product candidates in accordance with our product specifications) and the possibility of termination or nonrenewal of the agreement by the third party, based on its own business priorities, at a time that is costly or damaging to us. In addition, the FDA and other regulatory authorities require that our product candidates be manufactured according to cGMP and similar foreign standards. Any failure by our third-party manufacturers to comply with cGMP or failure to scale up manufacturing processes, including any failure to deliver sufficient quantities of product candidates in a timely manner, could lead to a delay in, or failure to obtain, regulatory approval of any of our product candidates. In addition, such failure could be the basis for action by the FDA to withdraw approvals for product candidates previously granted to us and for other regulatory action, including recall or seizure, total or partial suspension of production or injunction.

In December 2011, we completed the technology transfer from Amgen and manufacturing scale up to 3,000 liters at our contract manufacturing organization, or CRO (Fujifilm Diosynth Bioservices or "Fujifilm"). Two (2) batches of blisibimod produced under US FDA good manufacturing procedures, or GMP, at the 3,000 liter scale passed all physical quality specifications and comparability assessments. We submitted plans to the FDA on March 4, 2011 and September 9, 2011 establishing criteria to demonstrate comparability of blisibimod manufactured by Fujifilm to that manufactured by Amgen. Data confirming comparability to Phase 1 material (Amgen) was filed with the FDA on August 8, 2011 and September 8, 2011. To date, we have had no comments on any of these submissions. Should the FDA not agree with our comparability assessment or if we are unable to agree on the specifications for future blisibimod manufacturing, further clinical development of blisibimod beyond the PEARL-SC clinical study would be substantially delayed and we would incur substantial additional expense.

We rely on our manufacturers to purchase from third-party suppliers the materials necessary to produce our product candidates for our clinical studies. There are a small number of suppliers for certain capital equipment and raw materials that we use to manufacture our drugs. Such suppliers may not sell these raw materials to our manufacturers at the times we need them or on commercially reasonable terms. We do not have any control over the process or timing of the acquisition of these raw materials by our manufacturers. Moreover, we currently do not have any agreements for the commercial production of these raw materials. Although we generally do not begin a clinical study unless we believe we have a sufficient supply of a product candidate to complete the clinical study, any significant delay in the supply of a product candidate or the raw material components thereof for an ongoing clinical study due to the need to replace a third-party manufacturer could considerably delay completion of our clinical studies, product testing and potential regulatory approval of our product candidates. If our manufacturers or we are unable to purchase these raw materials after regulatory approval has been obtained for our product candidates, the commercial launch of our product candidates would be delayed or there would be a shortage in supply of such product candidates, which would impair our ability to generate revenues from the sale of our product candidates.

Because of the complex nature of our compounds, our manufacturers may not be able to manufacture our compounds at a cost or in quantities or in a timely manner necessary to make commercially successful products. If we successfully commercialize any of our drugs, we may be required to establish large-scale commercial manufacturing capabilities. In addition, as our drug development pipeline increases and matures, we will have a greater need for clinical study and commercial manufacturing capacity. We have no experience manufacturing pharmaceutical products on a commercial scale and some of these suppliers will need to increase their scale of production to meet our projected needs for commercial manufacturing, the satisfaction of which on a timely basis may not be met.

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If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our product candidates, we may be unable to generate any revenue.

We do not currently have an organization for the sales, marketing and distribution of pharmaceutical products and the cost of establishing and maintaining such an organization may exceed the cost-effectiveness of doing so. In order to market any products that may be approved by the FDA, we must build our sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. If we are unable to establish adequate sales, marketing and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and may not become profitable. We will be competing with many companies that currently have extensive and well-funded marketing and sales operations. Without an internal team or the support of a third party to perform marketing and sales functions, we may be unable to compete successfully against these more established companies.

Guidelines and recommendations published by various organizations may adversely affect the use of any products for which we may receive regulatory approval.

Government agencies issue regulations and guidelines directly applicable to us and to our product candidates. In addition, professional societies, practice management groups, private health or science foundations and organizations involved in various diseases from time to time publish guidelines or recommendations to the medical and patient communities. These various sorts of recommendations may relate to such matters as product usage and use of related or competing therapies. For example, organizations like the American Heart Association have made recommendations about therapies in the cardiovascular therapeutics market. Changes to these recommendations or other guidelines advocating alternative therapies could result in decreased use of any products for which we may receive regulatory approval, which may adversely affect our results of operations.

Risks Related to Our Intellectual Property

If our or our licensors' patent positions do not adequately protect our product candidates or any future products, others could compete with us more directly or prevent us from commercializing our products, which would harm our business.

As of the date of this report, we either own or hold license rights to numerous US, EP, and non-EP foreign patents relating to varespladib sodium/varespladib, other sPLA2 inhibiting compounds, and blisibimod. Our varespladib sodium/varespladib portfolio includes patents and patent applications originally filed by Anthera and exclusively licensed or assigned cases from Eli Lilly and Shionogi & Co., Ltd. Our blisibimod portfolio includes exclusively and non-exclusively licensed patents and patent applications from Amgen Inc.

Our commercial success will depend in part on our and our licensors' ability to obtain additional patents and protect our existing patent positions, particularly those patents for which we have secured exclusive rights, as well as our ability to maintain adequate protection of other intellectual property for our technologies, product candidates and any future products in the United States and other countries. If we or our licensors do not adequately protect our intellectual property, competitors may be able to use our technologies and erode or negate any competitive advantage we may have, which could materially harm our business, negatively affect our position in the marketplace, limit our ability to commercialize our product candidates and delay or render impossible our achievement of profitability. The laws of some foreign countries do not protect our proprietary rights to the same extent as the laws of the United States, and we may encounter significant problems in protecting our proprietary rights in these countries.

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The patent positions of biotechnology and pharmaceutical companies, including our patent position, involve complex legal and factual questions, and, therefore, validity and enforceability cannot be predicted with certainty. Patents may be challenged, deemed unenforceable, invalidated or circumvented. We and our licensors will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies, product candidates and any future products are covered by valid and enforceable patents or are effectively maintained as trade secrets.

The degree of future protection for our proprietary rights is uncertain, and we cannot ensure that:

- we or our licensors were the first to make the inventions covered by each of our pending patent applications;
- we or our licensors were the first to file patent applications for these inventions;
- others will not independently develop similar or alternative technologies or duplicate any of our technologies;
- any of our or our licensors' pending patent applications will result in issued patents;
- any of our or our licensors' patents will be valid or enforceable;
- any patents issued to us or our licensors and collaborators will provide a basis for commercially viable products, will provide us with any competitive advantages or will not be challenged by third parties;
- we will develop additional proprietary technologies or product candidates that are patentable; or
- the patents of others will not have an adverse effect on our business.

We are aware of two families of third party United States patents and pending foreign applications that contain broad claims related to BLyS or BAFF binding polypeptides. Based on our analyses, if these patents were asserted against us, we do not believe that blisibimod would be found to infringe any valid claim of these patents. If we were to challenge the validity of any issued United States patent in court, we would need to overcome the presumption of validity that attaches to every United States patent by presenting clear and convincing evidence as to the invalidity of the patent's claims. There is no assurance that a court would find in our favor on questions of infringement or validity, and we could incur substantial costs in litigation if we are required to defend against patent suits brought by third parties or if we initiate these suits. If third party patents are determined to be valid and construed to cover blisibimod, the development and commercialization of this program could be affected, subjecting us to potential liability for damages and in addition may require us to obtain a license to continue marketing the affected product. Such a license may not be available on commercially acceptable terms, if at all.

We may be unable to adequately prevent disclosure of trade secrets and other proprietary information.

We rely on trade secrets to protect our proprietary know-how and technological advances, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. We rely in part on confidentiality agreements with our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors to protect our trade secrets and other proprietary information. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently discover our trade secrets and proprietary information. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights. Failure to obtain or maintain trade secret protection could enable competitors to use our proprietary information to develop products that compete with our products or cause additional, material adverse effects upon our competitive business position.

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We license patent rights from third-party owners. If we, or such owners, do not properly maintain or enforce the patents underlying such licenses, our competitive position and business prospects will be harmed.

We have obtained exclusive, worldwide licenses, except for Japan, of the composition of matter, methods of making and methods of use for certain sPLA2 compounds from Eli Lilly and Shionogi & Co., Ltd. In addition, we are party to a license agreement with Amgen that provides exclusive and worldwide rights to develop and commercialize blisibimod a novel BAFF inhibitor, as well as non-exclusive rights to certain technology relating to peptibody compositions and formulations. We may enter into additional licenses to third-party intellectual property in the future.

We depend in part on our licensors to protect the proprietary rights covering our in-licensed sPLA2 compounds and blisibimod, respectively. Our licensors are responsible for maintaining certain issued patents and prosecuting certain patent applications. We have limited, if any, control over the amount or timing of resources that our licensors devote on our behalf or the priority they place on maintaining these patent rights and prosecuting these patent applications to our advantage. Our licensors may also be notified of alleged infringement and be sued for infringement of third-party patents or other proprietary rights. We may have limited, if any, control or involvement over the defense of these claims, and our licensors could be subject to injunctions and temporary or permanent exclusionary orders in the United States or other countries. Our licensors are not obligated to defend or assist in our defense against third-party claims of infringement. We have limited, if any, control over the amount or timing of resources, if any, that our licensors devote on our behalf or the priority they place on defense of such third-party claims of infringement.

Our success will depend in part on the ability of us or our licensors to obtain, maintain and enforce patent protection for their intellectual property, in particular, those patents to which we have secured exclusive rights. We or our licensors may not successfully prosecute the patent applications which we have licensed. Even if patents issue in respect of these patent applications, we or our licensors may fail to maintain these patents, may determine not to pursue litigation against other companies that are infringing these patents or may pursue such litigation less aggressively than we would. Without protection for the intellectual property we license, other companies might be able to offer substantially identical products for sale, which could adversely affect our competitive business position and harm our business prospects.

If we do not obtain protection under the Hatch-Waxman Act and similar foreign legislation to extend our licensed patent terms and to obtain market exclusivity for our product candidates, our business will be materially harmed.

The United States Drug Price Competition and Patent Term Restoration Act of 1984, more commonly known as the "Hatch-Waxman Act," provides for an extension of patent term for drug compounds for a period of up to five years to compensate for time spent in the regulatory approval process. Assuming we gain a five-year patent term extension for each of our current product candidates in clinical development, and that we continue to have rights under our license agreements with respect to these product candidates, we would have exclusive rights to varespladib's U.S. "new chemical entity" patent (the primary patent covering the compound as a new composition of matter) until 2019 and to blisibimod's U.S. new chemical entity patent until 2027. In Europe, similar legislative enactments allow patent terms in the European Union to be extended for up to five years through the grant of a Supplementary Protection Certificate. Assuming we gain such a five-year extension for each of our current product candidates in clinical development, and that we continue to have rights under our license agreements with respect to these product candidates, we would have exclusive rights to varespladib's European new chemical entity patents until 2020 and to blisibimod's European new chemical entity patents until 2027. In addition, since varespladib has not been previously approved in the United States, varespladib could be eligible for up to five years of New Chemical Entity, or NCE, exclusivity from the FDA. NCE exclusivity would prevent the FDA from approving any generic competitor following NDA approval independent of the patent status of varespladib. Further, since blisibimod has not been previously approved, blisibimod could be eligible for 12 years of data exclusivity from the FDA. During the data exclusivity period, competitors are barred from

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relying on the innovator biologic's safety and efficacy data to gain approval. Similarly, the European Union provides that companies who receive regulatory approval for a new small molecule compound or biologic will have a 10-year period of data exclusivity for that compound or biologic (with the possibility of a further one-year extension) in most EU countries, beginning on the date of such European regulatory approval, regardless of when the European new chemical entity patent covering such compound expires. A generic version of the approved drug may not be marketed or sold during such market exclusivity period. However, there is no assurance that we will receive the extensions of our patents or other exclusive rights available under the Hatch-Waxman Act or similar foreign legislation. If we fail to receive such Hatch-Waxman extensions or marketing exclusivity rights or if we receive extensions that are materially shorter than expected, our ability to prevent competitors from manufacturing, marketing and selling generic versions of our products will be materially harmed.

Our current patent positions and license portfolio may not include all patent rights needed for the full development and commercialization of our product candidates. We cannot be sure that patent rights we may need in the future will be available for license to us on commercially reasonable terms, or at all.

We typically develop our product candidates using compounds for which we have in-licensed and original composition of matter patents and patents that claim the activities and methods for such compounds' production and use to the extent known at that time. As we learn more about the mechanisms of action and new methods of manufacture and use of these product candidates, we may file additional patent applications for these new inventions or we may need to ask our licensors to file them. We may also need to license additional patent rights or other rights on compounds, treatment methods or manufacturing processes because we learn that we need such rights during the continuing development of our product candidates.

Although our in-licensed and original patents may prevent others from making, using or selling similar products, they do not ensure that we will not infringe the patent rights of third parties. We may not be aware of all patents or patent applications that may impact our ability to make, use or sell any of our product candidates or proposed product candidates. For example, because we sometimes identify the mechanism of action or molecular target of a given product candidate after identifying its composition of matter and therapeutic use, we may not be aware until the mechanism or target is further elucidated that a third party has an issued or pending patent claiming biological activities or targets that may cover our product candidate. U.S. patent applications filed after November 29, 2000 are confidential in the U.S. Patent and Trademark Office for the first 18 months after such applications' earliest priority date, and patent offices in non-U.S. countries often publish patent applications for the first time six months or more after filing. Furthermore, we may not be aware of published or granted conflicting patent rights. Any conflicts resulting from patent applications and patents of others could significantly reduce the coverage of our patents and limit our ability to obtain meaningful patent protection. If others obtain patents with conflicting claims, we may need to obtain licenses to these patents or to develop or obtain alternative technology.

We may not be able to obtain any licenses or other rights to patents, technology or know-how from third parties necessary to conduct our business as described in this report and such licenses, if available at all, may not be available on commercially reasonable terms. Any failure to obtain such licenses could delay or prevent us from developing or commercializing our drug candidates or proposed product candidates, which would harm our business. Litigation or patent interference proceedings may be necessarily brought against third parties, as discussed below, to enforce any of our patents or other proprietary rights or to determine the scope and validity or enforceability of the proprietary rights of such third parties.

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Litigation regarding patents, patent applications and other proprietary rights may be expensive and time consuming. If we are involved in such litigation, it could cause delays in bringing product candidates to market and harm our ability to operate.

Our commercial success will depend in part on our ability to manufacture, use, sell and offer to sell our product candidates and proposed product candidates without infringing patents or other proprietary rights of third parties. Although we are not currently aware of any litigation or other proceedings or third-party claims of intellectual property infringement related to our product candidates, the pharmaceutical industry is characterized by extensive litigation regarding patents and other intellectual property rights. Other parties may obtain patents in the future and allege that the use of our technologies infringes these patent claims or that we are employing their proprietary technology without authorization. Likewise, third parties may challenge or infringe upon our or our licensors' existing or future patents.

Proceedings involving our patents or patent applications or those of others could result in adverse decisions regarding the patentability of our inventions relating to our product candidates or the enforceability, validity or scope of protection offered by our patents relating to our product candidates.

Even if we are successful in these proceedings, we may incur substantial costs and divert management time and attention in pursuing these proceedings. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, defend an infringement action or challenge the validity of the patents in court. Patent litigation is costly and time-consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, if we do not obtain a license, develop or obtain non-infringing technology, fail to defend an infringement action successfully or have our patents declared invalid, we may incur substantial monetary damages; encounter significant delays in bringing our product candidates to market; or be precluded from participating in the manufacture, use or sale of our product candidates or methods of treatment requiring licenses.

Risks Related to the Securities Markets and Investment in Our Common Stock

Market volatility may affect our stock price and the value of your investment.

The market price for our common stock has been and is likely to continue to be volatile. In addition, the market price of our common stock may fluctuate significantly in response to a number of factors, most of which we cannot predict or control, including:

- plans for, progress in and results from clinical studies for blisibimod and our other product candidates;
- announcements of new products, services or technologies, commercial relationships, acquisitions or other events by us or our competitors;
- developments concerning proprietary rights, including those pertaining to patents held by Eli Lilly and Shionogi & Co., Ltd. concerning our sPLA2 inhibitors and Amgen concerning blisibimod;
- failure of any of our product candidates, if approved, to achieve commercial success;
- fluctuations in stock market prices and trading volumes of securities of similar companies;
- general market conditions and overall fluctuations in U.S. equity markets;
- variations in our operating results, or the operating results of our competitors;
- changes in our financial guidance or securities analysts' estimates of our financial performance;

changes in accounting principles;

sales of large blocks of our common stock, including sales by our executive officers, directors and significant stockholders;

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additions or departures of any of our key personnel;

announcements related to litigation;

changing legal or regulatory developments in the United States and other countries; and

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

Although our common stock is listed for trading on the NASDAQ Global Market, our securities have been relatively thinly traded. Investor trading patterns could serve to exacerbate the volatility of the price of the stock. Accordingly, it may be difficult to sell shares of common stock quickly without significantly depressing the value of the stock. Unless we are successful in developing continued investor interest in our stock, sales of our stock could result in major fluctuations in the price of the stock. In addition, the stock market in general, and The NASDAQ Global Market in particular, have experienced substantial price and volume volatility that is often seemingly unrelated to the operating performance of particular companies. These broad market fluctuations may cause the trading price of our common stock to decline. In the past, securities class action litigation has often been brought against a company after a period of volatility in the market price of its common stock. We may become involved in this type of litigation in the future. Any securities litigation claims brought against us could result in substantial expenses and the diversion of our management's attention from our business.

Because a small number of our existing stockholders own a majority of our voting stock, your ability to influence corporate matters will be limited.

Our executive officers, directors and greater than 5% stockholders, in the aggregate, own approximately 60% of our outstanding common stock. As a result, such persons, acting together, will have the ability to control our management and affairs and substantially all matters submitted to our stockholders for approval, including the election and removal of directors and approval of any significant transaction. These persons will also have the ability to control our management and business affairs. This concentration of ownership may have the effect of delaying, deferring or preventing a change in control, impeding a merger, consolidation, takeover or other business combination involving us, or discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of our business, even if such a transaction would benefit other stockholders.

Future sales of our common stock may cause our stock price to decline.

As of December 31, 2011, there were 40,938,041 shares of our common stock outstanding. In addition, as of December 31, 2011, we had outstanding options to purchase shares of our common stock and restricted stock units of 2,490,146 that, if exercised or released, will result in these additional shares becoming available for sale. A large portion of these shares and outstanding equity awards are held by a small number of persons and investment funds. Sales by these stockholders or option holders of a substantial number of shares could significantly reduce the market price of our common stock. Moreover, certain holders of shares of common stock will have rights, subject to some conditions, to require us to file registration statements covering the shares they currently hold, or to include these shares in registration statements that we may file for ourselves or other stockholders.

We have registered all common stock that we may issue under our Amended and Restated 2010 Stock Option and Incentive Plan (the "2010 Plan") and our Employee Stock Purchase Plan (the "ESPP"). As of December 31, 2011, an aggregate of 1,748,858 shares of our common stock has been reserved for future issuance under the 2010 Plan, plus any shares reserved and unissued or cancelled under our 2005 Equity Incentive Plan, and an aggregate of 350,000 shares has been reserved for future issuance under our ESPP. These shares can be freely sold in the public market upon issuance. If a large number of these shares are sold in the public market, the sales could reduce the trading price of our common stock.

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We filed a universal shelf registration statement with the SEC on Form S-3 (File No. 333-179043) on January 17, 2012, which was declared effective on January 24, 2012, for the proposed offering from time to time of up to $100.0 million of our securities, including common stock, preferred stock, debt securities and/or warrants. We may issue securities in the future pursuant to the shelf registration statement based on market conditions or other circumstances.

We may need to raise additional capital to fund our operations, which may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights.

We may seek additional capital through a combination of private and public equity offerings, debt financings and collaboration, strategic and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest may be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions such as incurring debt, making capital expenditures or declaring dividends. If we raise additional funds through collaboration, strategic alliance and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates or grant licenses on terms that are not favorable to us.

Operating as a public company increases our expenses and administrative burden.

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company. In addition, our administrative staff will be required to perform additional tasks. For example, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC and The NASDAQ Global Market, impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. We must also bear all of the internal and external costs of preparing and distributing periodic public reports in compliance with our obligations under the securities laws.

In particular, the Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. Commencing in 2011, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management time on compliance-related issues. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, our stock price could decline, and we could face sanctions, delisting or investigations by The NASDAQ Global Market, or other material adverse effects on our business, reputation, results of operations, financial condition or liquidity.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the value of their stock.

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Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may delay or prevent an acquisition of us or a change in our management. These provisions include:

- a classified and staggered board of directors whose members can only be dismissed for cause;
- the prohibition on actions by written consent of our stockholders;
- the limitation on who may call a special meeting of stockholders;
- the establishment of advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon at stockholder meetings;
- the ability of our board of directors to issue preferred stock without stockholder approval, which would increase the number of outstanding shares and could thwart a takeover attempt; and
- the requirement of at least 75% of the outstanding common stock to amend any of the foregoing provisions.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us. Although we believe these provisions collectively provide for an opportunity to obtain greater value for stockholders by requiring potential acquirors to negotiate with our board of directors, they would apply even if an offer rejected by our board were considered beneficial by some stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management.

Our ability to use our net operating loss carryforwards may be subject to limitation and may result in increased future tax liability to us.

Generally, a change of more than 50% in the ownership of a corporation's stock, by value, over a three-year period constitutes an ownership change for U.S. federal income tax purposes. An ownership change may limit a company's ability to use its net operating loss carryforwards attributable to the period prior to such change. We have not performed a detailed analysis to determine whether an ownership change under Section 382 of the Internal Revenue Code has occurred after each of our previous private placements of preferred stock and convertible debt, or our previous issuances of common stock, which if sufficient, taking into account prior or future shifts in our ownership over a three-year period, could cause us to undergo an ownership change. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards to offset U.S. federal taxable income may become subject to limitations, which could potentially result in increased future tax liability to us.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

The Company leases its main operating facility in Hayward, California. We occupied 7,800 square feet under a sublease that commenced in the fourth quarter of 2008 and was then amended in April 2011. The new lease commenced on August 1, 2011 and includes approximately $245,000 in tenant improvement reimbursements from the landlord. Pursuant to the amendment, the lease increased the Company's square

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footage from 7,800 square feet to approximately 14,000 square feet. The new lease expires on September 30, 2014. We believe our existing facilities are adequate for our current needs and that any additional space we need will be available in the future on commercially reasonable terms.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we may be involved in routine legal proceedings, as well as demands, claims and threatened litigation, which arise in the normal course of our business. We believe there is no litigation pending that could, individually or in the aggregate, have a material adverse effect on our results of operations or financial condition.

ITEM 4. MINE SAFETY DISCLOSURE

Not applicable.

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PART II

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

Price Range of Common Stock

Our common stock has been listed on The NASDAQ Global Market under the symbol "ANTH" since our initial public offering ("IPO"). Prior to that offering, there was no public market for our common stock. The following table sets forth, for the periods indicated, the high and low intraday sales prices of our common stock as reported by The NASDAQ Global Market:

	High	Low
First Quarter 2010 (beginning March 1, 2010)	$ 7.39	$ 6.86
Second Quarter 2010	$ 8.55	$ 5.07
Third Quarter 2010	$ 5.99	$ 2.82
Fourth Quarter 2010	$ 6.90	$ 4.12
First Quarter 2011	$ 6.99	$ 3.65
Second Quarter 2011	$ 9.08	$ 5.25
Third Quarter 2011	$ 8.63	$ 4.42
Fourth Quarter 2011	$ 7.45	$ 4.60

Holders of our Common Stock

As of December 31, 2011, an aggregate of 40,938,041 shares of our common stock were issued and outstanding and were held by approximately 1,100 holders of record and beneficial holders, based on information provided by the Company's transfer agent.

Performance Graph

The following graph shows a comparison of cumulative total return of our common stock, the NASDAQ Composite Index and the Nasdaq Biotech Index from March 1, 2010 (the first day our stock began trading on the NASDAQ Global Market through December 31, 2011. The graph and table assume that $100 was invested on March 1, 2010 in each of our common stock, the NASDAQ Composite Index and the NASDAQ Biotech Index, and that all dividends were reinvested. The past performance of our common stock is no indication of future performance.

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COMPARISON OF TOTAL RETURN
Among Anthera Pharmaceuticals, Inc., The NASDAQ Composite Index
And The NASDAQ Biotech Index

	3/1/2010	3/31/2010	6/30/2010	9/30/2010	12/31/2010	3/31/2011	6/30/2011	9/30/2011	12/31/2011
Anthera Pharmaceuticals, Inc.	$ 100.00	$ 99.71	$ 76.46	$ 59.77	$ 69.61	$ 96.29	$ 116.55	$ 68.05	$ 87.59
Nasdaq Composite	$ 100.00	$ 105.47	$ 92.77	$ 104.18	$ 116.68	$ 122.32	$ 121.99	$ 106.24	$ 114.58
Nasdaq Biotech	$ 100.00	$ 104.08	$ 88.66	$ 99.24	$ 107.53	$ 115.36	$ 122.85	$ 107.47	$ 120.23

Dividend Policy

We have never declared or paid any cash dividends on our common stock. We currently intend to retain any future earnings to finance the growth and development of our business. Therefore, we do not anticipate declaring or paying any cash dividends in the foreseeable future. Any future determination as to the declaration and payment of dividends, if any, will be at the discretion of our board of directors and will depend on then existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

Securities Authorized for Issuance under Equity Compensation Plans

The information regarding securities authorized for issuance under equity compensation plans is included in Part III of this report.

Recent Sales of Unregistered Securities

All information under this Item has been previously reported on our Current Reports on Form 8-K, filed with the Securities and Exchange Commission (the "SEC").

Issuer Purchases of Equity Securities

We did not repurchase any securities during the quarter ended December 31, 2011.

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ITEM 6. SELECTED FINANCIAL DATA (in thousands, except share and per share data)

	Year Ended December 31,					Cumulative Period from September 9 2004 (Date of Inception) to December 31,
	2011	2010	2009	2008	2007	2011
Statement of Operations Data:						
Operating expenses						
Research and development	$ 85,281	$ 29,457	$ 8,415	$ 10,882	$ 23,922	$ 166,062
General and administrative	7,857	6,301	3,426	2,980	2,469	24,075
Total operating expenses	(93,138)	(35,758)	(11,841)	(13,862)	(26,391)	(190,137)
Other Income (Expense)						
Other income (expense)	606	(15)	(192)	178	697	1,611
Interest expense	(2,803)	(845)	(170)	(296)		(4,348)
Mark-to-market adjustment of warrant liability		(3,796)				(3,796)
Beneficial conversion feature				(4,119)		(4,309)
Total other income (expense)	(2,197)	(4,656)	(362)	(4,237)	697	(10,842)
Net loss	$ (95,335)	$ (40,414)	$ (12,203)	$ (18,099)	$ (25,694)	$ (200,979)
Net loss per share basic and diluted(1)	$ (2.55)	$ (1.76)	$ (8.06)	$ (13.47)	$ (28.15)	
Weighted-average number of shares used in per share calculation basic and diluted(2)	37,417,775	22,909,802	1,513,598	1,343,420	912,668	

(1) Diluted earnings per share, or EPS, is identical to basic EPS since common equivalent shares are excluded from the calculation, as their effect is anti-dilutive.

(2) For accounting purposes only, the number of issued and outstanding shares do not include weighted-average shares of unvested stock for the year ended December 31, 2007 of 261,649, for the year ended December 31, 2008 of 230,028, for the year ended December 31, 2009 of 110,079, for the year ended December 31, 2010 of 47,654 and for the year ended December 31, 2011 of 13,374. These shares are subject to a risk of repurchase by us until such shares are vested. See Note 2 of our financial statements for more information.

	As of December 31,				
	2011	2010	2009	2008	2007
Balance Sheet Data:					
Cash and cash equivalents	$ 65,624	$ 40,030	$ 3,803	$ 7,895	$ 153
Short-term investments	1,746	23,351			5,825
Working capital	37,742	57,241	(14,344)	(496)	(2,908)
Total assets	69,493	65,263	5,889	8,034	6,193
Total liabilities	50,409	8,005	18,168	8,494	12,058
Convertible preferred stock			52,124	52,124	28,892
Deficit accumulated during the development stage	(200,979)	(105,644)	(65,230)	(53,026)	(34,927)

Total stockholders' (deficit) equity	19,084	57,258	(12,279)	(460)	(5,865)

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

The following discussion and analysis should be read together with our financial statements and the related notes set forth under "Item 8. Financial Statements and Supplementary Data." This discussion contains forward-looking statements reflecting our current expectations that involve risks and uncertainties. See "Special Note Regarding Forward-Looking Statements" for a discussion of the uncertainties, risks and assumptions associated with these statements. Actual results and the timing of events could differ materially from those discussed in our forward-looking statements as a result of many factors, including those set forth under "Risk Factors" and elsewhere in this report.

Overview

We are a biopharmaceutical company focused on developing and commercializing products to treat serious diseases associated with inflammation. We currently have one Phase 2 clinical program, blisibimod. Two of our product candidates, varespladib and varespladib sodium, are designed to inhibit a novel enzyme target known as secretory phospholipase A2, or sPLA2. Elevated levels of sPLA2 have been implicated in a variety of acute inflammatory conditions, including acute coronary syndrome and acute chest syndrome associated with sickle cell disease, as well as in chronic diseases, including stable coronary artery disease. In addition, our Phase 2 product candidate, blisibimod, targets elevated levels of B-cell activating factor, or BAFF, which has been associated with a variety of B-cell mediated autoimmune diseases, including systemic lupus erythematosus, or lupus, lupus nephritis vasculitis, rheumatoid arthritis, multiple sclerosis, Sjögren's Syndrome, Graves' Disease and others.

On March 9, 2012, an independent data safety monitoring board (DSMB) recommended stopping the Company's VISTA-16 clinical study for varespladib. After review of the totality of evidence, including the emerging unblinded data from VISTA-16, the DSMB was unanimous in its view that there was cogent evidence to recommend early termination of the trial. According to the DSMB, the chief reason is the inability of VISTA-16 to detect a statistically significant benefit of the drug on the prespecified primary and secondary endpoints even if the trial continues to its scheduled termination. We believe that the DSMB's decision was based on the belief that the risk profile of the drug would not outweigh any benefit. As a result, we have closed enrollment in the study and informed all investigators to remove patients from therapy immediately. We have also closed enrollment in our IMPACTS-2 clinical study for varespladib sodium.

While data continues to be made available to us, and while we continue to assess these data, based on the DSMB recommendation we expect that we will not engage in any further development activities of our $sPLA_2$ portfolio.

We were incorporated and commenced operations in September 2004. Since our inception, we have generated significant losses. As of December 31, 2011, we had an accumulated deficit of approximately $201.0 million. In January 2012, Anthera Pharmaceuticals, Limited, a wholly-owned subsidiary, was incorporated in Ireland. The establishment of this subsidiary was part of the Company's ongoing growth activities and strategic plan. As of the date of this filing, we have never generated any revenue and have generated only interest income from cash and cash equivalents and short-term investments. We expect to incur substantial and increasing losses for at least the next several years as we pursue the development and commercialization of our product candidates.

To date, we have funded our operations through equity offerings, private placements of convertible debt and debt financings, raising net proceeds of approximately $224.4 million. We will need substantial additional financing to continue to develop our product candidates, obtain regulatory approvals and to fund operating expenses, which we will seek to raise through public or private equity or debt financings, collaborative or other arrangements with third parties or through other sources of financing. We cannot assure you that such funds will be available on terms favorable to us, if at all. In addition to the normal

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risks associated with development-stage companies, we may never successfully complete development of any of our product candidates, obtain adequate patent protection for our technology, obtain necessary government regulatory approval for our product candidates or achieve commercial viability for any approved product candidates. In addition, we may not be profitable even if we succeed in commercializing any of our product candidates.

Revenue

To date, we have not generated any revenue. We do not expect to generate revenue unless or until we obtain regulatory approval of, and commercialize, our product candidates or in-license additional products that generate revenue. We intend to seek to generate revenue from a combination of product sales, up-front fees and milestone payments in connection with collaborative or strategic relationships and royalties resulting from the licensing of the commercial rights to our intellectual property. We expect that any revenue we generate will fluctuate from quarter to quarter as a result of the nature, timing and amount of milestone payments we may receive upon the sale of our products, to the extent any are successfully commercialized, as well as any revenue we may receive from our collaborative or strategic relationships.

Research and Development Expenses

Since our inception, we have focused our activities on our product candidate development programs. We expense research and development costs as they are incurred. Research and development expenses consist of personnel costs, including salaries, benefits and stock-based compensation, clinical studies performed by contract research organizations, or CROs, materials and supplies, licenses and fees and overhead allocations consisting of various administrative and facilities-related costs. Research and development activities are also separated into three main categories: licensing, clinical development and pharmaceutical development. Licensing costs consist primarily of fees paid pursuant to license agreements. Historically, our clinical development costs have included costs for preclinical and clinical studies. We expect to incur substantial clinical development costs for our Phase 2b clinical study named PEARL-SC for blisibimod, as well as for the development of our other product candidates. Pharmaceutical development costs consist of expenses incurred relating to clinical studies and product formulation and manufacturing.

We expense both internal and external research and development costs as incurred. We are developing our product candidates in parallel, and we typically use our employee and infrastructure resources across several projects. Thus, some of our research and development costs are not attributable to an individually named project, but rather are allocated across our clinical stage programs. These unallocated costs include salaries, stock-based compensation charges and related "fringe benefit" costs for our employees (such as workers compensation and health insurance premiums), consulting fees and travel.

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The following table shows our total research and development expenses for the years ended December 31, 2011, 2010, and 2009, and for the period from September 9, 2004 (Date of Inception) through December 31, 2011 (in thousands):

	Years Ended December 31,			For the Period September 9, 2004 (Date of Inception) to December 31,
	2011	2010	2009	2011
Allocated costs:				
Varespladib	$ 46,139	$ 19,230(1)	$ 5,535	$ 93,231(1)(2)
Blisibimod	32,300	5,827	34	44,270(3)
Varespladib sodium	118	(12)	193	6,625
Unallocated costs	6,724	4,412	2,653	21,936
Total development	$ 85,281	$ 29,457	$ 8,415	$ 166,062

(1) Includes milestone payments of $3.5 million pursuant to amendments to the license agreements with each of Eli Lilly and Shionogi & Co. Ltd., which were paid in the form of shares of common stock.

(2) Includes license fees of $4.0 million pursuant to a license agreement with each of Eli Lilly and Shionogi & Co. Ltd., which were paid in cash and shares of preferred stock in 2006.

(3) Includes a one-time license initiation fee of $6.0 million pursuant to a license agreement with Amgen.

We expect our research and development expenses to increase significantly as we continue to develop our product candidates. We completed enrollment in the PEARL-SC study of blisibimod in October 2011. We intend to fund our clinical studies with existing cash and proceeds from potential future debt and equity offerings.

We expect that a large percentage of our research and development expenses in the future will be incurred in support of our current and future clinical development programs. These expenditures are subject to numerous uncertainties in timing and cost to completion. As we obtain results from clinical studies, we may elect to discontinue or delay clinical studies for certain product candidates or programs in order to focus our resources on more promising product candidates or programs. Completion of clinical studies may take several years or more, but the length of time generally varies according to the type, complexity, novelty and intended use of a product candidate. The cost of clinical studies may vary significantly over the life of a program as a result of differences arising during clinical development, including:

- the number of sites included in the studies;
- the length of time required to enroll suitable patient subjects;
- the number of patients that participate in the studies;
- the number of doses that patients receive;
- the drop-out or discontinuation rates of patients; and
- the duration of patient follow-up.

Our expenses related to clinical studies are based on estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and clinical research organizations that conduct and manage clinical studies on our behalf. The financial terms of these agreements are subject to

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negotiation and vary from contract to contract and may result in uneven payment flows. Generally, these agreements set forth the scope of work to be performed at a fixed fee or unit price. Payments under the contracts depend on factors such as the successful enrollment of patients or the completion of clinical study milestones. Expenses related to clinical studies generally are accrued based on contracted amounts and the achievement of milestones such as number of patients enrolled. If timelines or contracts are modified based upon changes to the clinical study design or scope of work to be performed, we modify our estimates of accrued expenses accordingly on a prospective basis.

None of our product candidates have received U.S. Food and Drug Administration, or FDA, or foreign regulatory marketing approval. In order to grant marketing approval, the FDA or foreign regulatory agencies must conclude that clinical data establishes the safety and efficacy of our product candidates and that the manufacturing facilities, processes and controls are adequate. Despite our efforts, our product candidates may not offer therapeutic or other improvement over existing, comparable drugs, be proven safe and effective in clinical studies, or meet applicable regulatory standards.

As a result of the uncertainties discussed above, we are unable to determine the duration and completion costs of our development projects or when and to what extent we will receive cash inflows from the commercialization and sale of an approved product candidate, if ever.

General and Administrative Expenses

General and administrative expenses consist primarily of compensation for employees in executive and operational functions, including clinical, chemical manufacturing, regulatory, finance and business development. Other significant costs include professional fees for legal services, including legal services associated with obtaining and maintaining patents. We will continue to incur significant general and administrative expenses as a public company, including costs for insurance, costs related to the hiring of additional personnel, payment to outside consultants, lawyers and accountants and complying with the corporate governance, internal controls and similar requirements applicable to public companies.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses. On an ongoing basis, we evaluate these estimates and judgments, including those described below. We base our estimates on our historical experience and on various other assumptions that we believe to be reasonable under the circumstances. These estimates and assumptions form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results and experiences may differ materially from these estimates.

While our significant accounting policies are more fully described in the accompanying notes to the financial statements included in this Annual Report on Form 10-K for the year ended December 31, 2011, we believe that the following accounting policies are the most critical to aid you in fully understanding and evaluating our reported financial results and affect the more significant judgments and estimates that we use in the preparation of our financial statements.

Accrued Clinical Expenses

We make estimates of our accrued clinical expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. This process involves reviewing open contracts and purchase orders, communicating with our applicable personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost. The majority of our service providers invoice us at least monthly in arrears for services performed. We

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periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. Examples of estimated accrued clinical expenses include:

- fees paid to CROs in connection with clinical studies;
- fees paid to investigative sites in connection with clinical studies;
- fees paid to contract manufacturers in connection with the production of clinical study materials; and
- fees paid to vendors in connection with preclinical development activities.

We base our accruals related to clinical studies on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage clinical studies on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical study milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual accordingly. If we do not identify costs that we have begun to incur or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates.

Stock-Based Compensation

Compensation costs related to all equity instruments, excluding restricted stock units ("RSUs"), are recognized at the grant date fair value of the awards. RSUs are accounted for as a liability award, and as such the fair value of the awards are remeasured at each reporting date. Additionally, we are required to include an estimate of the number of awards that will be forfeited in calculating compensation costs, which are recognized over the requisite service period of the awards on a straight-line basis. We account for stock-based compensation using the Black-Scholes option pricing model to estimate the fair value of each option grant on the date of grant. Black-Scholes option pricing model requires the input of highly subjective assumptions, including the expected stock price volatility, expected term, and forfeiture rate. Any changes in these highly subjective assumptions could significantly impact stock-based compensation expense.

Results of Operations

Comparison of Years Ended December 31, 2011 and 2010

Research and development expenses. Research and development expenses consist of personnel costs for employees in clinical, chemical manufacturing and regulatory functions, clinical studies performed by CROs, pharmaceutical development costs including product formulation and manufacturing, preclinical costs, license fees and overhead allocations consisting of various administrative and facilities-related costs.

Change in research and development expenses from the years ended December 31, 2010 to 2011 (in millions):

	2011	2010	$ Change	% Change
Research and development expense	$ 85.3	$ 29.5	$ 55.8	189%

Research and development expenses increased due primarily to increased clinical trial costs associated with our Phase 3 clinical study of varespladib and Phase 2 clinical study of blisibimod of approximately $41.2 million. The trial costs increased as a result of continued enrollment and the addition of clinical sites for the VISTA-16 and PEARL-SC clinical studies. Manufacturing development activities also increased by

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approximately $13.9 million over the prior period. Furthermore, we increased headcount to support our clinical development activities, which resulted in increased salaries and benefits of $2.0 million.

General and administrative expenses. General and administrative expenses consist of personnel costs for employees in executive, business development and operational functions, professional service fees including corporate legal fees, accountant fees and overhead allocations consisting of various administrative and facilities-related costs.

Change in general and administrative expenses from the years ended December 31, 2010 to 2011 (in millions):

	2011	2010	$ Change	% Change
General and administrative expense	$ 7.9	$ 6.3	$ 1.6	25%

General and administrative expenses increased due primarily to increased headcount and related salaries and benefits to support our expanding business activities, and increased professional services incurred in connection with operating as a public company.

Other income/expense. Other income/expense consists of interest earned on our cash, cash equivalents and short-term investments and realized gains relating to short term investments. Other income/expense was approximately $0.6 million of income for the year ended December 31, 2011 as compared to $0.02 million of expense for the prior year. The change is primarily a result of increased income on higher cash and investment balances in 2011 as compared to the prior year due to proceeds received from the issuance of notes payable and equity offering. Further included in the year ended December 31, 2011 were realized foreign currency gains of approximately $0.4 million on short-term investments.

Interest expense. Interest expense was $2.8 million for the year ended December 31, 2011 compared with $0.8 million for the prior year. Interest expense for the year ended December 31, 2011 consists primarily of interest expense, amortization of note discount and note issuance costs, and charges recorded for an end-of-term payment associated with our notes issued under a Loan and Security Agreement with Hercules Technology Growth Capital, Inc. and Hercules Technology II, L.P. (together, "Hercules") in March 2011. Interest expense for the year ended December 31, 2010 consists of primarily non-cash charges related to the amortization of discounts associated with our convertible promissory notes issued in July and September of 2009, which were converted into shares of our common stock upon the closing of our IPO in March 2010.

Comparison of Years Ended December 31, 2010 and 2009

Research and development expenses. Research and development expenses consist of personnel costs for employees in clinical, chemical manufacturing and regulatory functions, clinical studies performed by CROs, pharmaceutical development costs including product formulation and manufacturing, preclinical costs, license fees and overhead allocations consisting of various administrative and facilities-related costs.

Change in research and development expenses from the years ended December 31, 2009 to 2010 (in millions):

	2010	2009	$ Change	% Change
Research and development expenses	$ 29.5	$ 8.4	$ 21.1	250%

The increase in research and development expenses from 2009 to 2010 was primarily attributable to the recognition of a $3.5 million non-cash charge related to milestone payments recorded in connection with the initiation of our Phase 3 clinical study of varespladib, which was paid through the issuance of 531,914 shares of common stock; and increased CRO and manufacturing cost related to the launch of our

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Phase 3 clinical study of varespladib and Phase 2 clinical study of blisibimod, as well as increased headcount to support these clinical studies.

General and administrative expenses. General and administrative expenses consist of personnel costs for employees in executive, business development and operational functions, professional service fees including corporate legal fees, accountant fees and overhead allocations consisting of various administrative and facilities-related costs.

Change in general and administrative expenses from the years ended December 31, 2009 to 2010 (in millions):

	2010	2009	$ Change	% Change
General and administrative expense	$ 6.3	$ 3.4	$ 2.9	85%

The increase in general and administrative expenses from 2009 to 2010 was primarily attributable to increased headcount and professional services incurred in connection with our financial audit and other costs associated with operating as a public company.

Other income/expense. Other income/expense consists of interest earned on our cash, cash equivalents and short-term investments and realized gains relating to short term investments. Other expense was approximately $0.02 million for the year ended December 31, 2010 as compared to $0.2 million of expense for the prior period. The decrease in expense is primarily a result of increased income on higher cash and investment balances in 2010 as compared to the prior year.

Interest expense. Interest expense for the year ended December 31, 2010 consists of primarily non-cash charges related to the amortization of discounts associated with our convertible promissory notes issued in July and September of 2009, which were converted into shares of our common stock upon the closing of our initial public offering ("IPO") in March 2010. Interest expense in 2009 was attributable to outstanding convertible debt that was converted to shares of the Company's common stock upon the closing of the Company's IPO.

Liquidity and Capital Resources

To date, we have funded our operations primarily through private placements of preferred stock and common stock, convertible debt, debt financings, and our IPO. As of December 31, 2011, we had received net proceeds of approximately $173.5 million from the sale of equity securities, approximately $26.3 million from the issuance of convertible promissory notes, and approximately $24.7 million from the issuance of notes payable. As of December 31, 2011, we had cash, cash equivalents and short-term investments of approximately $67.4 million.

Cash, cash equivalents and investments consist of the following (in thousands):

	2011	2010
Cash and cash equivalents	$ 65,624	$ 40,030
Short-term investments	1,746	23,351
Total	$ 67,370	$ 63,381

Our principal liquidity requirements are primarily to meet our working capital needs, support ongoing business activities, research and development, and our capital expenditure needs.

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Cash Flows

Cash flows from operating activities

Net cash used in operating activities was approximately $73.1 million for the year ended December 31, 2011. The net loss is higher than cash used in operating activities by $22.3 million. The primary drivers for the difference are adjustments for non-cash charges of $4.6 million in clinical trial accruals and changes in other operating assets and liabilities of $14.4 million, which are based upon our estimated clinical trial performance to date. In addition, adjustments for non-cash charges including stock-based compensation, amortization of discount on notes payable and debt issuance costs totaled $3.3 million.

Net cash used in operating activities was approximately $27.8 million for the year ended December 31, 2010. The net loss is higher than cash used in operating activities by $12.6 million. The primary drivers for the difference are adjustments for non-cash charges such as stock-based compensation of approximately $0.7 million, amortization of note discount and debt issuance cost of approximately $0.8 million, issuance of $3.5 million worth of common stock in lieu of cash milestone payments due to Eli Lilly and Shionogi & Co., Ltd., the conversion of approximately $0.3 million of accrued interest into shares of common stock upon conversion of certain convertible promissory notes, mark-to-market adjustments relating to warrant and derivative liability of $3.8 million, and increase in net operating assets and liabilities of approximately $3.6 million.

Net cash used in operating activities was approximately $17.2 million for the year ended December 31, 2009. The net loss is higher than cash used in operating activities by $5.0 million. The primary drivers for the difference are adjustments for non-cash charges such as depreciation of $0.02 million, stock-based compensation of approximately $0.3 million and amortization of note discount and debt issuance cost of approximately $0.2 million, a decrease in current liabilities of approximately $0.6 million primarily due to payments made to CROs for the achievement of clinical milestones and a $5.0 million license fee payment made to Amgen.

Cash flows from investing activities

Net cash provided by investing activities was approximately $20.2 million for the year ended December 31, 2011 and was driven by the maturities of short-term investments of $26.3 million during the period, offset by purchases of short-term investments of $4.7 million and property and equipment of $1.3 million.

Net cash used by investing activities was $23.4 million for the year ended December 31, 2010 and was primarily driven by the purchase of short-term investments during the year.

Net cash provided by investing activities for the year ended December 31, 2009 was not significant.

Cash flows from financing activities

Net cash provided by financing activities was approximately $78.4 million for the year ended December 31, 2011 and consisted primarily of net proceeds of approximately $24.7 million received from the issuance of notes payable to Hercules in March 2011, and approximately $54.0 million in net proceeds received from the equity offering in June 2011.

Net cash provided by financing activities was approximately $87.5 million for the year ended December 31, 2010 and consisted of proceeds of $61.2 million received from the issuance of common stock from our IPO, proceeds of $29.6 million received from the issuance of common stock and warrants in connection with the September private placement offering, and proceeds of approximately $0.2 million received from the exercise of stock options and issuance of common stock through our ESPP, offset by approximately $3.5 million of issuance cost paid during the period.

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Net cash provided by financing activities was approximately $13.0 million for the year ended December 31, 2009 and consisted of net proceeds of $13.3 million received from the issuance of convertible promissory notes, partially offset by approximately $0.3 million in costs paid in connection with our IPO.

Contractual Obligations and Commitments

The Company has lease obligations consisting of an operating lease in connection with a sublease for our operating facility that commenced in October 2008 and expires September 2014, for approximately 7,800 square feet, through July 2011, and approximately 14,000 square feet, subsequent to July 2011, of office space, and office equipment leases that commenced in October 2007 and will expire in June 2013.

On March 25, 2011, the Company entered into a Loan and Security Agreement ("Loan Agreement") with Hercules. Under the terms of the Loan Agreement, the Company borrowed $25.0 million at an interest rate of the higher of (i) 10.55% or (ii) 7.30% plus the prime rate as reported in the Wall Street Journal, and issued to Hercules a secured term promissory note evidencing the loan. The loan is secured by the Company's assets, excluding intellectual property. The Company will make interest only payments for the initial 15 months. Thereafter, the loan will be repaid in 30 equal monthly installments of approximately $1.0 million, at the initial interest rate. The Company will also be obligated to pay an end of the term charge of $0.9 million, which is being expensed over the term of the Loan Agreement using the effective interest rate.

The following table summarizes our estimated scheduled future minimum contractual obligations and commitments as of December 31, 2011 (in thousands):

Payments Due by Period	Less than 1 year	1 - 3 years	Total
Notes Payable	$ 4,468	$ 20,532	$ 25,000
Interest on Notes Payable(1)	2,583	3,256	5,839
Facility Lease	225	413	638
Equipment Lease	3	2	5
Total	$ 7,279	$ 24,203	$ 31,482

(1) Interest payments reflected are estimated based on an interest rate of 10.55% throughout the term of the note, plus an additional end of term charge of $938.

The above amounts exclude potential payments to be made under our license agreements to our licensors that are based on the progress of our product candidates in development, as these payments are not determinable. Under our license agreement with Eli Lilly and Shionogi & Co., Ltd. to develop and commercialize certain $sPLA_2$ inhibitors, we are obligated to make additional milestone payments upon the achievement of certain development, regulatory, and commercial objectives. We are also obligated to pay royalties on future net sales of products that are developed and approved as defined by this collaboration. Our obligation to pay royalties with respect to each licensed product in each country will expire upon the later of (a) 10 years following the date of the first commercial sale of such licensed product in such country, and (b) the first date on which generic version(s) of the applicable licensed product achieve a total market share, in the aggregate, of 25% or more of the total unit sales of wholesalers to pharmacies of licensed product and all generic versions combined in the applicable country.

Also excluded from the table above are potential milestone payments on the development of blisibimod. Under our license agreement with Amgen to develop and commercialize blisibimod, we are obligated to make additional milestone payments upon the achievement of certain development, regulatory and commercial objectives. We are also obligated to pay royalties on future net sales of products that are developed and approved as defined by this collaboration. Our royalty obligations as to a particular

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licensed product will be payable, on a country-by-country and licensed product-by-licensed product basis, for the longer of (a) the date of expiration of the last to expire valid claim within the licensed patents that covers the manufacture, use or sale, offer to sell or import of such licensed product by us or a sublicensee in such country, or (b) 10 years after the first commercial sale of the applicable licensed product in the applicable country.

Funding Requirements

We expect to incur substantial expenses and generate significant operating losses as we continue to advance our product candidates into preclinical studies and clinical studies and as we:

- continue clinical development of blisibimod;
- hire additional clinical, scientific and management personnel; and
- implement new operational, financial and management information systems.

Our future capital uses and requirements depend on numerous forward-looking factors. These factors include the following:

- the progress of preclinical development and clinical studies of our product candidates;
- the time and costs involved in obtaining regulatory approvals;
- delays that may be caused by evolving requirements of regulatory agencies;
- the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims;
- our ability to establish, enforce and maintain selected strategic alliances; and
- the acquisition of technologies, product candidates and other business opportunities that require financial commitments.

To date, we have not generated any revenue. We do not expect to generate commercial product revenue unless or until we obtain regulatory approval of, and commercialize, our product candidates. We expect our continuing operating losses to result in increases in cash used in operations over the next several years. Our future capital requirements will depend on a number of factors including the progress and results of our clinical studies, the costs, timing and outcome of regulatory review of our product candidates, our revenue, if any, from successful development and commercialization of our product candidates, the costs of commercialization activities, the scope, progress, results and costs of preclinical development, laboratory testing and clinical studies for other product candidates, the emergence of competing therapies and other market developments, the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending intellectual property rights, the extent to which we acquire or invest in other product candidates and technologies, and our ability to establish collaborations and obtain milestone, royalty or other payments from any collaborators.

As of the date of this report, we believe our existing cash, cash equivalents and short-term investments will enable us to meet our obligations and sustain our operations through at least the next 12 months. However, we may require significant additional funds earlier than we currently expect to conduct additional or extended clinical studies and seek regulatory approval of our product candidates. Because of the numerous risks and uncertainties associated with the development and commercialization of our product candidates, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical studies.

Additional funding may not be available to us on acceptable terms or at all. In addition, the terms of any financing may adversely affect the holdings or the rights of our stockholders. For example, if we raise additional funds by issuing equity securities or by selling debt securities, if convertible, further dilution to

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our existing stockholders may result. To the extent our capital resources are insufficient to meet our future capital requirements, we will need to finance our future cash needs through public or private equity offerings, collaboration agreements, debt financings or licensing arrangements.

If adequate funds are not available, we may be required to terminate, significantly modify or delay our development programs, reduce our planned commercialization efforts, or obtain funds through collaborators that may require us to relinquish rights to our technologies or product candidates that we might otherwise seek to develop or commercialize independently. We may elect to raise additional funds even before we need them if the conditions for raising capital are favorable.

Off-Balance Sheet Arrangements

We do not currently have, nor have we ever had, any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. We are exposed to market risk related to fluctuations in interest rates, market prices, and foreign currency exchange rates. However, since a majority of our investments are in short-term certificates of deposit, FDIC-insured corporate bonds and money market funds, we do not believe we are subject to any material market risk exposure. As of December 31, 2011, we did not have any material derivative financial instruments. The fair value of our marketable securities, including those included in cash equivalents and short-term investments, was $67.4 million as of December 31, 2011.

Our investment policy is to limit credit exposure through diversification and investment in highly rated securities. We actively review, along with our investment advisors, current investment ratings, company specific events and general economic conditions in managing our investments and in determining whether there is a significant decline in fair value that is other-than-temporary. We will monitor and evaluate the accounting for our investment portfolio on a quarterly basis for additional other-than-temporary impairment charges.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements required by this item are set forth beginning in Item 15 of this report and are incorporated herein by reference.

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of December 31, 2011, the end of the period covered by this Annual Report on Form 10-K, management performed, under the supervision and with the participation of the Company's chief executive officer and chief financial officer, an evaluation of the effectiveness of the Company's disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. The Company's disclosure controls and procedures are designed to ensure that information required to be disclosed in the reports the Company files or submits under the Exchange Act is recorded, processed, summarized and

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reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including the Company's chief executive officer and chief financial officer, to allow timely decisions regarding required disclosures. Based on this evaluation, the Company's chief executive officer and chief financial officer have concluded that, as of December 31, 2011, the Company's disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed was accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Internal control over financial reporting is a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with GAAP. Internal control over financial reporting includes those policies and procedures which pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets; provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with GAAP; provide reasonable assurance that receipts and expenditures are being made only in accordance with management's and/or the Board of Directors' authorization; and provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our consolidated financial statements.

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

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2011, using the criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on our assessment, management has concluded that we maintained effective internal control over financial reporting as of December 31, 2011, based on the COSO criteria.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2011, has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control Over Financial Reporting

During the quarter ended December 31, 2011, there were no changes in the Company's internal control over financial reporting that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Anthera Pharmaceuticals, Inc.:

We have audited the internal control over financial reporting of Anthera Pharmaceuticals, Inc. (a development stage company) (the "Company") as of December 31, 2011, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal

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control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on the criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the financial statements of the Company as of and for the year ended December 31, 2011 and our report dated March 14, 2012 expressed an unqualified opinion on those financial statements and included an explanatory paragraph regarding the Company's development stage status.

/s/ Deloitte & Touche LLP

San Francisco, California
March 14, 2012

ITEM 9B. OTHER INFORMATION

None.

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PART III

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

The information required by this Item 10 is incorporated by reference from our definitive Proxy Statement for our 2012 Annual Meeting of Stockholders ("Proxy Statement"), where it appears under the headings "Election of Directors", "Executive Officers" and "Section 16(a) Beneficial Ownership Reporting Compliance."

We have adopted a Code of Ethics that applies to all directors, officers and employees of the Company. We publicize the Code of Business Conduct and Ethics through posting the policy on our website, http://www.anthera.com.

ITEM 11. ***Executive Compensation***

The information required by this Item 11 is incorporated by reference from our Proxy Statement where it appears under the headings "Compensation Discussion and Analysis", "Compensation of Executive Officers", "Election of Directors" and "Compensation Committee Report."

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

The information required by this Item 12 is incorporated by reference from our Proxy Statement where it appears under the headings "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information".

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

The information required by this Item 13 is incorporated by reference from our Proxy Statement where it appears under the headings "Certain Relationships and Related Transactions" and "Election of Directors."

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

The information required by this Item 14 is incorporated by reference from our Proxy Statement where it appears under the heading "Ratification of Auditors."

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PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)

The following documents are filed as part of this report:

(1)

Index list to Financial Statements:

(2)

Financial Statement Schedules

All other schedules are omitted because they are not required or the required information is included in the financial statements or notes thereto.

(3)

Exhibits

The exhibits listed in the accompanying Exhibit Index are filed or incorporated by reference as part of this report.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Anthera Pharmaceuticals, Inc.:

We have audited the accompanying balance sheets of Anthera Pharmaceuticals, Inc. (a development stage company) (the "Company") as of December 31, 2011 and 2010, and the related statements of operations, stockholders' equity (deficit) and comprehensive loss, and cash flows for each of the three years in the period ended December 31, 2011,and for the period from September 9, 2004 (Date of Inception) to December 31, 2011. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2011 and 2010, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2011, and for the period from September 9, 2004 (Date of Inception) to December 31, 2011, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2011, based on the criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 14, 2012 expressed an unqualified opinion on the Company's internal control over financial reporting.

The Company is in the development stage as of December 31, 2011. The Company is engaged in developing therapeutics to treat diseases associated with inflammation and autoimmune diseases. As discussed in Note 1 to the financial statements, successful completion of the Company's development program and, ultimately, the attainment of profitable operations is dependent upon future events, including obtaining adequate financing to fulfill its development activities, obtaining regulatory approval, and achieving a level of sales adequate to support the Company's cost structure.

/s/ Deloitte & Touche LLP

San Francisco, California
March 14, 2012

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ANTHERA PHARMACEUTICALS, INC
(A Development Stage Company)

BALANCE SHEETS

(in thousands except share amounts)

	December 31, 2011	December 31, 2010
ASSETS		
Current assets:		
Cash and cash equivalents	$ 65,624	$ 40,030
Short-term investments	1,746	23,351
Prepaid expenses and other current assets	607	1,865
Total current assets	67,977	65,246
Property and equipment net	1,276	17
Deferred financing cost	240	
TOTAL	$ 69,493	$ 65,263
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 17,432	$ 3,791
Accrued clinical studies	7,715	3,137
Accrued liabilities	559	468
Accrued payroll and related costs	372	609
Short term portion of notes payable, net of discount	4,157	
Total current liabilities	30,235	8,005
Notes payable, net of discount	20,174	
Total liabilities	50,409	8,005
Commitments and contingencies (Note 5)		
Stockholders' equity		
Common stock, $0.001 par value, 95,000,000 shares authorized; 40,933,354 and 32,853,032 shares issued and outstanding as of December 31, 2011 and 2010, respectively	41	33
Additional paid-in capital	220,051	162,919
Accumulated comprehensive loss	(29)	(50)
Deficit accumulated during the development stage	(200,979)	(105,644)
Total stockholders' equity	19,084	57,258
TOTAL	$ 69,493	$ 65,263

See accompanying notes to financial statements.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

STATEMENTS OF OPERATIONS

(in thousands except share and per share amounts)

	Years Ended December 31,			Cumulative Period from September 9, 2004 (Date of Inception) to December 31,
	2011	2010	2009	2011
OPERATING EXPENSES:				
Research and development	$ 85,281	$ 29,457	$ 8,415	$ 166,062
General and administrative	7,857	6,301	3,426	24,075
Total operating expenses	93,138	35,758	11,841	190,137
LOSS FROM OPERATIONS	(93,138)	(35,758)	(11,841)	(190,137)
OTHER INCOME (EXPENSE):				
Other income (expense)	606	(15)	(192)	1,611
Interest expense	(2,803)	(845)	(170)	(4,348)
Mark-to-market adjustment of warrant liability		(3,796)		(3,796)
Beneficial conversion features				(4,309)
Total other income (expense)	(2,197)	(4,656)	(362)	(10,842)
NET LOSS	$ (95,335)	$ (40,414)	$ (12,203)	$ (200,979)
Net loss per share basic and diluted	$ (2.55)	$ (1.76)	$ (8.06)	
Weighted-average number of shares used in per share calculation basic and diluted	37,417,775	22,909,802	1,513,598	

See accompanying notes to financial statements.

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Anthera Pharmaceuticals, Inc.
(A Development Stage Company)

STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
AND COMPREHENSIVE LOSS

(in thousands except share and per share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Deficit Accumulated During Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
DATE OF INCEPTION September 9, 2004								
Issuance of common stock to founders for cash		$	140,186	$	$	$	$	$
Issuance of common stock to founders for service			735,981	1	1			2
Repurchase of common stock from founder			(73,014)					
Issuance of Series A convertible preferred stock for cash at $1.47 per share, net of issuance cost of $9	526,955	1			767			768
Issuance of Series A convertible preferred stock in exchange for service at $1.47 per share	25,575				38			38
Issuance of common stock upon exercise of stock options			33,292		5			5
Reclass of early exercise of stock options to liability			(29,204)		(4)			(4)
Share-based compensation related to equity awards					1			1
Net loss							(554)	(554)
BALANCE December 31, 2005	552,530	1	807,241	1	808		(554)	256
Conversion of Series A convertible preferred stock to Series A-1 convertible preferred stock at a ratio of 1:1								
Issuance of Series A-2 convertible preferred stock for cash at $5.14 per share net of issuance cost of $202	1,138,677	1			5,645			5,646
Issuance of Series A-2 convertible preferred stock upon conversion of convertible promissory notes at $3.85 and $5.14 per share	224,248				962			962
Issuance of Series A-2 convertible preferred stock in exchange for licensed technology at $5.14 per share	257,744				1,324			1,324
Beneficial conversion feature related to conversion of convertible promissory notes into Series A-1 convertible preferred stock					190			190
Issuance of Series B convertible preferred stock for cash at $7.28 per share net of issuance cost of $21	2,619,568	3			19,036			19,039
Issuance of Series B convertible preferred stock in exchange for licensed technology at $7.28 per share	127,297				926			926
Issuance of common stock upon exercise of stock options			125,581		17			17
Reclass of early exercise of stock options to liability			(36,810)		(5)			(5)
Share-based compensation related to equity awards					9			9
Net loss							(8,679)	(8,679)
BALANCE December 31, 2006	4,920,064	5	896,012	1	28,912		(9,233)	19,685
Issuance of common stock upon exercise of stock options			493,605		118			118
Reclass of early exercise of stock options liability			(240,165)		(60)			(60)
Issuance of common stock for service			16,355		2			2
Share-based compensation related to equity awards					87			87
Change in other comprehensive loss unrealized loss on investments						(2)		(2)
Net loss							(25,695)	(25,695)
Comprehensive loss								(25,697)
BALANCE December 31, 2007	4,920,064	5	1,165,807	1	29,059	(2)	(34,928)	(5,865)

Conversion of Series B convertible preferred stock to Series B-1 convertible preferred stock at a ratio of 1:1								
Issuance of Series B-2 convertible preferred stock for cash at $7.28 per share net of issuance cost of $242	962,066	1			6,512			6,513
Issuance of Series B-2 convertible preferred stock upon conversion of convertible promissory notes at $5.46 per share	2,235,661	2			12,198			12,200
Issuance of Series B-2 convertible preferred stock in lieu of interest payment at $5.46 per share	28,517				156			156
Issuance of warrants in connection with issuance of Series B-2 convertible preferred stock					244			244
Beneficial conversion feature related to conversion of convertible promissory notes into Series B-2 convertible preferred stock					4,119			4,119
Issuance of common stock upon exercise of stock options			179,886		68			68
Release of early exercise of stock options liability			128,180		13			13
Repurchase of common stock upon employee termination			(18,983)		(5)			(5)
Share-based compensation related to equity awards					195			195
Change in other comprehensive loss unrealized gain on investments						1		1
Net loss							(18,099)	(18,099)
Comprehensive loss								(18,098)
BALANCE December 31, 2008	8,146,308	8	1,454,890	1	52,559	(1)	(53,027)	(460)

See accompanying notes to financial statements.

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Anthera Pharmaceuticals, Inc.
(A Development Stage Company)

STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
AND COMPREHENSIVE LOSS (Continued)

(in thousands except share and per share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Deficit Accumulated During Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
BALANCE December 31, 2008	8,146,308	$ 8	1,454,890	$ 1	$ 52,559	$ (1)	$ (53,027)	$ (460)
Issuance of common stock upon exercise of stock options			19,089		15			15
Release of early exercise of stock options liability			92,220		26			26
Share-based compensation related to equity awards					342			342
Change in other comprehensive loss unrealized gain on investments						1		1
Net loss							(12,203)	(12,203)
Comprehensive loss								(12,202)
Balance December 31, 2009	8,146,308	8	1,566,199	1	$ 52,942		(65,230)	(12,279)
Conversion of convertible preferred stock to common stock at a ratio of 1:1	(8,146,308)	(8)	8,146,308	8				
Issuance of common stock for cash at $7.00 per share net of issuance cost of $3,039			6,000,000	6	37,075			37,081
Issuance of common stock upon conversion of convertible promissory notes and accrued interest at $5.25 and $6.28 per share			2,511,235	2	13,882			13,884
Issuance of common stock upon release of escrow funds			2,598,780	3	17,097			17,100
Issuance of common stock upon cashless exercise of warrants			194,474					
Issuance of common stock to collaborator in lieu of milestone payment			531,914	1	3,499			3,500
Issuance of common stock upon exercise of overallotment by underwriters net of issuance cost of $17,291			604,492	1	3,960			3,961
Issuance of common stock upon exercise of stock options			138,878		116			116
Issuance of common stock pursuant to employee stock purchase plan			24,916		81			81
Issuance of common stock upon private placement transaction, net of issuance cost of $508,384			10,500,000	11	23,767			23,778
Issuance of warrants in conjunction with private placement transaction					5,324			5,324
Net change of early exercise of stock options and liability			35,836		1			1
Reclass of warrant and derivative liability to equity in conjunction with conversion of convertible promissory notes into common stock					4,473			4,473
Share-based compensation related to equity awards					702			702
Change in other comprehensive loss unrealized loss on investments and foreign currency translation						(50)		(50)
Net loss							(40,414)	(40,414)
Comprehensive loss								(40,464)
BALANCE December 31, 2010			32,853,032	33	162,919	(50)	(105,644)	57,258
Issuance of common stock upon exercise of stock options			264,726		241			241
Issuance of common stock for cash at $7.50 per share net of issuance cost of $198			7,666,667	8	53,845			53,853

Issuance of common stock upon exercise of warrants	66,667	220				220
Issuance of common stock upon release of restricted stock units	31,345	102				102
Issuance of common stock pursuant to employee stock purchase plan	28,283	134				134
Net change of early exercise of stock options and liability	22,634	21				21
Issuance of warrants in conjunction with debt financing		1,276				1,276
Share-based compensation related to equity awards		1,293				1,293
Change in other comprehensive loss unrealized loss on investments and foreign currency translation				21		21
Net loss					(95,335)	(95,335)
Comprehensive loss						(95,314)
BALANCE December 31, 2011	$ 40,933,354	$ 41	$ 220,051	$ (29)	$ (200,979)	$ 19,084

See accompanying notes to financial statements.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

STATEMENTS OF CASH FLOWS

(in thousands)

	Years Ended December 31,			September 9, 2004 (Date of Inception) to December 31,
	2011	2010	2009	2011
CASH FLOW FROM OPERATING ACTIVITIES:				
Net loss	$ (95,335)	$ (40,414)	$ (12,203)	$ (200,979)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation	80	17	18	170
Amortization of premium on short-term investments	84	102		56
Realized loss/(gain) on short-term investments	(8)		1	(164)
Stock-based compensation expense employees	2,423	702	342	3,760
Issuance of preferred and common stock for license fee, interest and service		3,673		6,122
Beneficial conversion feature				4,309
Amortization of discount on convertible promissory notes	364	541	137	1,042
Amortization of debt issuance cost	374	228	80	680
Mark-to-market adjustment on warrant liability		3,796	(1)	3,796
Changes in assets and liabilities:				
Prepaid expenses and other assets	1,253	(1,845)	51	(611)
Accounts payable	13,574	2,664	(213)	17,623
Accrued clinical study	4,579	2,572	(895)	7,716
Accrued liabilities	(191)	(270)	474	270
Accrued payroll and related costs	(264)	456	37	345
License fee payable			(5,000)	
Net cash used in operating activities	(73,067)	(27,778)	(17,172)	(155,865)
INVESTING ACTIVITIES:				
Property and equipment purchases	(1,346)	(22)	(4)	(1,453)
Purchase of short-term investments	(4,735)	(24,948)		(44,484)
Proceeds from sale of short-term investments	26,313	1,610		42,845
Restricted cash			40	
Net cash provided by (used in) investing activities	20,232	(23,360)	36	(3,092)
FINANCING ACTIVITIES:				
Proceeds from issuance of convertible notes and notes payable, net of issuance costs	24,700	(210)	13,303	50,952
Proceeds from issuance of preferred stock, net				32,210
Proceeds from issuance of common stock, net of offering costs	54,012	87,543	(274)	141,281
Proceeds from issuance of common stock pursuant to employee stock purchase plan and exercise of stock options	376	197	15	797
Proceeds from issuance of common stock pursuant to exercise of warrant	220			220
Withholding taxes paid on vested restricted stock units	(879)			(879)
Net cash provided by financing activities	78,429	87,530	13,044	224,581
Effect of exchange rate changes on cash		(165)		
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	25,594	36,227	(4,092)	65,624
CASH AND CASH EQUIVALENTS Beginning of period	40,030	3,803	7,895	
CASH AND CASH EQUIVALENTS End of period	$ 65,624	$ 40,030	$ 3,803	$ 65,624

SUPPLEMENTAL CASH DISCLOSURES OF CASH FLOW INFORMATION:				
Interest paid	$ 1,838	$	$	$ 1,853
NONCASH INVESTING AND FINANCING ACTIVITIES:				
Conversion of convertible promissory notes and accrued interest into common stock, Series A-2 convertible preferred stock and Series B-2 convertible preferred stock	$	$ 13,883	$	$ 27,200
Beneficial conversion feature	$	$	$	$ 4,309
Unamortized debt discount charged to equity in conjunction with conversion of promissory notes into common stock	$	$ 186	$	$ 186
Reclassification of warrant and derivative liabilities to additional paid-in capital	$	$ 406	$	$ 406
Issuance costs charged to equity	$	$ 3,565	$	$ 3,565
Accrued and deferred financing and debt issuance costs	$	$ 28	$ 1,761	$

See accompanying notes to financial statements.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

1. ORGANIZATION AND DESCRIPTION OF BUSINESS

Anthera Pharmaceuticals, Inc. (the "Company" or "Anthera") was incorporated on September 9, 2004 in the state of Delaware. During 2006, the Company opened its headquarters in San Mateo, California, and subsequently moved to Hayward, California. Anthera is a biopharmaceutical company focused on developing and commercializing therapeutics to treat serious diseases associated with inflammation. Two of the Company's primary product candidates, varespladib and varespladib sodium, are inhibitors of the family of human enzymes known as secretory phospholipase A_2, or $sPLA_2$. The Company's other primary product candidate, blisibimod, targets elevated levels of B-cell activating factor, or BAFF. In January 2012, Anthera Pharmaceuticals, Limited, a wholly-owned subsidiary, was incorporated in Ireland. The establishment of this subsidiary was part of the Company's ongoing growth activities and strategic plan.

The Company's activities since inception have consisted principally of acquiring product and technology rights, raising capital, and performing research and development. Accordingly, the Company is considered to be in the development stage as of December 31, 2011, as defined by guidance issued by the Financial Accounting Standards Board ("FASB"). Successful completion of the Company's development programs and, ultimately, the attainment of profitable operations are dependent on future events, including, among other things, its ability to access potential markets; secure financing; develop a customer base; attract, retain and motivate qualified personnel; and develop strategic alliances. To date, we have funded our operations through equity offerings, private placements of convertible debt and debt financings, raising net proceeds of approximately $224.4 million.

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States, or GAAP. From September 9, 2004 (Date of Inception) through December 31, 2011, the Company had an accumulated a deficit of $201.0 million. During the year ended December 31, 2011, the Company incurred a net loss of $95.3 million and had negative cash flows from operations of $73.1 million. The Company expects to continue to incur substantial losses and negative cash flows from operations over the next several years during its clinical development phase.

The Company had cash, cash equivalents, and short-term investments of approximately $67.4 million at December 31, 2011. As of the date of this report, the Company anticipates that its existing cash, cash equivalents and short-term investments are sufficient to fund its near term liquidity needs for at least the next 12 months. The Company's current plan includes obtaining top-line data from its PEARL-SC clinical study during 2012 and to investigate the structure of future trials and research and development activities for its product candidates. To maintain liquidity for the next 12 months using our existing cash, cash equivalents and short-term investments, the Company's plan assumes the deferral of substantially all development and operational costs beyond those necessary for top-line data from its PEARL-SC clinical study and, if necessary, a reduction in certain general and administrative and research and development expenses. Prior to initiating any new trial studies for its product candidates, the Company would need to raise additional capital through the issuance of equity or debt securities, or securing other financing. Management believes that the Company will be able to meet its obligations and sustain its operations through at least the next 12 months.

The Company will need substantial additional financing to conduct new trials in the development of its product candidates and to obtain regulatory approvals. Such financing may not be available on terms favorable to it, if at all. Further, these activities may span many years and require substantial expenditures to complete and may ultimately be unsuccessful. Any delays in completing these activities could adversely impact the Company. The Company plans to meet its future capital requirements primarily through

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

1. ORGANIZATION AND DESCRIPTION OF BUSINESS (Continued)

potential partnership upfront and milestone payments, issuances of equity securities, debt financing, and in the longer term, revenue from product sales. Failure to generate revenue or raise additional capital would adversely affect the Company's ability to achieve its intended business objectives.

On February 26, 2010, the Company's Registration Statement on Form S-1 was declared effective for its initial public offering ("IPO"), pursuant to which the Company sold 6,000,000 shares of its common stock at a public offering price of $7.00 per share. The Company received net proceeds of approximately $37.1 million from this transaction. Concurrent with the closing of the IPO, the Company received an aggregate of $17.1 million from the issuance of 2,598,780 shares of its common stock to certain of its investors pursuant to a common stock purchase agreement.

On April 6, 2010, the Company sold 604,492 shares of common stock pursuant to the exercise of the underwriters' over-allotment option in connection with the Company's IPO and received net proceeds of approximately $4.0 million.

On September 24, 2010, the Company completed a private placement transaction with certain accredited investors pursuant to which the Company sold an aggregate of 10,500,000 units at a purchase price of $3.00 per unit, with each unit consisting of one share of common stock and a warrant to purchase an additional 0.40 shares of common stock. Each warrant is exercisable in whole or in part at any time until September 24, 2015 at a per share exercise price of $3.30, subject to certain adjustments as specified in the warrant. The Company received net proceeds of approximately $29.1 million.

On June 8, 2011, the Company utilized its shelf registration statement to sell 7,666,667 shares of its common stock at $7.50 per share. The Company received net proceeds of approximately $54.0 million, which is being used for general corporate purposes.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

The preparation of these financial statements in conformity with U.S. GAAP requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, expenses, and related disclosures. On an ongoing basis, management evaluates its estimates, including critical accounting policies or estimates related to clinical trial accruals, our tax provision and stock-based compensation. The Company bases its estimates on historical experience and on various other market specific and other relevant assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from these estimates.

Cash and Cash Equivalents

The Company considers all highly liquid instruments purchased with an original maturity or remaining maturities of three months or less at the date of purchase to be cash equivalents. Cash equivalents consist primarily of cash currencies, for which the carrying amounts are reasonable estimates of fair value. Cash equivalents are recognized at fair value.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Short-Term Investments

The Company has designated its investments as available for sale and the investment are carried at fair value. The Company determines the appropriate classification of securities at the time of purchase and reevaluates such classification as of each balance sheet date. Securities with maturity exceeding three months but less than one year are classified as short-term investments. Realized gains and losses and declines in value judged to be other-than-temporary are determined based on specific identification method and are reported in the statements of operations. The Company includes any unrealized gains and losses on short-term investments in stockholders' equity as a component of other comprehensive income (loss).

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents and short-term investments. The Company's cash equivalents consist of certificates of deposit with maturities less than three months and treasury money market funds. The Company's short-term investments consist of certificates of deposit and corporate bonds with maturities exceeding three months but less than one year. The Company has not experienced any losses in such accounts. The Company believes it is not exposed to significant credit risk related to cash, cash equivalents and short-term investments.

Property and Equipment Net

Property and equipment are stated at cost, less accumulated depreciation. Depreciation is computed over the estimated useful lives of the respective assets, which range from three to five years, using the straight-line method. Repairs and maintenance costs are expensed as incurred. Leasehold improvements are stated at cost and amortized using the straight-line method over the term of the lease or the life of the related asset, whichever is shorter.

Long-Lived Assets

The Company's long-lived assets and other assets are reviewed for impairment in accordance with the guidance of the FASB whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. Recoverability of an asset to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted cash flows expected to be generated by the asset. If such asset is considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds its fair value. Through December 31, 2011, the Company had not experienced impairment losses on its long-lived assets.

Accrued Clinical Studies

The Company makes estimates of its accrued clinical expenses as of each balance sheet date in the financial statements based on facts and circumstances known at that time. This process involves reviewing open contracts and purchase orders, communicating with applicable personnel to identify services that have been performed on the Company's behalf and estimating the level of service performed and the associated cost incurred for the service when the Company has not yet been invoiced or otherwise notified of actual cost. The majority of service providers invoice at least monthly in arrears for services performed.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

The Company periodically confirms the accuracy of estimates with the service providers and makes adjustments if necessary. Examples of estimated accrued clinical expenses include:

- fees paid to CROs in connection with clinical studies;
- fees paid to investigative sites in connection with clinical studies;
- fees paid to contract manufacturers in connection with the production of clinical study materials; and
- fees paid to vendors in connection with preclinical development activities.

Accruals related to clinical studies are based on estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage clinical studies on the Company's behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical study milestones. In accruing service fees, the Company estimates the time period over which services will be performed and the level of effort to be expensed in each period. If the actual timing of the performance of services or the level of effort varies from estimates, the accrual is adjusted accordingly. If costs are not identified or if the Company underestimates or overestimates the level of services performed or the costs of these services, actual expenses could differ from estimates.

Research and Development Costs

Research and development expenses consist of personnel costs, including salaries, benefits and stock-based compensation, clinical studies performed by contract research organizations, or CROs, materials and supplies, licenses and fees, and overhead allocations consisting of various administrative and facilities related costs. Research and development activities are also separated into three main categories: research, clinical development, and pharmaceutical development. Research costs typically consist of preclinical and toxicology costs. Clinical development costs include costs for Phase 1, 2 and 3 clinical studies. Pharmaceutical development costs consist of expenses incurred in connection with product formulation and chemical analysis.

The Company charges research and development costs, including clinical study costs, to expense when incurred, consistent with the guidance of the FASB. Clinical study costs are a significant component of research and development expenses. All of the Company's clinical studies are performed by third-party CROs. The Company accrues costs for clinical studies performed by CROs based on patient enrollment activities and adjusts the estimates, if required, based upon the Company's ongoing review of the level of effort and costs actually incurred by the CROs. The Company monitors levels of performance under each significant contract, including the extent of patient enrollment and other activities through communications with the CROs, and adjusts the estimates, if required, on a monthly basis so that clinical expenses reflect the actual effort expended by each CRO.

All material CRO contracts are terminable by the Company upon written notice and the Company is generally only liable for actual effort expended by the CROs and certain noncancelable expenses incurred at any point of termination.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Amounts paid in advance related to incomplete services will be refunded if a contract is terminated. Some contracts include additional termination payments that become due and payable if the Company terminates the contract. Such additional termination payments are only recorded if a contract is terminated.

In 2010, research and development costs were offset by $1 million of grant monies received for certain research and development costs as provided by Section 48D of the Internal Revenue Code.

Comprehensive Loss

Comprehensive loss consists of certain changes in equity that are excluded from net loss. Specifically, the Company includes unrealized losses on available for sale securities and the effect of exchange rate changes on cash equivalents and short-term investments in other comprehensive loss. Comprehensive loss for each period presented is set forth in the Statement of Stockholders' Equity and Comprehensive Loss.

Income Taxes

The Company accounts for income taxes in accordance with guidance issued by the FASB, which prescribes the use of the liability method whereby deferred tax asset and liability account balances are determined based on differences between the financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company provides a valuation allowance, if necessary, to reduce deferred tax assets to their estimated realizable value.

Segments

The Company operates in only one segment. Management uses cash flow as the primary measure to manage its business and does not segment its business for internal reporting or decision-making.

Net Loss Per Share

Basic net loss attributable to common stockholders per share is computed by dividing income available to common stockholders (the numerator) by the weighted-average number of common shares outstanding (the denominator) during the period. Shares issued during the period and shares reacquired during the period are weighted for the portion of the period that they were outstanding. The computation of diluted EPS is similar to the computation of basic EPS except that the denominator is increased to include the number of additional common shares that would have been outstanding if the dilutive potential common shares had been issued. In addition, in computing the dilutive effect of convertible securities, the numerator is adjusted to add back any convertible preferred dividends and the after-tax amount of interest recognized in the period associated with any convertible debt. The numerator also is adjusted for any other changes in income or loss that would result from the assumed conversion of those potential common shares, such as profit-sharing expenses. Diluted EPS is identical to basic EPS since common equivalent shares are excluded from the calculation, as their effect is anti-dilutive.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

The following table summarizes the Company's calculation of net loss per common share (in thousands except share and per share amounts):

	Years Ended December 31,		
	2011	**2010**	**2009**
Net loss per share			
Numerator			
Net loss	$ (95,335)	$ (40,414)	$ (12,203)
Denominator			
Weighted-average common shares outstanding	37,431,149	22,957,456	1,623,677
Less: Weighted-average shares subject to repurchase	(13,374)	(47,654)	(110,079)
Denominator for basic and diluted net loss per share	37,417,775	22,909,802	1,513,598
Basic and diluted net loss per share	$ (2.55)	$ (1.76)	$ (8.06)

The following table shows weighted-average historical dilutive common share equivalents outstanding, which are not included in the above calculation, as the effect of their inclusion is anti-dilutive during each period.

	Years Ended December 31,		
	2011	**2010**	**2009**
Options to purchase common stock	807,301	978,231	932,544
Common stock subject to repurchase	13,374	47,654	110,079
Warrants to purchase common stock	1,675,050	1,496,314	240,516
Convertible preferred stock (on an as-if-converted basis)			8,146,308
Restricted stock units	232,114	153,658	
	2,727,839	2,675,857	9,429,447

Stock-Based Compensation

The Company uses the Black-Scholes option pricing model as the method for determining the estimated fair value for all stock-based awards, including employee stock options, and rights to purchase shares under our Employee Stock Purchase Plan based on their estimated fair value, and recognize the costs in our financial statements over the employees' requisite service period. The Black-Scholes option pricing model requires the use of highly subjective and complex assumptions which determine the fair value of share-based awards, including the option's expected term and the price volatility of the underlying stock. Compensation costs related to all equity instruments granted after January 1, 2006 are recognized at the grant-date fair value of the awards. Additionally, the Company is required to include an estimate of the number of awards that will be forfeited in calculating compensation costs, which are recognized over the requisite service period of the awards on a straight-line basis.

Expected Term The Company's expected term represents the period that the Company's stock-based awards are expected to be outstanding and is determined using the simplified method.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Expected Volatility Expected volatility is estimated using comparable public company volatility for similar terms.

Expected Dividend The Black-Scholes option pricing model calls for a single expected dividend yield as an input and the Company has never paid dividends and has no plans to pay dividends.

Risk-Free Interest Rate The risk-free interest rate used in the Black-Scholes option pricing method is based on the U.S. Treasury zero-coupon issues in effect at the time of grant for periods corresponding with the expected term of option.

Estimated Forfeitures The estimated forfeiture rate is determined based on the Company's historical forfeiture rates to date. The Company monitors actual expenses and periodically updates the estimate.

Equity instruments issued to nonemployees are recorded at their fair value as determined in accordance with guidance provided by the FASB and are periodically revalued as the equity instruments vest and recognized as expense over the related service period.

3. PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets are comprised of the following (in thousands):

	December 31,	
	2011	**2010**
Prepaid insurance	$ 425	$ 405
Grant receivable		978
Interest receivable	5	447
Other current assets	177	35
Prepaid expense and other current assets	$ 607	$ 1,865

4. PROPERTY AND EQUIPMENT

Property and equipment are comprised of the following (in thousands):

	December 31,	
	2011	**2010**
Lab equipment	$ 1,312	$
Computers and software	50	77
Office equipment and furniture	7	17
Leasehold improvements	39	11
Total property and equipment	1,408	105
Less accumulated depreciation and amortization	(132)	(88)
Property and equipment, net	$ 1,276	$ 17

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

4. PROPERTY AND EQUIPMENT (Continued)

The Company recorded the following depreciation expense in the respective periods (in thousands):

	Years Ended December 31,			Period from September 9, 2004 (Date of Inception) to December 31, 2011
	2011	2010	2009	
Depreciation expense	$ 80	$ 17	$ 18	$ 170

5. CASH EQUIVALENTS AND INVESTMENTS

The Company's cash equivalents and short-term investments as of December 31, 2011 are as follows:

	Amortized Cost	Gross Unrealized Gains	Fair Value
Cash	$ 65,624	$	$ 65,624
Certificates of deposit	1,745	1	1,746
Total	67,369	1	67,370
Less amounts classified as cash and cash equivalents	(65,624)		(65,624)
Total	$ 1,745	$ 1	$ 1,746

The Company's cash equivalents and short-term investments as of December 31, 2010 were as follows:

	Amortized Cost	Gross Unrealized Losses	Fair Value
Cash	$ 15,499	$	$ 15,499
Money market funds	19,467		19,467
Certificates of deposit	14,478	(7)	14,471
Corporate bonds	4,011		4,011
Investments in foreign sovereign debt	10,017	(84)	9,933
Total	63,472	(91)	63,381
Less amounts classified as cash and cash equivalents	(40,045)	15	(40,030)
Total	$ 23,427	$ (76)	$ 23,351

Realized losses recorded for the years ended December 31, 2011 and 2010 were immaterial.

6. FAIR VALUE OF INSTRUMENTS

Pursuant to the accounting guidance for fair value measurement and its subsequent updates, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (i.e., the "exit price") in an orderly transaction between market participants at the measurement date. The accounting guidance establishes a hierarchy for inputs used in measuring fair value that minimizes the use of

unobservable inputs by requiring the use of observable market data when available. Observable inputs are

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

6. FAIR VALUE OF INSTRUMENTS (Continued)

inputs that market participants would use in pricing the asset or liability based on active market data. Unobservable inputs are inputs that reflect the assumptions market participants would use in pricing the asset or liability based on the best information available in the circumstances.

The fair value hierarchy is broken down into the three input levels summarized below:

Level 1 Valuations are based on quoted prices in active markets for identical assets or liabilities, and readily accessible by us at the reporting date. Examples of assets and liabilities utilizing Level 1 inputs are certain money market funds, U.S. Treasuries and trading securities with quoted prices on active markets.

Level 2 Valuations based on inputs other than the quoted prices in active markets that are observable either directly or indirectly in active markets. Examples of assets and liabilities utilizing Level 2 inputs are U.S. government agency bonds, corporate bonds, commercial paper, certificates of deposit and over-the-counter derivatives.

Level 3 Valuations based on unobservable inputs in which there is little or no market data, which require us to develop our own assumptions. Examples of assets and liabilities utilizing Level 3 inputs are cost method investments, auction rate securities (ARS) and the Primary Fund.

The following tables present the Company's fair value hierarchy for all its financial assets (including those in cash and cash equivalents), in thousands, by major security type measured at fair value on a recurring basis as of December 31, 2011 and 2010 (in thousands):

	December 31, 2011			
	Estimated Fair Value	Level 1	Level 2	Level 3
Certificates of deposit	1,746		1,746	
Total	$ 1,746	$	$ 1,746	$

	December 31, 2010			
	Estimated Fair Value	Level 1	Level 2	Level 3
Money market funds	$ 19,467	$ 19,467	$	$
Certificates of deposit	14,471		14,471	
Corporate bonds	4,011		4,011	
Investments in foreign sovereign debt	9,933		9,933	
Total	$ 47,882	$ 19,467	$ 28,415	$

7. COMMITMENTS AND CONTINGENCIES

Leases

The Company leases its main operating facility in Hayward, California. The Company began occupying this operating facility in the fourth quarter of 2008 and amended its lease for the facility in April 2011. The new lease commenced on August 1, 2011 and includes approximately

$245,000 in tenant

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

7. COMMITMENTS AND CONTINGENCIES (Continued)

improvement reimbursements from the landlord. Pursuant to the amendment, the lease increased the Company's square footage from 7,800 square feet to approximately 14,000 square feet. The new lease expires on September 30, 2014. The Company recognizes rental expense on the facility on a straight line basis over the term of the lease. Differences between the straight line net expense on rent payments is classified as deferred rent liability on the balance sheet.

Rent expense was as follows (in thousands):

	Years Ended December 31,			Period from September 9, 2004 (Date of Inception) to December 31,
	2011	2010	2009	2011
Rent expense	$ 184	$ 158	$ 182	$ 875

As of December 31, 2011, future minimum lease payments under noncancellable operating leases were as follows (in thousands):

	2011
Less than 1 year	$ 228
1 to 3 years	415
3 to 5 years	
Total	$ 643

Other Commitments

In July 2006, the Company with Shionogi & Co., Ltd. and Eli Lilly and Company (collectively "Eli Lilly") entered into a license agreement (the "Eli Lilly Agreement") to develop and commercialize certain sPLA2 inhibitors for any indications, including for the treatment of inflammatory diseases. The Eli Lilly Agreement granted the Company commercialization rights to Shionogi & Co., Ltd.'s and Eli Lilly's sPLA2 inhibitors, including varespladib and varespladib sodium. Under the terms of the Eli Lilly Agreement, the Company's license is worldwide, with the exception of Japan where Shionogi & Co., Ltd. has retained rights. Pursuant to this license agreement, the Company paid Shionogi & Co., Ltd. and Eli Lilly a one-time license initiation fee of $250,000 in the aggregate. Additionally, in consideration for the licensed technology, the Company issued an aggregate of 257,744 shares of Series A-2 convertible preferred stock at $5.14 per share and an aggregate of 127,297 shares of Series B-1 convertible preferred stock at $7.28 per share with a total aggregate value of $2.3 million to Shionogi & Co., Ltd. and Eli Lilly. As there is no future alternative use for the technology, the Company recorded the initiation and license fees in research and development expenses during 2006. In March 2010, the Company paid $1.75 million each to Eli Lilly and Shionogi & Co., Ltd. in the form of the Company's common stock upon the commencement of the Company's Phase 3 VISTA-16 study of varespladib.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

7. COMMITMENTS AND CONTINGENCIES (Continued)

Under the terms of the Eli Lilly Agreement, the Company is obligated to make additional milestone payments to Eli Lilly of up to $97.5 million upon the achievement of certain development and regulatory milestones. The Company is also obligated to pay tiered royalties, which increase as a percentage from the mid-single digits to the low double digits as net sales increase, on future net sales of products that are developed and approved as defined by this collaboration. The Company's obligation to pay royalties with respect to each licensed product in each country will expire upon the later of (a) 10 years following the date of the first commercial sale of such licensed product in such country and (b) the first date on which generic version(s) of the applicable licensed product achieve a total market share, in the aggregate, of 25% or more of the total unit sales of wholesalers to pharmacies of licensed product and all generic versions combined in the applicable country. As of December 31. 2011, there were no outstanding obligations due to Eli Lilly.

In December 2007, the Company with Amgen, Inc. ("Amgen") entered into a worldwide, exclusive license agreement (the "Amgen Agreement") to develop and commercialize blisibimod in any indication, including for the treatment of systemic lupus erythematosus ("lupus"). Under the terms of the Amgen Agreement, the Company paid a nonrefundable, upfront license fee of $6.0 million. As there is no future alternative use for the technology, the Company expensed the license fee in research and development expenses during 2007.

Under the terms of the Amgen Agreement, the Company is obligated to make additional milestone payments to Amgen of up to $33.0 million upon the achievement of certain development and regulatory milestones. The Company is also obligated to pay tiered royalties on future net sales of products, ranging from the high single digits to the low double digits, which are developed and approved as defined by this collaboration. The Company's royalty obligations as to a particular licensed product will be payable, on a country-by-country and licensed product-by-licensed product basis, for the longer of (a) the date of expiration of the last to expire valid claim within the licensed patents that covers the manufacture, use or sale, offer to sell, or import of such licensed product by the Company or a sublicense in such country or (b) 10 years after the first commercial sale of the applicable licensed product in the applicable country. As of December 31, 2011, there were no outstanding obligations due to Amgen.

8. NOTES PAYABLE

In March 2011, the Company entered into a Loan and Security Agreement ("Loan Agreement") with Hercules. Under the terms of the Loan Agreement, the Company borrowed $25.0 million at an interest rate of the higher of (i) 10.55% or (ii) 7.30% plus the prime rate as reported in the Wall Street Journal, and issued to Hercules a secured term promissory note evidencing the loan. The loan is secured by the Company's assets, excluding intellectual property. The Company will make interest only payments for the initial 15 months. Thereafter, the loan will be repaid in 30 equal monthly installments of approximately $952,000, at the initial interest rate. The Company will also be obligated to pay an end of the term charge of $937,500, which will be expensed over the term of the Loan Agreement using the effective interest method.

The Loan Agreement limits both the seniority and amount of future debt the Company may incur. The Company may be required to prepay the loan in the event of a change in control. In conjunction with the loan, the Company issued a seven-year warrant to purchase 321,429 shares of the Company's common stock at an exercise price of $6.00 per share. The warrant is immediately exercisable and expires March

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NOTES TO FINANCIAL STATEMENTS (Continued)

8. NOTES PAYABLE (Continued)

2018. The Company estimated the fair value of this warrant using the Black-Scholes option valuation model with the following assumptions: expected term of seven years, a risk-free interest rate of 2.87%, expected volatility of 63% and 0% expected dividend yield.

The Company applied the relative fair value method to allocate the $25.0 million proceeds received under the Loan Agreement between the loan and warrant. The initial carrying amount assigned to the loan was $23.7 million and was recorded as Notes payable net of discount on the Company's balance sheet. We believe the carrying amount at December 31, 2011 approximates fair value. The fair value allocated to the warrant of $1.3 million was recorded as an increase to additional paid-in capital in the Company's balance sheet. The resulting $1.3 million discount from the $25.0 million par value of the loan is being amortized as an additional interest expense over the term of the loan using the effective interest rate method. At December 31, 2011, this warrant remained outstanding and exercisable.

In connection with the Loan Agreement, the Company incurred note issuance costs of approximately $370,200, which are recorded as long-term assets on the Company's balance sheet. The note issuance costs are being amortized to interest expense over the term of the Loan Agreement using the effective interest rate method.

Notes payable as of December 31, 2011 consists of (in thousands):

	2011
Notes payable, net of discount	$ 24,331
Less current maturities, net of discount	4,157
	$ 20,174

Annual maturities of long-term debt as of December 31, 2011 are as follows (in thousands):

2012	$ 4,468
2013	9,691
2014	10,841
Total	$ 25,000

9. CONVERTIBLE PROMISSORY NOTES AND EQUITY FINANCING

Prior to our IPO, we used convertible debt as a method to finance our clinical trials. In connection with the completion of the Company's IPO on March 4, 2010, all of the Company's outstanding convertible debt was converted to shares of common stock. As of December 31, 2010 there was no convertible debt outstanding.

In April 2006, the Company issued convertible promissory notes to a group of individuals, or Holders, in exchange for an aggregate principal amount of $570,000, or Bridge Loan. The Bridge Loan was converted into Series A-2 convertible preferred stock at a discount of 25% resulting in a $3.85 per share price in August 2006. The interest on these loans was 7% per annum and accrued interest of $13,816 was paid out to the Holders upon closing of our Series A-2 convertible preferred stock. In connection with the conversion of the Bridge Loan, a beneficial conversion feature of $190,000 representing the difference

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ANTHERA PHARMACEUTICALS, INC.
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NOTES TO FINANCIAL STATEMENTS (Continued)

9. CONVERTIBLE PROMISSORY NOTES AND EQUITY FINANCING (Continued)

between the conversion price and the fair value of the preferred shares multiplied by the number of shares converted was recorded as non-cash interest expense and an increase in additional paid-in capital.

In June 2006, the Company issued two additional convertible promissory notes to two new investors for an aggregate principal amount of $390,000. The notes were converted into Series A-2 convertible preferred stock at the issuance price of our Series A-2 convertible preferred stock, or $5.14 per share, in August 2006. The interest on these loans was 8% per annum. A portion of accrued interest in the amount of $1,751 was converted into Series A-2 convertible preferred stock and the remainder of accrued interest was paid out to the investors.

During February and May 2008, the Company issued convertible promissory notes to its existing investors in exchange for an aggregate principal amount of $12.2 million. The interest on these loans was 4.2% per annum. The notes and accrued interest of $155,630 were converted into Series B-2 convertible preferred stock at the issuance price of our Series B-2 convertible preferred stock, or $5.46 per share, in August 2008. In connection with the terms of the convertible promissory notes, a charge for the beneficial conversion feature of $4.1 million representing the difference between the conversion price and the fair value of the preferred shares multiplied by the number of shares converted was recorded as non-cash interest expense and an increase to additional paid-in capital.

On August 12, 2008, the Company issued 2,267,178 shares of its Series B-2 convertible preferred stock to certain of its existing investors in exchange for conversion of $12.2 million of aggregate principal amount of and $155,630 of aggregate interest accrued upon convertible promissory notes and 962,066 shares of its Series B-2 convertible preferred stock to two new investors in exchange for $7.0 million of cash. In connection with the issuance of our Series B-2 convertible preferred stock, the Company issued warrants to purchase 240,516 shares of the Company's common stock to those investors purchasing shares for cash.

In July and September 2009, the Company sold (i) convertible promissory notes, or the 2009 notes, that are secured by a first priority security interest in all of the Company's assets, and (ii) warrants, or the 2009 warrants, to purchase shares of the Company's equity securities to certain of its existing investors for an aggregate purchase price of $10.0 million. These transactions are collectively referred to as the 2009 bridge financing. The 2009 notes and accrued interest were converted into shares of the Company's common stock at a discount of 25% resulting in $5.25 per share in March 2010 upon the closing of the Company's IPO.

In September 2009, the Company executed a stock purchase agreement, which was amended to add an additional purchaser in November 2009, with certain existing preferred stock holders for the sale of shares of the Company's common stock equal to $20.5 million. In December 2009, the Company entered into a note purchase agreement and amended the September 2009 stock purchase and escrow agreements. The agreements provided for the release of $3.4 million of the $20.5 million held in the escrow account. The Company issued convertible promissory notes, or the escrow notes, for the released amount to the investors. The escrow funds, escrow notes and accrued interest were converted into shares of the Company's common stock at $6.58 per share in March 2010 upon the closing of the Company's IPO. The conversion price reflected the Company's IPO price of $7.00 per share, minus per-share underwriting discount and commission fees.

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ANTHERA PHARMACEUTICALS, INC.
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NOTES TO FINANCIAL STATEMENTS (Continued)

10. STOCKHOLDERS EQUITY

Common Stock

At December 31, 2011, the Company is authorized to issue 100,000,000 shares of capital stock, of which 95,000,000 shares are designated as common stock, par value $0.001 per share. Holders of common stock are entitled to one vote per share on all matters to be voted upon by the stockholders of the Company. Holders of common stock are entitled to receive ratably dividends, if any, as may be declared by the Board of Directors. No dividends have been declared to date.

At December 31, 2011, the Company had reserved the following shares for future issuance:

Common stock warrants outstanding	4,811,898
Common stock options outstanding	2,283,771
Restricted stock units outstanding	206,375
Common stock options available for future grant under stock option plan	171,434
Total	7,473,478

Convertible Preferred Stock

In connection with the completion of the Company's IPO on March 4, 2010, all of the Company's shares of preferred stock outstanding at the time of the offering were converted into an aggregate of 8,146,308 shares of common stock. As of December 31, 2010, no liquidation preference remained.

The Company's Fifth Amended and Restated Certificate of Incorporation designates 5,000,000 shares of the Company's capital stock as undesignated preferred stock.

Warrants

In August 2008, in connection with the issuance of Series B-2 convertible preferred stock, the Company issued 240,516 warrants for the purchase of common stock at $1.34 per share to two new investors. The warrants expired upon the earliest of (i) seven years from the issuance date, (ii) the closing date of the Company's IPO or (iii) upon consummation by the Company of any consolidation or merger. The Company valued the warrants using the Black-Scholes option pricing model with the following assumptions: expected volatility of 72%, risk-free interest rate of 3.46% and expected term of seven years. The fair value of the warrants was calculated to be $224,478 and recorded as issuance cost and an increase to additional paid-in capital. As of December 31, 2009, 240,516, warrants remain outstanding. Each of the warrants contained a net issuance feature, which allowed the warrant holder to pay the exercise price of the warrant by forfeiting a portion of the exercised warrant shares with a value equal to the aggregate exercise. The warrants were exercised upon the closing of the Company's IPO on March 4, 2010.

In connection with the issuance of the 2009 notes for $10.0 million, as discussed in Note 9, the Company issued warrants to each note holder to purchase shares of its equity securities. Each 2009 warrant is exercisable for the security into which each 2009 note is converted, at the price at which that security is sold to other investors. Depending on when the 2009 notes are converted, each 2009 warrant may be exercisable for a number of shares equal to the quotient obtained by dividing (x) (i) 25% of the principal amount of the accompanying 2009 notes, in the event the conversion occurs prior to April 1, 2010, or (ii) 50% of the principal amount of the accompanying 2009 notes, in the event the conversion occurs on or

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ANTHERA PHARMACEUTICALS, INC.
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NOTES TO FINANCIAL STATEMENTS (Continued)

10. STOCKHOLDERS EQUITY (Continued)

after April 1, 2010, by (y) the purchase price of the securities into which the note is ultimately converted. The Company accounted for the 2009 warrants in accordance with guidance provided by the FASB, which requires that a financial instrument, other than outstanding shares, that, at inception, is indexed to an obligation to repurchase the issuer's equity shares, regardless of the timing of the redemption feature, and may require the issuer to settle the obligation by transferring assets, be classified as liability through the completion of the Company's IPO. The Company measured the fair value of the 2009 warrants using the Black-Scholes option pricing model on issuance date and adjusted the fair value at the end of each reporting period based on the following assumptions:

	March 31, 2010	December 31, 2009	September 30, 2009
Expected Volatility	94%	78%	78%
Dividend Yield	0%	0%	0%
Risk-Free Interest Rate	2.28%	2.34%	2.38%
Expected Term (years)	5.00	5.00	5.00

The Company then applied probability factors to the different possible conversion scenarios and calculated the initial fair value of the 2009 warrants to be $320,000, which amount was recorded as a discount to the 2009 notes. The discount was amortized as interest expense over the terms of the 2009 notes. The Company re-measured the fair value of the 2009 warrants on December 31, 2009 and recorded the change in fair value in non-operating income. Upon conversion of the 2009 notes into shares of common stock at the completion of the Company's IPO, the fair value of the 2009 warrants was re-measured again by the Company and the change in fair value of $1.5 million was recorded in non-operating expense during the year ended December 31, 2010. Concurrent with the conversion of the 2009 notes, the Company calculated the number of warrant shares to be 357,136 based on 25% of the principal amount of the accompanying 2009 notes and the IPO price of the Company's common stock of $7.00 per share. The warrant liability and unamortized discount were reclassified to additional paid-in-capital as a result of the conversion of the 2009 notes.

In connection with the issuance of the escrow notes for $3.4 million, as discussed in Note 9, which were exchangeable for exchange notes, each exchange note that was issued would be accompanied by a warrant, which was exercisable for the security into which the accompanying exchange note, if any, was converted, at the price at which that security was sold to other investors. Depending on when the exchange notes are converted, each warrant may be exercisable for a number of shares equal to the quotient obtained by dividing (x) (i) 25% of the principal amount of the accompanying exchange notes, in the event the conversion occurs prior to April 1, 2010, or (ii) 50% of the principal amount of the accompanying exchange notes, in the event the conversion occurs on or after April 1, 2010, by (y) the purchase price of the securities into which the exchange note is ultimately converted. The Company accounts for the potential issuance of the warrants in accordance with guidance provided by the FASB. The Company measured the fair value of its derivative using the Black-Scholes option pricing model with the following assumptions: expected volatility of 78%, risk-free interest rate of 2.34% and expected term of five years. The Company then applied probability factors to the different possible exchange and conversion scenarios and calculated the fair value of the warrants to be $0.09 million, which amount was recorded as a discount to the escrow notes. The discount was amortized as interest expense over the terms of the escrow notes. The escrow notes were converted into shares of the Company's common stock upon the closing of its IPO.

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10. STOCKHOLDERS EQUITY (Continued)

As a result of the conversion taking place prior to the exchange of the escrow notes into exchange notes, the Company's obligation to issue the warrants was eliminated. Consequently, the Company reclassified the unamortized discount into additional paid-in capital and reduced the fair value of the warrant liability to zero.

On September 24, 2010, the Company closed a private placement transaction with certain accredited investors pursuant to which the Company sold an aggregate of 10,500,000 units at a purchase price of $3.00 per unit, with each unit consisting of one share of common stock and a warrant to purchase an additional 0.40 shares of common stock. Each warrant is exercisable in whole or in part at any time until September 24, 2015 at a per share exercise price of $3.30, subject to certain adjustments as specified in the warrant. The Company valued the warrant using the Black-Scholes option pricing model with the following assumptions: expected volatility of 64%, risk-free interest rate of 1.37% and expected term of five years. The fair value of the warrants was calculated to be $5.3 million and has been recorded in additional paid-in capital. As of December 31, 2011, 4,133,333 warrants remain outstanding. Each of the warrants contains a net issuance feature, which allows the warrant holder to pay the exercise price of the warrant by forfeiting a portion of the exercised warrant shares with a value equal to the aggregate exercise.

Embedded Derivative

The 2009 notes and the escrow notes discussed in Note 9 contained a contingent automatic redemption feature and a contingent put option that meet the definition of an embedded derivative as defined by guidance provided by the FASB, as these notes contain features with implicit or explicit terms that affect some or all of the cash flows or the value of other exchanges required by a contract in a manner similar to a derivative instrument. The Company evaluated these embedded derivative features and determined that the embedded derivative features should be separated from the 2009 notes and escrow notes and recognized as derivative instruments. Pursuant to the guidance provided by the FASB, if a hybrid instrument contains more than one embedded derivative feature that would individually warrant separate accounting as a derivative instrument, those embedded derivative features shall be bundled together as a single, compound embedded derivative that shall then be bifurcated and accounted for separately from the host contract unless a fair value election is made. Since the Company may not make a fair value election, the contingent automatic redemption and the contingent put option should be bundled together as a single, compound embedded derivative and separated from the 2009 notes and escrow notes. The Company recognized the bundled embedded derivative as a derivative liability with initial and subsequent measurements at fair value and changes in fair value recorded in earnings. Upon conversion of the 2009 notes and escrow notes into shares of common stock at the completion of the Company's IPO, the Company re-measured the fair value of the embedded derivative and recorded a charge of $2.5 million in non-operating expense during the year ended December 31, 2010.

11. STOCK-BASED AWARDS

Option Plan

The Company's 2005 Equity Incentive Plan (the "2005 Plan") was adopted by the board of directors in January 2005. The 2005 Plan permits the granting of incentive and non-statutory stock options, restricted stock, stock appreciation rights, performance units, performance shares and other stock awards to eligible employees, directors and consultants. The Company grants options to purchase shares of common stock

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ANTHERA PHARMACEUTICALS, INC.
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NOTES TO FINANCIAL STATEMENTS (Continued)

11. STOCK-BASED AWARDS (Continued)

under the 2005 Plan at no less than the fair market value of the underlying common stock as of the date of grant. Options granted under the 2005 Plan have a maximum term of 10 years and generally vest over four years at the rate of 25% of total shares underlying the option. Selected grants vest immediately or over a shorter vesting period.

The 2005 Plan allows the option holders to exercise their options prior to vesting. Unvested shares are subject to repurchase by the Company at the option of the Company. Unvested shares subject to repurchase have been excluded from the number of shares outstanding. Option activity in the following table below includes options exercised prior to vesting. The liability for shares subject to repurchase as of December 31, 2011 and 2010 was not significant.

On February 1, 2010, the Company's board of directors adopted the 2010 Stock Option and Incentive Plan (the "2010 Plan") effective upon consummation of the IPO, which was also approved by the Company's stockholders. The Company initially reserved 233,644 shares of common stock for issuance under the 2010 Plan, plus 35,670 shares remaining available for grant under the Company's 2005 Plan, plus any additional shares returned under the 2005 Plan as a result of the cancellation of options or the repurchase of shares issued pursuant to the 2005 Plan. On July 9, 2010, the Company's stockholders approved an increase to the aggregate number of shares initially available for grant under the 2010 Plan by 200,000 shares to 433,644 shares of common stock. In addition, the 2010 Plan provides for annual increases in the number of shares available for issuance thereunder on the first day of each fiscal year, beginning with the 2011 fiscal year, equal to four percent (4%) of the outstanding shares of the Company's common stock on the last day of the immediately preceding fiscal year. The maximum aggregate number of shares of stock that may be issued in the form of incentive stock options shall not exceed the lesser of (i) the number of shares reserved and available for issuance under the Plan or (ii) 1,460,280 shares of stock, subject in all cases to adjustment including reorganization, recapitalization, reclassification, stock dividend, stock split, reverse stock split or other similar change in the Company's capital stock. The 2010 Plan permits the granting of incentive and non-statutory stock options, restricted and unrestricted stock awards, restricted stock units, stock appreciation rights, performance share awards, cash-based awards and dividend equivalent rights to eligible employees, directors and consultants. The option exercise price of an option granted under the 2010 Plan may not be less than 100% of the fair market value of a share of the Company's common stock on the date the stock option is granted. Options granted under the 2010 Plan have a maximum term of 10 years and generally vest over four years. In addition, in the case of certain large stockholders, the minimum exercise price of incentive options must equal 110% of fair market value on the date of grant and the maximum term is limited to five years.

The 2010 Plan does not allow the option holders to exercise their options prior to vesting.

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ANTHERA PHARMACEUTICALS, INC.
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NOTES TO FINANCIAL STATEMENTS (Continued)

11. STOCK-BASED AWARDS (Continued)

The following table summarizes stock option activity for the Company from inception to December 31, 2011 (in thousands except share and per share information):

	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life in Years	Aggregate Intrinsic Value
Balance at December 31, 2008	957,125	$ 0.60	8.28	
Options granted	405,358	$ 1.69		
Options exercised	(19,089)	$ 0.80		
Options cancelled	(19,618)	$ 0.92		
Balance at December 31, 2009	1,323,776	$ 0.92	7.94	
Options granted	112,000	$ 4.82		
Options exercised	(138,878)	$ 0.84		
Options cancelled	(20,907)	$ 1.50		
Repurchase		$ 0.26		
Balance at December 31, 2010	1,275,991	$ 1.26	7.07	
Options granted	1,413,000	$ 5.77		
Options exercised	(270,334)	$ 1.04		
Options cancelled	(134,886)	$ 6.53		
Balance at December 31, 2011	2,283,771	$ 3.77	7.88	$ 6,063
Ending vested at December 31, 2011	1,236,823	$ 2.23	6.85	$ 4,974
Ending vested and expected to vest at December 31, 2011	2,283,771	$ 3.77	7.88	$ 6,063

The intrinsic value of stock options represents the difference between the exercise price of stock options and the market price of our stock on that day for all in-the-money options. Additional information related to our stock options is summarized below (in thousands except per share information):

	Years Ended December 31,			Period from September 9, 2004 (Date of Inception) to December 31,
	2011	2010	2009	2011
Weighted-average fair value per share granted	$ 3.47	$ 3.10	$ 1.01	$ 1.68
Intrinsic value of options exercised	$ 1,579	$ 699	$ 14	$ 2,407
Proceeds received from the exercise of stock options	$ 280	$ 116	$ 15	$ 603
Grant date fair value of options vested	$ 1,929	$ 235	$ 358	$ 2,748

There was $3.8 million of total unrecognized compensation expense as of December 31, 2011 related to options. The unrecognized compensation expense will be amortized on a straight-line basis over a weighted-average remaining period of 2.92 years.

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11. STOCK-BASED AWARDS (Continued)

Information about stock options outstanding, vested and expected to vest as of December 31, 2011, is as follows:

	Outstanding, Vested and Expected to Vest			Options Vested	
Range of Exercise Price	Number of Shares	Weighted-Average Remaining Contractual Life (In Years)		Weighted Average Exercise Price	Number of Shares
$0.26 - $1.34	618,760	5.44	$	0.56	614,487
$1.51 - $4.77	412,329	7.92	$	2.58	304,573
$4.88 - $4.88	908,000	9.00	$	4.88	238,478
$6.75 - $7.70	46,682	8.35	$	7.12	29,285
$8.17 - $8.17	298,000	9.43	$	8.17	50,000
	2,283,771	7.88	$	3.77	1,236,823

As of December 31, 2011, there are 171,434 shares available for grant under the 2010 Plan.

Restricted Stock Units

The Company grants restricted stock unit awards ("RSUs") under its 2010 Plan, as determined by the Company's compensation committee. The restricted stock units granted represent a right to receive shares of common stock at a future date determined in accordance with the participant's award agreement. An exercise price and monetary payment are not required for receipt of restricted stock units or the shares issued in settlement of the award. Instead, consideration is furnished in the form of the participant's services to the Company. Substantially all of the RSUs vest over four years.

In June 2011, the Company amended the 2010 Plan to allow individuals who had received RSUs to net share settle in excess of the minimum statutory withholding amount for taxes. In accordance with guidance issued by the FASB, this modification resulted in the RSUs being classified as a liability, and the subsequent change in fair value to be recorded as expense. The unsettled RSUs are remeasured at each reporting date and will continue to be remeasured until they are fully vested in approximately 3 years. Any changes in valuation are recorded as compensation expense for the period. As of December 31, 2011, the liability related to the unsettled awards was not significant.

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ANTHERA PHARMACEUTICALS, INC.
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NOTES TO FINANCIAL STATEMENTS (Continued)

11. STOCK-BASED AWARDS (Continued)

The following table summarizes activity related to our restricted stock units:

	Shares	Weighted-Average Grant Date Fair Value
Outstanding at December 31, 2009		
Restricted stock units granted	333,000	$ 5.15
Restricted stock units forfeitures and cancellations	(30,500)	$ 5.36
Outstanding at December 31, 2010	302,500	$ 5.13
Restricted stock units granted	54,000	$ 5.65
Restricted stock units released	(140,000)	$ 5.20
Restricted stock units forfeitures and cancellations	(10,125)	$ 4.48
Outstanding at December 31, 2011	206,375	$ 5.24

Early Exercise of Employee Options

Stock options granted under the Company's 2005 Plan provide employee option holders the right to elect to exercise unvested options in exchange for restricted common stock. Unvested shares, which amounted to 4,687 and 27,321 at December 31, 2011 and December 31, 2010, respectively, were subject to a repurchase right held by the Company at the original issuance price in the event the optionees' employment is terminated either voluntarily or involuntarily. For exercises of employee options, this right lapses 25% on the first anniversary of the vesting start date and in 36 equal monthly amounts thereafter. These repurchase terms are considered to be a forfeiture provision and do not result in variable accounting. The shares purchased by the employees pursuant to the early exercise of stock options are not deemed to be outstanding until those shares vest. In addition, cash received from employees for exercise of unvested options is treated as a refundable deposit shown as a liability in the Company's financial statements. For the years ended December 31, 2011 and December 31, 2010, cash received for early exercise of options was not significant. As the shares vest, the shares and liability are released into common stock and additional paid-in capital.

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ANTHERA PHARMACEUTICALS, INC.
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NOTES TO FINANCIAL STATEMENTS (Continued)

11. STOCK-BASED AWARDS (Continued)

The activity of early exercise of options granted to employees is as follows:

Unvested Shares	Shares	Weighted-Average Grant Price
Balance as of December 31, 2008	161,646	$ 0.34
Early exercise of options	4,381	$ 1.51
Vested	(96,603)	$ 0.35
Balance as of December 31, 2009	69,424	$ 0.45
Early exercise of options	18,011	$ 1.37
Vested	(53,847)	$ 0.34
Repurchases	(6,267)	$ 0.26
Balance as of December 31, 2010	27,321	$ 1.02
Vested	(22,634)	$ 0.94
Balance as of December 31, 2011	4,687	$ 1.41

2010 Employee Stock Purchase Plan

In July 2010, the Company's stockholders approved the ESPP. The Company reserved 100,000 shares of common stock for issuance thereunder plus on January 1, 2011 and each January 1 thereafter, the number of shares of stock reserved and available for issuance under the Plan shall be cumulatively increased by the lesser of (i) one percent (1%) of the number of shares of common stock issued and outstanding on the immediately preceding December 31 or (ii) 250,000 shares of common stock.

Under the ESPP, eligible employees of the Company and certain designated subsidiaries of the Company may authorize the Company to deduct amounts from their compensation, which amounts are used to enable the employees to purchase shares of the Company's common stock. The purchase price per share is 85% of the fair market value of the common stock as of the first date or the ending date of the applicable semi-annual purchase period, whichever is less (the "Look-Back Provision"). The 15% discount and the Look-Back Provision make the ESPP compensatory under guidance issued by the FASB. The Black-Scholes option pricing model was used to value the employee stock purchase rights. For the years ended December 31, 2011 and December 31, 2010 and the period from September 9, 2004 (Inception Date) through December 31, 2011, the following weighted-average assumptions were used in the valuation of the stock purchase rights:

	Year Ended December 31, 2011	Year Ended December 31, 2010	Period from September 9, 2004 (Date of Inception) to December 31, 2011
Expected Volatility	62%	67%	64%
Dividend Yield	0%	0%	0%
Risk-Free Interest Rate	0.08%	0.16%	0.11%
Expected Term (years)	0.50	0.33	0.44

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ANTHERA PHARMACEUTICALS, INC.
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NOTES TO FINANCIAL STATEMENTS (Continued)

11. STOCK-BASED AWARDS (Continued)

Stock-Based Compensation Expense

Total stock-based compensation expense, including expense recorded for the ESPP, was as follows (in thousands):

	Years Ended December 31,			Period from September 9, 2004 (Date of Inception) to December 31,
	2011	2010	2009	2011
Research and development	$ 1,014	$ 231	$ 189	$ 1,597
General and administrative	1,409	471	153	2,163
Total employee stock-based compensation	$ 2,423	$ 702	$ 342	$ 3,760

The assumptions used in the Black-Scholes option-pricing model to value stock options are as follows:

	Years Ended December 31,			Period from September 9, 2004 (Date of Inception) to December 31,
	2011	2010	2009	2011
Expected Volatility	63%	69%	74%	73%
Dividend Yield	0%	0%	0%	0%
Risk-Free Interest Rate	2.25%	1.91%	2.10%	3.25%
Expected Term (years)	6.25	6.25	6.25	6.25

12. EMPLOYEE BENEFIT PLAN

The Company maintains a defined contribution 401(k) plan, or the 401(k) Plan. Employee contributions are voluntary and are determined on an individual basis, limited by the maximum amounts allowable under federal tax regulations. The Company has made no contributions to the 401(k) Plan since its inception.

13. INCOME TAXES

The Company has incurred net operating losses since inception. The Company has not reflected any benefit of such net operating loss carryforwards in the accompanying financial statements and has established a full valuation allowance against its deferred tax assets.

Deferred income taxes reflect the net tax effects of (a) temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and (b) operating losses and tax credit carryforwards.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

13. INCOME TAXES (Continued)

The significant components of the Company's deferred tax assets for the years ended December 31, 2011 and 2010 are as follows (in thousands):

	December 31,	
	2011	2010
Deferred tax assets:		
Net operating loss carryforwards	$ 69,300	$ 33,300
Tax credits	4,813	3,543
Intangible assets	2,749	3,014
Accrued bonus	148	230
Accrued liabilities	3,165	1,250
Stock-based compensation	657	270
Other	44	34
Total deferred tax assets	80,876	41,641
Deferred tax liabilities		
Valuation allowance	(80,876)	(41,641)
Net deferred tax asset	$	$

A reconciliation of the statutory tax rates and the effective tax rate for the years ended December 2011, 2010, and 2009 is as follows:

	2011	2010	2009
Statutory rate	34%	34%	34%
State tax	6%	7%	6%
Tax credit	1%	2%	1%
Other	0%	(4)%	(3)%
Valuation allowance	(41)%	(38)%	(38)%
Effective tax rates	0%	0%	0%

Tax benefits of net operating losses, temporary differences and credit carryforwards are recorded as an asset to the extent that management assesses that realization is "more likely than not." Realization of the future tax benefits is dependent on the Company's ability to generate sufficient taxable income within the carryforward period. Because of the Company's recent history of operating losses, management believes that recognition of the deferred tax assets arising from the above-mentioned future tax benefits is currently not likely to be realized and, accordingly, has provided a valuation allowance.

Realization of the future tax benefits is dependent on the Company's ability to generate sufficient taxable income within the carryforward period. Because of the Company's recent history of operating losses, management believes that the deferred tax assets arising from the above-mentioned future tax benefits are currently not likely to be realized and, accordingly, has provided a full valuation allowance. The net valuation allowance increased by $39.2 million for the year ended December 31, 2011, $15.5 million for the year ended December 31, 2010, $4.7 million for the year ended December 31, 2009 and $80.9 million for the period from September 9, 2004 (Date of Inception) to December 31, 2011.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

13. INCOME TAXES (Continued)

Net operating losses and tax return credit carryforwards as of December 31, 2011, are as follows (in thousands):

	Amount	Expiration Years
Net operating losses federal	$ 173,928	Beginning 2024
Net operating losses state	$ 174,207	Beginning 2014
Tax return credits federal	$ 3,876	Beginning 2026
Tax return credits state	$ 1,420	Not applicable

Utilization of the net operating loss carryforwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, or the IRC, and similar state provisions. The Company has not performed a detailed analysis to determine whether an ownership change under Section 382 of the IRC has occurred. The effect of an ownership change would be the imposition of an annual limitation on the use of net operating loss carryforwards attributable to periods before the change.

As of December 31, 2011, the Company had unrecognized tax benefits of $1.8 million, all of which would not currently affect the Company's effective tax rate if recognized due to the Company's deferred tax assets being fully offset by a valuation allowance. The Company did not anticipate any significant change to the unrecognized tax benefit balance as of December 31, 2011. A reconciliation of unrecognized tax benefits is as follows (in thousands):

	Amount
Balance as of December 31, 2008	$ 808
Additions based on tax positions related to current year	84
Balance as of December 31, 2009	892
Additions based on tax positions related to current year	469
Balance as of December 31, 2010	1,361
Additions based on tax positions related to current year	404
Balance as of December 31, 2011	$ 1,765

The Company would classify interest and penalties related to uncertain tax positions in income tax expense, if applicable. There was no interest expense or penalties related to unrecognized tax benefits recorded through December 31, 2010. The tax years 2004 through 2010 remain open to examination by one or more major taxing jurisdictions to which the Company is subject.

The Company does not anticipate that total unrecognized net tax benefits will significantly change prior to the end of 2012.

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

14. SELECTED QUARTERLY DATA (unaudited)

Quarterly results were as follows (in thousands, except per share data):

	Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
2011				
OPERATING EXPENSES:				
Research and development	$ 16,317	$ 20,586	$ 21,546	$ 26,832
General and administrative	2,340	2,096	1,824	1,597
LOSS FROM OPERATIONS	(18,657)	(22,682)	(23,370)	(28,429)
Interest expense	(69)	(902)	(920)	(912)
Other income (expense)	160	414	(153)	184
NET LOSS	$ (18,566)	$ (23,170)	$ (24,443)	$ (29,156)
Net loss per share basic and diluted	$ (0.56)	$ (0.66)	$ (0.60)	$ (0.71)
Shares used in computing basic and diluted net loss per share	32,895,152	34,900,225	40,833,495	40,916,666

	Quarter Ended			
	March 31,	June 30,	September 30,	December 31,
2010				
OPERATING EXPENSES:				
Research and development	$ 5,242	$ 6,438	$ 6,885	$ 10,892
General and administrative	1,224	1,510	1,510	2,057
LOSS FROM OPERATIONS	(6,466)	(7,948)	(8,395)	(12,949)
Interest expense	(845)			
Other income (expense)	3	12	61	(91)
Mark-to-market adjustment of warrant liability	(3,796)			
NET LOSS	$ (11,104)	$ (7,936)	$ (8,334)	$ (13,040)
Net loss per share basic and diluted	$ (0.83)	$ (0.36)	$ (0.36)	$ (0.40)
Shares used in computing basic and diluted net loss per share	13,344,231	22,223,941	22,964,279	32,828,697

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ANTHERA PHARMACEUTICALS, INC.
(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS (Continued)

15. RELATED PARTY TRANSACTIONS

The Company engaged an outside service provider whose chief executive officer is a founder of the Company and spouse of an officer of the Company, for clinical management services. In consideration for the services rendered, the Company paid the following fees (in thousands):

	Years Ended December 31,			Period from September 9, 2004 (Date of Inception) to December 31, 2011
	2011	2010	2009	
Project management fees	$ 3,326	$ 534	$ 38	$ 3,991

As of December 31, 2011, the Company had approximately $1.1 million payable to this organization for services performed during the period compared to approximately $0.5 million payable as of December 31, 2010. There were no changes to the scope of services performed by this entity during the year ended December 31, 2011 as compared to the year ended December 31, 2010. Further, we anticipate this relationship to continue for the foreseeable future.

16. SUBSEQUENT EVENTS

On March 9, 2012, an independent data safety monitoring board recommended stopping the Company's VISTA-16 clinical study for varespladib due to a lack efficacy that could not be reasonably overcome in the remainder of the trial. As a result, the Company has closed enrollment in the study and informed all investigators to remove patients from therapy immediately. The Company believes that the DSMB's decision was based on the belief that the risk profile of the drug would not outweigh any benefit. The Company has also closed enrollment in its IMPACTS-2 clinical study for varespladib sodium.

While data continues to be made available, and while the Company continues to assess these data, based on the DSMB recommendation to stop the VISTA-16 study for varespladib, the Company expects not to engage in any further development activities of its $sPLA_2$ portfolio.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ANTHERA PHARMACEUTICALS, INC.

By: /s/ PAUL F. TRUEX

Paul F. Truex
President and Chief Executive Officer (Principal Executive Officer)

Dated: March 14, 2012

POWER OF ATTORNEY

We, the undersigned officers and directors of Anthera Pharmaceuticals, Inc., hereby severally constitute and appoint Paul F. Truex and Christopher P. Lowe, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign for us and in our names in the capacities indicated below any and all amendments to this report, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ PAUL F. TRUEX Paul F. Truex	President, Chief Executive Officer and Director (Principal Executive Officer)	March 14, 2012
/s/ CHRISTOPHER P. LOWE Christopher P. Lowe	Chief Financial Officer (Principal Financial and Accounting Officer)	March 14, 2012
/s/ CHRISTOPHER S. HENNEY Christopher S. Henney	Chairman of the Board of Directors	March 14, 2012
/s/ BOGDAN DZIURZYNSKI Bogdan Dziurzynski	Director	March 14, 2012

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Signature	Title	Date
/s/ JAMES I. HEALY James I. Healy	Director	March 14, 2012
/s/ DONALD J. SANTEL Donald J. Santel	Director	March 14, 2012
/s/ DANIEL K. SPIEGELMAN Daniel K. Spiegelman	Director	March 14, 2012
/s/ DAVID E. THOMPSON David E. Thompson	Director	March 14, 2012
/s/ PETER A. THOMPSON Peter A. Thompson	Director	March 14, 2012

Exhibit Index

Number	Description
3.1	Fifth Amended and Restated Certificate of Incorporation(1)
3.2	Amended and Restated Bylaws(2)
4.1	Specimen certificate evidencing shares of common stock(3)
4.2	Second Amended and Restated Investor Rights Agreement by and among the Company and the other persons and entities party thereto, dated as of July 17, 2009(3)
#10.1	2005 Equity Incentive Plan and form agreements thereunder(4)
#10.2	Amended and Restated 2010 Stock Option and Incentive Plan(5)
#10.3	Form of Amended and Restated Indemnification Agreement(4)
#10.4	Form of Amended and Restated Change in Control Agreement(6)
#10.5	Form of Amended and Restated Severance Benefits Agreement(6)
+10.6	License Agreement among Eli Lilly and Company, Shionogi & Co., Ltd. and the Company, dated as of July 31, 2006(4)
+10.7	Agreement between Shionogi & Co., Ltd. and the Company, dated as of September 7, 2009 (amending License Agreement among Eli Lilly and Company, Shionogi & Co., Ltd. and the Company, dated as of July 31, 2006)(4)
+10.8	Agreement between Eli Lilly and Company and the Company, dated as of September 15, 2009 (amending License Agreement among Eli Lilly Company, Shionogi & Co., Ltd. and the Company, dated as of July 31, 2006)(4)
+10.9	Amended and Restated Technology Transfer Letter Agreement between Eli Lilly and Company and the Company, dated as of July 12, 2006(4)
+10.10	License Agreement between Amgen Inc. and the Company, dated as of December 18, 2007(4)
10.11	Consent to Sublease, by and among the Company, NewTower Trust Company Multi-Employer Property Trust and Guava Technologies, dated as of September 12, 2008(4)
10.12	Sublease by and between the Company and Guava Technologies, dated as of August 1, 2008(4)
10.13	Note and Warrant Purchase Agreement by and among the Company and the other persons and entities party thereto, dated as of July 17, 2009(4)
10.14	Form of Stock Purchase Warrant sold pursuant to that Note and Warrant Purchase Agreement, dated as of July 17, 2009(7)
10.15	Amendment No. 1 to License Agreement between Amgen Inc. and the Company, dated as of October 16, 2009(8)
10.16	Agreement between Eli Lilly and Company and the Company, dated as of January 28, 2010 (amending Agreement between the parties, dated as of September 15, 2009)(9)
10.17	Agreement between Shionogi & Co., Ltd. and the Company, dated as of February 24, 2010 (amending the Agreement between the parties, dated as of September 7, 2009)(10)

Number	Description
10.18	Amendment No. 3 to Stock Purchase Agreement and Escrow Agreement by and among the Company and the other persons and entities party thereto, dated as of February 24, 2010(11)
10.19	Amendment No. 1 to Note Purchase Agreement by and between the Company and the other persons and entities party thereto, dated as of February 24, 2010(12)
#10.20	2010 Employee Stock Purchase Plan(13)
#10.21	Employment Agreement by and between the Company and James Pennington, effective as of May 1, 2010(14)
#10.22	Form of Non-Qualified Stock Option Agreement for Company Employees Under the Anthera Pharmaceuticals, Inc. 2010 Stock Option and Incentive Plan(15)
#10.23	Form of Non-Qualified Stock Option Agreement for Non-Employee Directors Under the Anthera Pharmaceuticals, Inc. 2010 Stock Option and Incentive Plan(15)
#10.24	Form of Incentive Stock Option Agreement Under the Anthera Pharmaceuticals, Inc. 2010 Stock Option and Incentive Plan(15)
#10.25	Form of Restricted Stock Award Agreement Under the Anthera Pharmaceuticals, Inc. 2010 Stock Option and Incentive Plan(15)
#10.26	Restricted Stock Unit Award Agreement Under the Anthera Pharmaceuticals, Inc. 2010 Stock Option and Incentive Plan(16)
10.27	Form of Securities Purchase Agreement, among the Company and the purchasers thereto, dated September 20, 2010(17)
10.28	Form of Registration Rights Agreement, between the Company and the Holders thereto, dated September 20, 2010(18)
10.29	Form of Warrant sold pursuant to that Securities Purchase Agreement, among the Company and the purchasers thereto, dated September 20, 2010(19)
10.30	First Addendum to Sublease by and between the Company and Millipore Corporation, as successor in interest to Guava Technologies, dated as of September 24, 2010(20)
10.31	Second Addendum to Sublease by and between the Company and Millipore Corporation, as a successor in interest to Guava Technologies, dated as of January 12, 2011(21)
10.32	Amendment No. 1 to 2010 Employee Stock Purchase Plan(22)
10.33	Loan and Security Agreement by and between the Company, Hercules Technology II, L.P. and Hercules Technology Growth Capital, Inc., dated as of March 25, 2011(23)
10.34	Form of Warrant Agreement dated as of March 25, 2011(24)
10.35	Lease by and between the Company and MEPT Mount Eden LLC, dated as of May 4, 2011(25)
10.36	Certificate of Amendment to Amended and Restated 2010 Stock Option and Incentive Plan(26)
10.37	Second Amended and Restated Change in Control Agreement, by and between the Company and Dr. Colin Hislop, dated as of August 5, 2011(27)
10.38	Second Amended and Restated Change in Control Agreement, by and between the Company and Dr. Debra Odink, dated as of August 5, 2011(28)

Number	Description
10.39	Second Amended and Restated Change in Control Agreement, by and between the Company and Ms. Georgina Kilfoil, dated as of August 5, 2011(29)
14.1	Code of Business Conduct and Ethics(30)
21.1	Subsidiaries of Anthera Pharmaceuticals, Inc.
23.1	Consent of Deloitte &Touche LLP, independent registered public accounting firm
24.1	Power of Attorney (included on signature page hereto)
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350, as adopted pursuant Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document.
101.SCH*	XBRL Taxonomy Extension Schema Document.
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.

+ Certain provisions of this Exhibit have been omitted pursuant to a request for confidential treatment

# Indicates management contract or compensatory plan, contract or agreement

* In accordance with Rule 406T of Regulation S-T, the XBRL related information in Exhibit 101 to this Quarterly Report on Form 10-Q is furnished and shall not be deemed to be "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of the section, and shall not be part of any registration statement or other document filed under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

(1) Filed as Exhibit 3.6 to the registrant's Amendment No. 4 to Registration Statement on Form S-1 (File No. 333-161930), filed February 3, 2010 and incorporated herein by reference.

(2) Filed as Exhibit 3.7 to the registrant's Amendment No. 4 to Registration Statement on Form S-1 (File No. 333-161930), filed February 3, 2010 and incorporated herein by reference.

(3) Filed as the same numbered exhibit to the registrant's Amendment No. 3 to Registration Statement on Form S-1 (File No. 333-161930), filed January 29, 2010 and incorporated herein by reference.

(4)

Filed as the same numbered exhibit to the registrant's Registration Statement on Form S-1 (File No. 333-161930), filed September 15, 2009 and incorporated herein by reference.

(5)

Filed as Appendix A to the registrant's Definitive Proxy Statement on Schedule 14A filed June 8, 2010 and incorporated herein by reference.

(6)

Filed as the same numbered exhibit to the registrant's Amendment No. 1 to Registration Statement on Form S-1 (File No. 333-161930), filed October 19, 2009 and incorporated herein by reference.

(7)

Filed as Exhibit 10.15 to the registrant's Registration Statement on Form S-1 (File No. 333-161930), filed September 15, 2009 and incorporated herein by reference.

(8)

Filed as Exhibit 10.18 to the registrant's Amendment No. 1 to Registration Statement on Form S-1 (File No. 333-161930), filed October 19, 2009 and incorporated herein by reference.

(9)

Filed as Exhibit 10.25 to the registrant's Amendment No. 3 to Registration Statement on Form S-1 (File No. 333-161930), filed January 29, 2010 and incorporated herein by reference.

(10)

Filed as Exhibit 10.26 to the registrant's Post-Effective Amendment No. 1 to Registration Statement on Form S-1 (File No. 333-161930), filed February 26, 2010 and incorporated herein by reference.

(11)

Filed as Exhibit 10.27 to the registrant's Post-Effective Amendment No. 1 to Registration Statement on Form S-1 (File No. 333-161930), filed February 26, 2010 and incorporated herein by reference.

(12)

Filed as Exhibit 10.28 to the registrant's Post-Effective Amendment No. 1 to Registration Statement on Form S-1 (File No. 333-161930), filed February 26, 2010 and incorporated herein by reference.

(13)

Filed as Appendix B to the registrant's Definitive Proxy Statement on Schedule 14A filed June 8, 2010 and incorporated herein by reference.

(14)

Filed as Exhibit 10.1 to the registrant's Current Report on Form 8-K filed June 4, 2010 and incorporated herein by reference

(15)

Filed as Exhibit 10.2 to the registrant's Amendment No. 4 to Registration Statement on Form S-1 (File No. 333-161930), filed February 3, 2010 and incorporated herein by reference.

(16)

Filed as Exhibit 10.1 to the registrant's Quarterly Report on Form 10-Q filed May 14, 2010 and incorporated herein by reference.

(17)

Filed as Exhibit 10.1 to the registrant's Current Report on Form 8-K filed September 22, 2010 and incorporated herein by reference.

(18)

Filed as Exhibit 10.2 to the registrant's Current Report on Form 8-K filed September 22, 2010 and incorporated herein by reference.

(19)

Filed as Exhibit 4.1 to the registrant's Current Report on Form 8-K filed September 22, 2010 and incorporated herein by reference.

(20)

Filed as Exhibit 10.40 to the registrant's Registration Statement on Form S-1 (File No. 333-170099), filed October 22, 2010 and incorporated herein by reference.

(21)

Filed as Exhibit 10.41 to the registrant's Annual Report on Form 10-K filed March 7, 2011 and incorporated herein by reference.

(22)

Filed as Exhibit 10.42 to the registrant's Annual Report on Form 10-K filed March 7, 2011 and incorporated herein by reference.

(23)

Filed as Exhibit 10.1 to the registrant's Current Report on Form 8-K filed March 29, 2011 and incorporated herein by reference.

(24)

Filed as Exhibit 10.2 to registrant's Current Report on Form 8-K filed March 29, 2011 and incorporated herein by reference.

(25)

Filed as Exhibit 10.4 to registrant's Quarterly Report on Form 10-Q filed May 13, 2011 and incorporated herein by reference.

(26)

Filed as Exhibit 10.2 to registrant's Quarterly Report on Form 10-Q filed August 12, 2011 and incorporated herein by reference.

(27)

Filed as Exhibit 10.1 to the registrant's current Report on Form 8-K filed with the SEC on August 9, 2011, and incorporated herein by reference.

(28)

Filed as Exhibit 10.2 to the registrant's current Report on Form 8-K filed with the SEC on August 9, 2011, and incorporated herein by reference.

(29)

Filed as Exhibit 10.3 to the registrant's current Report on Form 8-K filed with the SEC on August 9, 2011, and incorporated herein by reference.

(30)

Filed as the same numbered exhibit to the registrant's Annual Report on Form 10-K filed March 7, 2011 and incorporated herein by reference.