

ALEXION PHARMACEUTICALS INC

Form 10-K

February 23, 2010

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

x Annual report pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934
For the fiscal year ended December 31, 2009

or

.. Transition report pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934
For the transition period from to

Commission file number: 0-27756

ALEXION PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of Incorporation or Organization)

13-3648318
(I.R.S. Employer Identification No.)

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352 Knotter Drive, Cheshire Connecticut 06410

(Address of Principal Executive Offices) (Zip Code)

203-272-2596

(Registrant's telephone number, including area code)

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

Common Stock, par value \$0.0001

Rights to Purchase Junior Participating

Cumulative Preferred Stock, par value \$0.0001

Name of each exchange on which registered: The Nasdaq Stock Market LLC

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

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

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

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 ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) 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. ☐

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 ☒ Accelerated filer ☐ Non-accelerated filer ☐ (Do not check if a smaller reporting company)

Smaller reporting company ☐

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

The aggregate market value of the Common Stock held by non-affiliates of the registrant, based upon the last sale price of the Common Stock reported on The Nasdaq Stock Market LLC on June 30, 2009, was approximately \$3,615,450,070.

The number of shares of Common Stock outstanding as of February 16, 2010 was 89,137,398.

DOCUMENTS INCORPORATED BY REFERENCE

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Portions of the registrant's Definitive Proxy Statement to be used in connection with its Annual Meeting of Stockholders to be held on May 12, 2010, are incorporated by reference into Part III of this report.

PART I

Unless the context requires otherwise, references in this report to we, our, us, Company and Alexion refer to Alexion Pharmaceuticals, Inc. and its subsidiaries.

Note Regarding Forward-Looking Statements

This annual report on Form 10-K contains forward-looking statements that have been made pursuant to the provisions of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are based on current expectations, estimates and projections about our industry, management's beliefs and certain assumptions made by our management, and may include, but are not limited to, statements regarding the potential benefits and commercial potential of Soliris® (eculizumab) for its approved indications and any future indications, timing and effect of sales of Soliris in various markets worldwide, level of future Soliris sales and collections, costs, expenses and capital requirements, cash outflows, cash from operations, status of reimbursement, price approval and funding processes in various countries worldwide, progress in developing commercial infrastructure and interest about Soliris in the patient, physician and payor communities, the safety and efficacy of Soliris and our product candidates, estimates of the potential markets and estimated commercialization dates for Soliris around the world, sales and marketing plans, any changes in the current or anticipated market demand or medical need for Soliris, status of our ongoing clinical trials, commencement dates for new clinical trials, clinical trial results, evaluation of our clinical trial results by regulatory agencies in other countries, prospects for regulatory approval in other countries, the need for additional research and testing, the uncertainties involved in the drug development process and manufacturing, our future research and development activities, assessment of competitors and potential competitors, estimates of the capacity of manufacturing and other facilities to support Soliris and our product candidates, the timing for regulatory approval of our manufacturing facility in Rhode Island, potential costs resulting from product liability or other third party claims, the sufficiency of our existing capital resources and projected cash needs, assessment of impact of recent accounting pronouncements, and the effect of shifting currency exchange rates. Words such as anticipates, expects, intends, plans, believes, seeks, estimates, variations of such words and similar expressions are intended to identify such forward-looking statements, although not all forward-looking statements contain these identifying words. These statements are not guarantees of future performance and are subject to certain risks, uncertainties, and assumptions that are difficult to predict; therefore, actual results may differ materially from those expressed or forecasted in any such forward-looking statements. Such risks and uncertainties include, but are not limited to, those discussed later in this report under the section entitled Risk Factors. Unless required by law, we undertake no obligation to update publicly any forward-looking statements, whether because of new information, future events or otherwise. However, readers should carefully review the risk factors set forth in other reports or documents we file from time to time with the Securities and Exchange Commission.

Item 1. BUSINESS.

Overview

Alexion Pharmaceuticals, Inc. was incorporated in Delaware in 1992. We are a biopharmaceutical company engaged in the discovery, development and commercialization of biologic therapeutic products aimed at treating patients with severe and life-threatening disease states, including hematologic, kidney and neurologic diseases, transplant rejection, cancer and autoimmune disorders. Our marketed product Soliris® (eculizumab) is the first and only therapy approved for the treatment of patients with paroxysmal nocturnal hemoglobinuria, or PNH.

Soliris is designed to inhibit a specific aspect of the complement component of the immune system and thereby treat inflammation associated with chronic hematologic, kidney and neurological disorders, transplant rejection, and autoimmune disorders. Soliris is a humanized monoclonal antibody that generally blocks complement activity for one to two weeks after a single dose at the doses currently prescribed. The initial indication for which we received approval for Soliris is PNH. PNH is a rare, debilitating and life-threatening, acquired genetic deficiency blood disorder defined by the destruction of red blood cells, or hemolysis. The chronic hemolysis in patients with PNH may be associated with life-threatening thromboses, recurrent pain, kidney disease, disabling fatigue, impaired quality of life, severe anemia, pulmonary hypertension, shortness of breath and intermittent episodes of dark-colored urine (hemoglobinuria).

Soliris was granted marketing approval by the U.S. Food and Drug Administration, or FDA, and by the European Commission, or E.C., in 2007 and now has received approval in several other countries worldwide. Additionally, Soliris was granted orphan drug designation for the treatment of PNH in the United States, Europe, Japan and several other territories.

In April 2009 and August 2009, the FDA and E.C., respectively, granted Soliris orphan drug designation for the treatment of patients with atypical Hemolytic Uremic Syndrome, or aHUS, a rare, inherited, and life-threatening complement-inhibitor deficiency disease that often progresses to end-stage kidney disease or failure. Alexion is currently enrolling patients in four clinical studies of Soliris as an investigational treatment for adolescent and adult patients with aHUS.

Recent Developments

In December 2009, our Rhode Island manufacturing facility received regulatory approval from the E.C. for the production of Soliris. In the fourth quarter of 2009, the FDA commenced its inspection of our Rhode Island manufacturing facility and requested additional information regarding our manufacturing processes which we plan to address in 2010.

In January 2010, we amended and restated our existing credit agreement with Bank of America, N.A. to, among other things, increase our revolving credit facility by \$25 million. The amended agreement provides for a \$50 million revolving credit facility, with up to a \$20 million sublimit for letters of credit that can be used for working capital requirements and other general corporate purposes. With the consent of the lenders and the administrative agent and subject to satisfaction of certain conditions, we may increase the facility to \$75 million in accordance with its terms.

Products and Development Programs

The human immune system defends the body from attack or invasion by infectious agents or pathogens. This is accomplished through a complex system of proteins and cells, primarily complement proteins, antibodies and white blood cells, each with a specialized function. Under normal circumstances, complement proteins, together with antibodies and white blood cells, act to protect the body by removing:

harmful micro-organisms;

cells containing foreign proteins known as antigens; and

potential disease-causing combinations of antigens and antibodies known as immune complexes.

When activated by stimuli, the immune system triggers a series of enzymatic and biochemical reactions called the complement cascade that results in an inflammatory response. This inflammatory response is one of the immune system's weapons against foreign pathogens or otherwise diseased tissue. However, under certain circumstances, the complement cascade may cause excessive or inappropriate activation, which may result in acute and chronic inflammatory conditions and damage to healthy tissues.

Some of the hematologic, autoimmune, or inflammatory diseases in which the complement cascade is activated include:

PNH;

atypical hemolytic uremic syndrome;

transplantation;

myasthenia gravis;

multifocal motor neuropathy;

asthma;

autoimmune and other hemolytic anemias;

cold agglutinin disease;

membranoproliferative glomerulonephropathy type II (dense deposit disease)

Guillain-Barré syndrome;

rheumatoid arthritis;

age-related macular degeneration;

antiphospholipid antibody syndrome including the catastrophic form;

autoimmune kidney disease;

lupus;

inflammatory skin and muscle disorders; and

specific types of multiple sclerosis.

We have focused our product development programs on anti-inflammatory therapeutics for diseases for which we believe current treatments are either non-existent or inadequate. Eculizumab is an antibody known as a C5 complement inhibitor, or a C5 Inhibitor, which is designed to selectively block the production of inflammation-causing proteins of the complement cascade. We believe that selective suppression of this immune response may provide a significant therapeutic advantage relative to existing therapies. In addition to PNH, for which the use of eculizumab has been approved in the United States, Europe and several other territories, we believe that C5 Inhibitors may be useful in the treatment of a variety of other serious diseases and conditions resulting from aberrant complement response.

Our clinical programs, including investigator sponsored clinical programs, are as follows:

Product	Development Area	Indication	Development Stage
Soliris		Paroxysmal Nocturnal Hemoglobinuria (PNH)	Commercial
Soliris	Nephrology	Atypical HUS	Phase II
		MPGN II (Dense Deposit Disease*)	Phase II
	Transplant	Presensitized Renal Transplant*	Phase II
		Presensitized Cardiac Transplant	Preclinical
	Neurology	Myasthenia Gravis	Phase II
		Neuromyelitis Optica*	Phase II
		Multifocal Motor Neuropathy*	Phase II
		Dry Age-Related Macular Degeneration (AMD)*	Phase II
	Hematology	Cold agglutinin disease	Preclinical
		Catastrophic Antiphospholipid Syndrome	Preclinical
Samalizumab	Oncology	Chronic Lymphocytic Leukemia	Phase I/II
		Multiple Myeloma	Phase I/II

* Investigator Initiated Trial

C5 Inhibitors

Complement proteins are a series of inactive proteins circulating in the blood. When activated by stimuli, including those associated with both acute and chronic inflammatory disorders, these inactive complement proteins are split by enzymes known as convertases into activated by-products through the complement cascade.

Some of these by-products, notably C3b, are helpful in fighting infections and inhibiting autoimmune disorders. However, the by-products generated by the cleavage of C5, known as C5a and C5b-9, generally cause harmful inflammation if inappropriately or over-activated. The inflammatory by-products of C5 cause:

lysis, or destruction, of red blood cells that are deficient in complement inhibitors;

activation of platelets, white blood cells, and blood-vessel lining endothelial cells that are deficient in complement inhibitors;

activation and destruction of muscle and other tissue cells;

activation of white blood cells;

attraction of white blood cells into inflamed tissues;

production of inflammatory chemicals including tumor necrosis factor-alpha;

activation of blood-clotting systems;

activation of blood vessel-lining cells called endothelial cells, allowing leakage of white blood cells into tissue;

activation of kidney cells; and

initiation of cell suicide programs in heart cells.

The following diagram illustrates the complement cascade:

Because of the generally beneficial effects of the components of the complement cascade prior to C5 and the potent inflammatory, destructive and disease-promoting effects of the cleavage products of C5, we have identified C5 as an effective anti-inflammatory drug target. Our C5 Inhibitor, eculizumab, specifically and tightly binds to C5 blocking its cleavage into harmful by-products, which inhibits subsequent damage from the downstream inflammatory mediators.

In human studies, eculizumab, which we sell under the name Soliris, had the following effects in patients with PNH:

reduction of red blood cell destruction (hemolysis);

reduction in incidence of life-threatening blood clots (thromboses);

improvement of severe anemia;

improvement of disabling fatigue and other quality of life outcomes;

decrease or elimination of blood transfusion requirements;

reduction of inflammation and blood clotting activation;

reduction in chronic kidney disease; and

reduction in incidence of high blood pressure in the lungs (pulmonary hypertension).

In addition, in laboratory and animal models of human disease, we have published results that the administration of eculizumab has demonstrated the following:

prevention and amelioration of asthmatic attacks;

enhancement of survival in organ transplantation models;

prevention of kidney damage and preservation of kidney function in a model of complement inhibitor deficiency;

prevention of nerve degeneration and improvement in function in myasthenia gravis models;

prevention of nerve degeneration and improvement in function in multifocal motor neuropathy model;

reduction of brain damage in cerebral ischemia, or reduced blood flow to brain tissue;

enhancement of survival in a model of lupus; and

preservation of kidney function in nephritis, or inflammation of kidney tissue.

Soliris

Soliris is designed to inhibit a specific aspect of the complement component of the immune system and thereby treat inflammation related to chronic hematologic, neurologic and autoimmune disorders and transplant rejection. Soliris is a humanized antibody which, administered at the doses currently prescribed, generally blocks complement activity for one to two weeks after a single dose.

Soliris was granted marketing approval by the U.S. Food and Drug Administration, or FDA, and by the European Commission, or E.C., in 2007 and now has received approval in several other countries worldwide. Additionally, Soliris was granted orphan drug designation for the treatment of PNH in the United States, Europe, Japan and several other territories.

Orphan drug designation generally entitles us to exclusivity for certain periods of time, subject to limited circumstances. However, if a competitive product that is the same as Soliris, as defined under the applicable regulations, is shown to be clinically superior to our product in the treatment of PNH, or if a competitive product is different from Soliris, as defined under the applicable regulations, the orphan drug exclusivity we have obtained may not block the approval of such competitive product.

About Paroxysmal Nocturnal Hemoglobinuria, or PNH

PNH is a rare, debilitating and life-threatening, acquired genetic deficiency blood disorder defined by the destruction of red blood cells. Patients with PNH have an acquired genetic deficiency in certain protective proteins on the surface of their blood cells, allowing their own complement system to attack and destroy these blood cells. Patients with PNH suffer from chronic complement activation of some of their blood cells and hemolysis, or destruction of red blood cells caused by the C5 cleavage product C5b-9. This hemolysis is believed to lead to further clinical complications including thromboses, kidney disease, liver dysfunction, disabling fatigue, impaired quality of life, recurrent pain, shortness of breath, pulmonary hypertension, intermittent

episodes of dark colored urine (hemoglobinuria), and anemia. The red blood cell destruction may be sufficiently large that recurrent blood transfusions are necessary to support normal red blood cell function. The prevalence, or number of affected patients at any one time, has not been definitively determined but has been estimated at approximately 8,000 – 10,000 total patients in North America and Western Europe. Approximately one-half of the patients with PNH die from the disease within 10-15 years of diagnosis. Soliris is the only therapy approved for PNH.

Eculizumab Development Programs

We believe that eculizumab may be useful in treating other complement mediated diseases and conditions. Our ongoing eculizumab development programs include:

Eculizumab Lead Development Area: Nephrology

Lead Program Atypical Hemolytic Uremic Syndrome (aHUS)

Atypical hemolytic uremic syndrome (aHUS) is a rare life-threatening disease characterized by the triad of microangiopathic hemolytic anemia, low platelet count and acute renal failure. It is a disorder of the regulation of the alternative complement pathway; many patients exhibit genetic mutations in complement inhibitor genes. It is a thrombotic microangiopathy that affects small blood vessels leading to chronic intravascular hemolysis, consumption of platelets, and clots in kidney blood vessels, resulting in renal failure. The prognosis for patients with aHUS is generally poor. Approximately 70% of patients with the most common mutation experience chronic renal insufficiency, chronic dialysis, or death by one year after the first clinical episode. Atypical HUS commonly recurs in patients who undergo renal transplantation. In addition, depending on the mutation, the disease can lead to loss of the transplanted kidney in up to approximately 90% of aHUS patients who undergo kidney transplantation.

Approximately 50% of patients with aHUS have been identified to have genetic mutations in one of the complement control proteins or neutralizing autoantibodies to complement regulatory factors, which can lead to uncontrolled complement activation. Excessive complement activation may contribute to the blood vessel inflammation and clotting by stimulating activation of white blood cells, platelets, and the endothelial lining of blood vessels.

In 2009, the FDA and E.C. granted Soliris orphan drug designation for the treatment of patients with aHUS. We are currently enrolling in our multi-national, multi-center clinical trials evaluating eculizumab for the treatment of both plasma-sensitive and plasma-resistant adolescent and adult patients with aHUS.

Dense Deposit Disease (DDD)

Dense deposit disease, or DDD, also called Type II membrano-proliferative glomerulonephritis, is a rare form of glomerulonephritis, associated with genetic mutations in complement inhibitor genes leading to sustained complement activation and inflammation. Clinically, it is characterized by the onset of severe proteinuria (excess protein in the urine), often accompanied by nephrotic syndrome which is refractory to immunosuppressant therapy. In most cases, the disease evolves into chronic renal failure, requiring dialysis and renal transplantation.

We are aware that independent investigators have commenced a study to evaluate eculizumab in patients with dense deposit disease.

Eculizumab Lead Development Area: Transplant

Lead Program Acute Humoral Rejection (AHR) in Presensitized Kidney Transplant Patients

Patients undergoing solid organ transplantation may experience severe acute humoral rejection (AHR) in the early post-transplant period. For example, in a patient undergoing a kidney transplant this may be characterized by the acute onset of renal dysfunction and rapid progression to destruction of the transplanted kidney.

AHR results when antibodies in the transplant recipient vigorously attacks the blood vessels of the donor kidney. During severe AHR, these donor specific antibodies bind to the blood vessel lining of the donor organ and initiate activation of the complement cascade, resulting in severe blood vessel inflammation and clotting. Administration of a C5 inhibitor in animal models of AMR inhibits complement activation, tissue damage and transplant rejection.

We are aware that independent investigators are continuing to enroll patients in clinical trials to evaluate eculizumab in presensitized renal transplant patients at elevated risk for AHR.

We are developing protocols to initiate multi-national, multi-site controlled clinical trials of eculizumab in this clinical setting and are further considering expansion of development efforts to include investigation of eculizumab as a treatment for patients undergoing transplantation of other organs.

Other Eculizumab Development Programs:

Myasthenia Gravis (MG)

Myasthenia gravis (MG) is a rare autoimmune syndrome characterized by autoantibodies attacking a specific target in the nerve-muscle junctions leading to failure of neuromuscular transmission. Patients with MG initially experience weakness in their ocular, or eye muscles, and the disease typically progresses to head, spinal, limb and respiratory muscles. Symptoms can include drooping eyelid, blurred vision, slurred speech, difficulty chewing or swallowing, weakness in the arms and legs and difficulty breathing.

In an experimental animal model of MG, administration of a C5 Inhibitor was found to prevent experimentally acquired MG and to inhibit disease progression.

In the third quarter of 2007, we filed an IND with the FDA to initiate clinical development and received authorization from the FDA in July 2008. Patient enrolment is currently ongoing in this Phase II clinical trial in the US, and we are opening sites in Europe as well.

Multifocal Motor Neuropathy (MMN)

Multifocal motor neuropathy, or MMN, is a rare autoimmune disorder in which autoantibodies attack the nerve-muscle junctions. Patients with MMN demonstrate a slow progressive asymmetrical weakness of limbs without sensory loss. Antibodies and complement activation products have been identified at the nerve-muscle junctions in diseases similar to MMN. Complement inhibition has recently been shown to be protective in animal models of MMN.

We are aware that independent investigators are examining the role of eculizumab for the treatment of patients with multifocal motor neuropathy.

Neuromyelitis Optica (NMO)

Neuromyelitis optica (NMO) is a rare autoimmune disease of the central nervous system (CNS) that affects the optic nerves and spinal cord. Individuals with NMO develop optic neuritis, which causes pain in the eye and vision loss, and transverse myelitis, which causes weakness, numbness, and sometimes paralysis of the arms and legs, along with sensory disturbances and loss of bladder and bowel control. In the past, NMO was considered to be a severe variant of multiple sclerosis (MS) because both can cause attacks of optic neuritis and myelitis. The recent discovery of an antibody in the blood of individuals with NMO gives doctors a reliable biomarker to distinguish NMO from MS.

We are aware that independent investigators are examining the role of eculizumab for the treatment of patients with neuromyelitis optica.

Cold Agglutinin Disease (CAD)

Cold Agglutinin Disease (CAD) is a rare autoimmune hemolytic anaemia characterized by activation of the complement cascade and sticking together (agglutination) of red blood cells. Patients may be typically first afflicted after reaching the age of sixty.

As blood is cooled during circulation through the distal parts of the arms and legs, specific antibodies bind to the red blood cells resulting in activation of the complement cascade and sticking together (agglutination) of red blood cells leading to hemolysis. Clinical manifestations of CAD include symptoms of chronic hemolysis such as fatigue, dyspnea, weakness, hemoglobinuria, kidney damage, pallor and jaundice as well as cold-induced circulatory symptoms ranging from mild discomfort to severe pain in affected limbs and tissues. In the most severe cases, complications of progressive hemolysis or anemia, or complications of blood transfusions, may result in death. Current therapies, including cold avoidance, corticosteroids, immunosuppressive drugs, intravenous immunoglobulin G (IgG) and chemotherapy agents are largely ineffective in controlling hemolysis in patients with CAD.

We are considering clinical development of eculizumab for the treatment of patients with cold agglutinin disease.

Age Related Macular Degeneration (Dry Form) (AMD)

Age-related macular degeneration is a chronic eye disease marked by deterioration of tissue in the part of the eye responsible for central vision. The deterioration occurs in the macula, which is in the center of the retina the layer of tissue on the inside back wall of the eye. Macular degeneration can lead to total blindness, and early in the progression of the disease can worsen a patient's quality of life by blurring or causing a blind spot in a patient's central vision. Macular degeneration tends to affect adults age 50 and older. Dry macular degeneration, in which tissue deterioration is not accompanied by bleeding, is the most common form of the disease.

We are aware that an independent investigator is examining eculizumab in patients with the dry form of age-related macular degeneration.

Catastrophic Antiphospholipid Syndrome (CAPS)

Antiphospholipid syndrome, or APS, is an autoimmune condition characterized by blood vessel clotting in the presence of antibodies that target specific proteins (antiphospholipid, or aPL). Catastrophic antiphospholipid

syndrome, or CAPS, is a rare and extreme form of APS characterized by near simultaneous clotting of blood vessels in multiple organs leading to multiorgan failure. Initial mortality in patients experiencing a first episode of CAPS is approximately one-quarter to one-half and treatment with anticoagulants may be ineffective.

In pregnant patients with APS, activated complement proteins are identified in the placenta. In animal models of APS, inhibition of complement rather than anticoagulation is required to block fetal loss. C5 inhibitor treatment in animal models of APS was shown to inhibit blood clotting and tissue damage.

Oncology Program: Samalizumab (Anti-CD200 Antibody)

The FDA authorized our IND to evaluate the activity of samalizumab, an antibody to the immune regulator CD200, in patients with chronic lymphocytic leukemia, or CLL. We continue dosing of CLL patients with samalizumab, which commenced in the second quarter of 2008, and have begun to screen and enroll patients with multiple myeloma as we expand our samalizumab clinical program.

Chronic lymphocytic leukemia (CLL) is a type of cancer of the blood and bone marrow. Chronic lymphocytic leukemia most commonly affects older adults, though it may occur at any age and rarely can affect children.

Multiple myeloma, also known as plasma cell myeloma, is the second-most common cancer of the blood. It is the most common type of plasma cell neoplasm. Multiple myeloma accounts for approximately 1% of all cancers and 2% of all deaths from cancer.

Manufacturing

We currently rely on two facilities, including our own facility in Rhode Island, for commercial quantities of Soliris. We obtain drug product to meet our requirements for clinical studies using both internal and third-party contract manufacturing capabilities. For both clinical and commercial requirements, we have contracted and expect to continue contracting for product finishing, vial filling and packaging through third parties.

In July 2006, we acquired a manufacturing plant in Smithfield, Rhode Island for the future commercial production of Soliris and development and manufacturing of future products. We submitted a supplemental BLA during the third quarter of 2009 for commercial production of eculizumab at this facility. In December 2009, our Rhode Island manufacturing facility received regulatory approval from the E.C. for the production of Soliris. In the fourth quarter of 2009, the FDA commenced its inspection of our Rhode Island manufacturing facility and requested additional information regarding our manufacturing processes which we plan to address in 2010.

We also use our Rhode Island facility for the production and purification of certain of our product candidates for clinical studies.

Our most significant agreement with a third party manufacturer is the large-scale product supply agreement with Lonza Sales AG, or Lonza, dated December 18, 2002, which has been amended from time to time. This agreement, the Lonza Agreement, relates to the manufacture of eculizumab. An amendment to the Lonza Agreement, dated June 8, 2007, provides for additional production and minimum quantity purchase commitments of Soliris of \$30 million to \$35 million from 2009 through 2013. Such commitments may be cancelled only in limited circumstances. If we terminate the Lonza Agreement without cause, we will be required to pay for

product scheduled for manufacture under our arrangement. Under an existing arrangement with Lonza, we expect to pay Lonza a royalty on sales of Soliris manufactured at our Rhode Island facility.

Sales and Marketing

We have established an organization to support current and future sales of Soliris in the United States, in the major markets in Europe, Latin America and in Japan and the Asia Pacific region. Our sales force is small compared to other drugs with similar gross revenues; however, we believe that a relatively smaller sales force is appropriate to effectively market Soliris due to the limited PNH patient population. If we receive regulatory approval in new territories, we may expand our own commercial organizations in such territories and market and sell Soliris through our own sales force in these territories. However, we will evaluate each jurisdiction on a country-by-country basis, and it is possible that we will promote Soliris in collaboration with marketing partners or rely on relationships with one or more companies with established distribution systems and direct sales forces in certain countries.

Customers

In the United States, our customers are primarily specialty distributors and specialty pharmacies which supply physician office clinics, hospital outpatient clinics, infusion clinics or home health care providers. We also sell Soliris to government agencies. Outside the United States, our customers are primarily hospitals, hospital buying groups, pharmacies, other health care providers and distributors.

During 2009 and 2008, sales to our single largest customer, AmerisourceBergen, accounted for 20% and 21%, respectively, of our Soliris net product sales, and no other customer individually accounted for more than 10% of total net product sales.

Because of the pricing of Soliris, the limited number of patients, the short period from sale of product to patient infusion and the lack of contractual return rights, Soliris customers generally carry limited inventory. We monitor inventory within our distribution channel to determine whether deferral of sales is required. To date, actual refunds and returns have been negligible.

Please also see Management's Discussion and Analysis Revenues, and Note 16 of the Consolidated Financial Statements included in this Form 10-K, for financial information about geographic areas.

Patents and Proprietary Rights

Patents and other proprietary rights are important to our business. Our policy is to file patent applications to protect technology, inventions and improvements to our technologies that are considered important to the development of our business. We also rely upon our trade secrets, know-how, and continuing technological innovations, as well as patents that we have licensed or may license from other parties, to develop and maintain our competitive position.

We have filed several U.S. patent applications and international counterparts of certain of these applications. In addition, we have in-licensed several additional U.S. and international patents and patent applications. As of December 31, 2009, we own or in-license over 74 U.S. patents and 35 U.S. patent applications. These patents and patent applications relate to technologies or products in the C5 Inhibitor program, high throughput screening, vectors, cancer, recombinant antibodies, and other technologies. We own or in-license 39 foreign patents and

146 pending foreign patent applications. We owe royalties to a third party and other fees to owners of one or more patents in connection with the manufacture and sale of Soliris for PNH, and we may owe royalties and fees to other third parties with respect to any future commercial manufacture and sale of Soliris and our product candidates.

Our success will depend in part on our ability to obtain and maintain U.S. and international patent protection for our products and development programs, to preserve our trade secrets and proprietary rights, and to operate without infringing on the proprietary rights of third parties or having third parties circumvent our rights. Because of the length of time and expense associated with bringing new products through development and regulatory approval to the marketplace, the health care industry has traditionally placed considerable importance on obtaining patent and trade secret protection for significant new technologies, products and processes. Significant legal issues remain to be resolved as to the extent and scope of patent protection for biotechnology products and processes in the United States and other important markets outside of the United States. Accordingly, there can be no assurance that patent applications owned or licensed by us will issue as patents, or that any issued patents will afford meaningful protection against competitors. Moreover, once issued, patents are subject to challenge through both administrative and judicial proceedings in the United States and in foreign jurisdictions. Such proceedings include interference proceedings before the U.S. Patent and Trademark Office and opposition proceedings before the European Patent Office. Litigation may be required to enforce our intellectual property rights. Any litigation or administrative proceeding may result in a significant commitment of our resources and, depending on outcome, may adversely affect the validity and scope of certain of our patent or other proprietary rights.

We are aware of broad patents owned by others relating to the manufacture, use and sale of recombinant humanized antibodies, recombinant human antibodies, and recombinant human single chain antibodies. Soliris and our product candidates are either genetically engineered antibodies, including recombinant humanized antibodies, recombinant human antibodies, or recombinant human single chain antibodies. We have received notices from the owners of patents claiming that their patents may be infringed by the development, manufacture or sale of Soliris or some of our drug candidates. We are also aware of other patents owned by third parties that might be claimed by such third parties to be infringed by the development and commercialization of Soliris or some of our drug candidates. In respect to some of these patents, we have obtained licenses, or expect to obtain licenses. However, with regard to such other patents, we have determined in our judgment that:

our products do not infringe the patents;

the patents are not valid; or

we have identified and are testing various modifications that we believe should not infringe the patents and which should permit commercialization of our product candidates.

If any patent holder successfully challenges our judgment that our products do not infringe their patents or that their patents are invalid, we could be required to pay costly damages or to obtain a license to sell or develop our drugs. A required license may be costly or may not be available on acceptable terms, if at all. A costly license, or inability to obtain a necessary license, could materially and adversely affect our ability to commercialize our products, including Soliris.

We record actual and estimated royalties to third parties related to the sale and commercial manufacture of Soliris. These estimates are influenced by our assessment of the likelihood of third parties asserting that their patents are infringed by the manufacture or sale of Soliris and the likely outcome of any such assertion. On a periodic basis and based on specific events such as the outcome of litigation, we may reassess these estimates, resulting in adjustments to cost of sales.

It is our policy to require our employees, consultants and parties to collaborative agreements to execute confidentiality agreements upon the commencement of employment or consulting relationships or collaborations with us. These agreements generally provide that all confidential information developed or made known during the course of the relationship with us is to be kept confidential and not to be disclosed to third parties except in specific circumstances. In the case of employees, the agreements also provide that all inventions resulting from work performed for us, utilizing our property or relating to our business and conceived or completed by the individual during employment shall be our exclusive property to the extent permitted by applicable law.

License Agreements

In March 1996, we entered into a license agreement with the Medical Research Council, or MRC, whereby MRC granted to us worldwide non-exclusive rights to certain patents related to the humanization and production of monoclonal antibodies. We pay MRC royalties on a quarterly basis with respect to sales of Soliris. The royalty is payable until the last to expire of the patents covered by the license agreement, which is expected to be in 2015. MRC may terminate the license if we file for bankruptcy or become insolvent, or if we fail to perform its obligations under the agreement and such failure is not remedied within three months after delivery of notice. Under the agreement, we agreed to (a) make royalty payments with respect to sales of licensed products, (b) promote the sale of Soliris of good marketable quality, and (c) use reasonable endeavors to meet market demand for licensed products.

In December 2008, we entered into a patent license agreement with PDL BioPharma, or PDL, in connection with the resolution of all civil claims previously filed by PDL and all counterclaims previously filed by Alexion. Pursuant to the license agreement, we paid \$25 million for a nonexclusive, irrevocable, perpetual worldwide license to some claims of certain PDL patents and a covenant not to sue from PDL for other claims of such PDL patents, in each case for the commercialization of Soliris for all indications.

We are party to other license agreements related to the manufacture and sale of Soliris; however, as with the PDL license agreement, we do not currently pay royalties under such agreements with respect to sales of Soliris. In the future, we expect to pay Lonza a royalty on sales of Soliris manufactured at our Rhode Island manufacturing facility.

Government Regulation

The preclinical studies and clinical testing, manufacture, labeling, storage, record keeping, advertising, promotion, export, and marketing, among other things, of our products and product candidates, including Soliris, are subject to extensive regulation by governmental authorities in the U.S. and other countries. In the U.S., pharmaceutical products are regulated by the FDA under the Federal Food, Drug, and Cosmetic Act and other laws, including, in the case of biologics, the Public Health Service Act. Soliris is regulated by the FDA as a biologic. Biologics require the submission of a Biologics License Application, or BLA, and approval by FDA prior to being marketed in the United States. Manufacturers of biologics may also be subject to state regulation. Failure to comply with FDA requirements, both before and after product approval, may subject us and/or our partners, contract manufacturers, and suppliers to administrative or judicial sanctions, including FDA refusal to approve applications, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, fines and/or criminal prosecution.

The steps required before a biologic may be approved for marketing in the U.S. generally include:

- (1) preclinical laboratory tests and animal tests;
- (2) submission to the FDA of an Investigational New Drug Application for human clinical testing, which must become effective before human clinical trials may commence;
- (3) adequate and well-controlled human clinical trials to establish the safety and efficacy of the product;
- (4) submission to the FDA of a BLA;
- (5) FDA pre-approval inspection of product manufacturers; and
- (6) FDA review and approval of BLA.

Preclinical studies include laboratory evaluation, as well as animal studies to assess the potential safety and efficacy of the product candidate. Preclinical safety tests must be conducted in compliance with FDA regulations regarding good laboratory practices. The results of the preclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an Investigational New Drug Application, or IND, which must become effective before human clinical trials may be commenced. The IND will automatically become effective 30 days after receipt by the FDA, unless the FDA before that time raises concerns about the drug candidate or the conduct of the trials as outlined in the IND. The IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can proceed. We cannot assure you that submission of an IND will result in FDA authorization to commence clinical trials or that once commenced, other concerns will not arise.

Clinical trials involve the administration of the investigational product to healthy volunteers or to patients, under the supervision of qualified principal investigators. Each clinical study at each clinical site must be reviewed and approved by an independent institutional review board, prior to the recruitment of subjects.

Clinical trials are typically conducted in three sequential phases, but the phases may overlap and different trials may be initiated with the same drug candidate within the same phase of development in similar or differing patient populations. Phase I studies may be conducted in a limited number of patients, but are usually conducted in healthy volunteer subjects. The drug is usually tested for safety and, as appropriate, for absorption, metabolism, distribution, excretion, pharmacodynamics and pharmacokinetics.

Phase II usually involves studies in a larger, but still limited patient population to evaluate preliminarily the efficacy of the drug candidate for specific, targeted indications; to determine dosage tolerance and optimal dosage; and to identify possible short-term adverse effects and safety risks.

Phase III trials are undertaken to further evaluate clinical efficacy of a specific endpoint and to test further for safety within an expanded patient population at geographically dispersed clinical study sites. Phase I, Phase II or Phase III testing might not be completed successfully within any specific time period, if at all, with respect to any of our product candidates. Results from one trial are not necessarily predictive of results from later trials. Furthermore, the FDA may suspend clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk.

The results of the preclinical studies and clinical trials, together with other detailed information, including information on the manufacture and composition of the product, are submitted to the FDA as part of a BLA requesting approval to market the product candidate. Under the Prescription Drug User Fee Act, as amended, the

fees payable to the FDA for reviewing a BLA, as well as annual fees for commercial manufacturing establishments and for approved products, can be substantial. The BLA review fee alone can exceed \$500,000, subject to certain limited deferrals, waivers and reductions that may be available. Each BLA submitted to the FDA for approval is typically reviewed for administrative completeness and reviewability within 45 to 60 days following submission of the application. If found complete, the FDA will file the BLA, thus triggering a full review of the application. The FDA may refuse to file any BLA that it deems incomplete or not properly reviewable. The FDA's established goals for the review of a BLA is six months for Priority applications and 10 months for Standard applications, whereupon a review decision is to be made. The FDA, however, may not approve a drug within these established goals and its review goals are subject to change from time to time. Further, the outcome of the review, even if generally favorable, may not be an actual approval but an action letter that describes additional work that must be done before the application can be approved. Before approving a BLA, the FDA may inspect the facilities at which the product is manufactured and will not approve the product unless current Good Manufacturing Practices, or cGMP, compliance is satisfactory. The FDA may deny approval of a BLA if applicable statutory or regulatory criteria are not satisfied, or may require additional testing or information, which can delay the approval process. FDA approval of any application may include many delays or never be granted. If a product is approved, the approval will impose limitations on the indicated uses for which the product may be marketed, may require that warning statements be included in the product labeling, and may require that additional studies be conducted following approval as a condition of the approval, may impose restrictions and conditions on product distribution, prescribing or dispensing in the form of a risk management plan, or otherwise limit the scope of any approval. To market a product for other indicated uses, or to make certain manufacturing or other changes requires FDA review and approval of a BLA Supplement or new BLA. Further post-marketing testing and surveillance to monitor the safety or efficacy of a product is required. Also, product approvals may be withdrawn if compliance with regulatory standards is not maintained or if safety or manufacturing problems occur following initial marketing. In addition new government requirements may be established that could delay or prevent regulatory approval of our product candidates under development.

The U.S. Congress and regulatory authorities, including the FDA, are considering whether an abbreviated approval process for so-called generic or follow-on biological products should be adopted. An abbreviated approval process is currently available under the Federal Food, Drug and Cosmetic Act for generic versions of conventional chemical drug compounds, sometimes referred to as small molecule compounds, but not for biological products approved under the Public Health Service Act through a BLA. Currently, an applicant for a generic version of a small molecule compound only has to reference in its application an approved product for which full clinical data demonstrating safety and effectiveness exist for the approved conditions of use; demonstrate that its product has the same active ingredients, dosage form, strength, route of administration and conditions of use and is absorbed in the body at the same rate and to the same extent as the referenced approved drug; include certifications to non-infringement of valid patents listed with the FDA for the referenced approved drug; and await the expiration of any non-patent exclusivity. Various proposals have been made to establish an abbreviated approval process to permit approval of generic or follow-on versions of biological products. It is unclear as to when, or if, any such proposals may be adopted but any such abbreviated approval process could have a material impact on our business as follow-on products may be significantly less costly to bring to market and may be priced significantly lower than our products.

Both before and after the FDA approves a product, the manufacturer and the holder or holders of the BLA for the product are subject to comprehensive regulatory oversight. For example, quality control and manufacturing procedures must conform, on an ongoing basis, to cGMP requirements, and the FDA periodically inspects manufacturing facilities to assess compliance with cGMP. Accordingly, manufacturers must continue to spend time, money and effort to maintain cGMP compliance.

Orphan Drug Designation

Soliris has received orphan drug designation from the FDA for the treatment of PNH and aHUS. Under the Orphan Drug Act, the FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which generally is a disease or condition that affects fewer than 200,000 individuals in the United States. Orphan drug designation must be requested before submitting a BLA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are publicly disclosed by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. If a product which has an orphan drug designation subsequently receives the first FDA approval for the indication for which it has such designation, the product is entitled to an orphan exclusivity period, in which the FDA may not approve any other applications to market the same drug for the same indication for seven years, except in limited circumstances.

Soliris has also received orphan drug designation for the treatment of PNH in several other territories, including Europe, Australia and South Korea, which provides certain regulatory and filing fee advantages, including market exclusivity, except in limited circumstances, for several years after approval. In 2009, the FDA and E.C. also granted Soliris orphan drug designation for the treatment of patients with aHUS.

Foreign Regulation

In addition to regulations in the United States, we are subject to a variety of foreign regulatory requirements governing human clinical trials and marketing approval for drugs. The foreign regulatory approval process includes all of the risks associated with FDA approval set forth above, as well as additional country-specific regulations. 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 trials or marketing of the product in those countries. The approval process varies from country to country, and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

For example, under European Union regulatory systems, we may submit marketing authorizations 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 decentralized procedure provides for mutual recognition of national approval decisions, and the holder of a national marketing authorization may submit an application to the remaining member states. We submitted our Marketing Authorization Application for Soliris for the treatment of PNH to the European Medicines Agency, or EMA, using the centralized procedure.

Reimbursement

Sales of pharmaceutical products depend in significant part on the coverage and reimbursement policies of government programs, including Medicare and Medicaid in the United States, and other third party payors. These health insurance programs may restrict coverage of some products by using payor formularies under which only selected drugs are covered, variable co-payments that make drugs that are not preferred by the payor more expensive for patients, and by using utilization management controls, such as requirements for prior authorization or prior failure on another type of treatment. Payors may especially impose these obstacles to coverage for higher priced drugs, and consequently Soliris may be subject to payor-driven restrictions.

In furtherance of our efforts to facilitate access to Soliris, we have created the Soliris OneSource Treatment Support Program in the United States, a treatment support service for patients with PNH and their healthcare providers. Alexion case managers provide education about PNH and Soliris and help facilitate solutions for reimbursement, coverage and access.

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 and/or reimbursement of medicinal products for human use. A member state may approve a specific price or level of reimbursement 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. Following E.C. approval of Soliris for patients with PNH in June 2007, we engaged with appropriate authorities on the operational, reimbursement, price approval and funding processes that are separately required in each country and have initiated commercialization in those countries where this process is completed.

Competition

There are currently no approved drugs other than Soliris for the treatment of PNH. However, many companies, including major pharmaceutical and chemical companies as well as specialized biotechnology companies, are engaged in activities similar to our activities. Universities, governmental agencies and other public and private research organizations also conduct research and may market commercial products on their own or through joint ventures. Many of these entities may have:

substantially greater financial and other resources;

larger research and development staffs;

lower labor costs; and/or

more extensive marketing and manufacturing organizations.

Many of these companies and organizations have significant experience in preclinical testing, human clinical trials, product manufacturing, marketing, sales and distribution and other regulatory approval and commercial procedures. They may also have a greater number of significant patents and greater legal resources to seek remedies for cases of alleged infringement of their patents by us to block, delay or compromise our own drug development process.

We compete with large pharmaceutical companies that produce and market synthetic compounds and with specialized biotechnology firms in the U.S., Europe and elsewhere, as well as a growing number of large pharmaceutical companies that are applying biotechnology to their operations. A number of biotechnology and pharmaceutical companies are developing new products for the treatment of the same diseases being targeted by us; in some instances, these products have already entered clinical trials or are already being marketed. Other companies are engaged in research and development based on complement proteins.

Several companies have either publicly announced their intentions to develop drugs which target the inflammatory effects of complement in the immune system or have had programs to develop complement inhibitor therapies. We believe that our potential C5 Inhibitors differ substantially from those of our potential competitors due to our compounds' demonstrated ability to specifically intervene in the complement cascade, for

potentially prolonged periods of time. We believe this action to be the optimal point so that the disease-causing actions of complement proteins are inhibited, while the normal disease-preventing functions of complement proteins and other aspects of immune function remain intact.

Employees

As of December 31, 2009, we had 673 full-time, world-wide employees, of which 315 were engaged in research, product development, manufacturing, and clinical development, 234 in sales and marketing, and 124 in administration, business development and finance. Our U.S. employees are not represented by any collective bargaining unit, and we regard the relationships with all our employees as satisfactory.

Available Information

Our internet website address is <http://www.alexionpharma.com>. Through our website, we make available, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, any amendments to those reports, proxy and registration statements, and all of our insider Section 16 reports, as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. These SEC reports can be accessed through the Investors section of our website. The information found on our website is not part of this or any other report we file with, or furnish to, the SEC. Paper copies of our SEC reports are available free of charge upon request in writing to Investor Relations, Alexion Pharmaceuticals, Inc., 352 Knotter Drive, Cheshire, CT 06410.

Item 1A. RISK FACTORS.

You should carefully consider the following risk factors before you decide to invest in our Company and our business because these risk factors may have a significant impact on our business, operating results, financial condition, and cash flows. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. If any of the following risks actually occurs, our business, financial condition and results of operations could be materially and adversely affected.

Risks Related to Our Lead Product Soliris

We depend heavily on the success of our lead product, Soliris, which was approved in the United States and in Europe in 2007 for the treatment of PNH. If we are unable to increase sales of Soliris in the United States and Europe and commercialize Soliris in additional countries, or if we are significantly delayed or limited in doing so, our business may be materially harmed.

Our ability to generate revenues will depend on commercial success of Soliris in the United States, Europe and throughout the rest of the world and whether physicians, patients and healthcare payors view Soliris as therapeutically effective and safe relative to cost. Since we launched Soliris in the United States in April 2007, almost all of our revenue has been attributed to sales of Soliris, and we expect that Soliris product sales will continue to contribute to a significant percentage or almost all of our total revenue over the next several years.

The commercial success of Soliris and our ability to generate and increase revenues will depend on several factors, including the following:

the number of patients with PNH who are diagnosed with the disease and identified to us;

the number of patients with PNH that may be treated with Soliris;

successful continuation of commercial sales in the United States and in European countries where we are already selling Soliris, and successful launch in countries where we have not yet obtained marketing approval or commenced sales;

ability to obtain and maintain sufficient coverage or reimbursement by third-party payors;

acceptance of Soliris in the medical community;

receipt and maintenance of marketing approvals from the United States and foreign regulatory authorities; and

establishment and maintenance of commercial manufacturing capabilities ourselves or through third-party manufacturers.

We dedicate significant resources to the worldwide expansion of the commercialization of Soliris for the treatment of PNH. In the European Union, we have established sales and marketing capabilities in several countries, and we continue discussions with appropriate authorities in other countries so that we may, upon conclusion of such discussions, commence commercial sales in those countries. We have submitted applications for marketing authorization in additional territories, including Japan, and received approval in Canada and Australia in 2009 and South Korea and Switzerland in 2010. We cannot guarantee that our pending marketing

applications, or any marketing applications that we file in the future, will be approved in all countries where we seek authorization to sell Soliris, or that we will be able to obtain reimbursement for Soliris or that other discussions and processes will be concluded successfully or on a timely basis and, as a result, sales in certain countries may be delayed or never occur, or may be subsequently reduced. If we are not successful in increasing sales of Soliris in the United States and Europe and commercializing in the rest of the world, or are significantly delayed or limited in doing so, we may experience a surplus inventory, our business may be materially harmed and we may need to significantly curtail operations.

Because the target patient population of Soliris for the treatment of PNH is small and has not been definitively determined, we must be able to successfully identify PNH patients and achieve a significant market share in order to achieve or maintain profitability.

The prevalence of PNH patients has not been definitively determined but can be estimated at approximately 8,000-10,000 total patients in North America and Western Europe. There can be no guarantee that any of our programs will be effective at identifying PNH patients and the number of PNH patients in the United States and Europe may turn out to be lower than expected or may not be otherwise amenable to treatment with Soliris, all of which would adversely affect our results of operations and our business.

If we are unable to obtain and maintain reimbursement for Soliris from government health administration authorities, private health insurers and other organizations, Soliris may be too costly for regular use and our ability to generate revenues would be harmed.

We may not be able to sell Soliris on a profitable basis or our profitability may be reduced if we are required to sell our product at lower than anticipated prices or reimbursement is unavailable or limited in scope or amount. Soliris is significantly more expensive than traditional drug treatments and almost all patients require some form of third party coverage to afford its cost. Our future revenues and profitability will be adversely affected if we cannot depend on governmental, private third-party payors and other third-party payors, such as Medicare and Medicaid in the United States or country specific governmental organizations, to defray the cost of Soliris to the patient. If these entities refuse to provide coverage and reimbursement with respect to Soliris or determine to provide a lower level of coverage and reimbursement than anticipated, Soliris may be too costly for general use, and physicians may not prescribe it.

In certain foreign countries, pricing, coverage and level of reimbursement of prescription drugs are subject to governmental control and we may be unable to negotiate coverage, pricing, and reimbursement on terms that are favorable to us, or such coverage, pricing, and reimbursement may differ in separate regions in the same country. 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, and we cannot guarantee that we will have the capabilities or resources to successfully conclude the necessary processes and commercialize Soliris in every or even most countries in which we seek to sell Soliris. Reimbursement sources are different in each country and in each country may include a combination of distinct potential payors, including private insurance and governmental payors. For example, countries in the European Union may 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 from time to time 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. Our results of operations may suffer if we are unable to successfully and timely conclude reimbursement, price approval or funding processes and begin to market Soliris in foreign countries or if coverage and reimbursement for Soliris in foreign countries is limited. If we discover we

are not able to obtain coverage, pricing or reimbursement on terms acceptable to us or at all, or if such terms should change, in any foreign countries, we may not be able to or we may determine not to sell Soliris in such countries and our plans for geographic expansion of sales and our business may be adversely affected as a result.

Many third-party payors cover only selected drugs, making drugs that are not preferred by such payor more expensive for patients, and require prior authorization or failure on another type of treatment before covering a particular drug. Third-party payors may be especially likely to impose these obstacles to coverage for higher-priced drugs such as Soliris.

In addition to potential restrictions on coverage, the amount of reimbursement for Soliris may also reduce our profitability and worsen our financial condition. In the United States, European countries, and elsewhere, there have been, and we expect there will continue to be, actions and proposals to control and reduce healthcare costs. Government and other third-party payors are challenging the prices charged for healthcare products and increasingly limiting and attempting to limit both coverage and level of reimbursement for prescription drugs. A significant reduction in the amount of reimbursement for Soliris in one or more countries may have a material adverse effect on our business. See additional discussion below under the headings Healthcare reform measures could adversely affect our business and The current credit and financial market conditions may aggravate certain risks affecting our business.

Even where patients have access to insurance, their insurance co-payment amounts or annual or lifetime caps on reimbursements may represent a barrier to obtaining or continuing Soliris. In the United States, Alexion has financially supported non-profit organizations, such as the PNH Fund of the National Organization for Rare Disorders, or NORD, which assist patients in accessing treatment for PNH, including Soliris. Such organizations assist patients whose insurance coverage leaves them with prohibitive co-payment amounts or other expensive financial obligations. NORD's, and other similar organizations', ability to provide assistance to PNH patients is dependent on funding from external sources, and we cannot guarantee that such funding will be provided at adequate levels, if at all. We have also provided Soliris without charge to patients who have no insurance coverage for drugs for related charitable purposes. We are not able to predict the financial impact of the support we may provide for these and other charitable purposes; however, substantial support could have a material adverse effect on our profitability in the future.

We may not be able to gain or maintain market acceptance among the medical community or patients which would prevent us from achieving or maintaining profitability in the future.

We cannot be certain that Soliris will gain or maintain market acceptance in a particular country among physicians, patients, healthcare payors, and others. Although we have received regulatory approval for Soliris in certain territories, including the United States and Europe, such approvals do not guarantee future revenue. We cannot predict whether physicians, other healthcare providers, government agencies or private insurers will determine that Soliris is safe and therapeutically effective relative to its cost. Medical doctors' willingness to prescribe, and patients' willingness to accept, Soliris depends on many factors, including prevalence and severity of adverse side effects in both clinical trials and commercial use, effectiveness of our marketing strategy and the pricing of Soliris, publicity concerning Soliris, our other product candidates or competing products, our ability to obtain and maintain third-party coverage or reimbursement, and availability of alternative treatments, including bone marrow transplants. If Soliris fails to achieve or maintain market acceptance among the medical community or patients in a particular country, we may not be able to market and sell it successfully in such country, which would limit our ability to generate revenue and could harm our overall business.

If we or our contract manufacturers fail to comply with continuing United States and foreign regulations, we could lose our approvals to market Soliris or our manufacturers could lose their approvals to manufacture Soliris, and our business would be seriously harmed.

We cannot guarantee that we will be able to maintain our regulatory approvals for Soliris. If we do not maintain our regulatory approvals for Soliris, the value of our company and our results of operations will be materially harmed. We and our future partners, contract manufacturers and suppliers are subject to rigorous and extensive regulation by the Food and Drug Administration, or FDA, other federal and state agencies, and governmental authorities in other territories. These regulations continue to apply after product approval, and cover, among other things, testing, manufacturing, quality control, labeling, advertising, promotion, risk mitigation, adverse event reporting requirements, and export of biologics. As a condition of approval for marketing Soliris, governmental authorities may require us to conduct additional studies. For example, in connection with the approval of Soliris in the United States, we agreed to establish a PNH Registry, monitor immunogenicity, monitor compliance with vaccination requirements, and determine the effects of anticoagulant withdrawal among PNH patients receiving eculizumab. The FDA can propose to withdraw approval if it determines that such studies are inadequate or if new clinical data or information shows that a product is not safe for use in an approved indication. We are required to report any serious and unexpected adverse experiences and certain quality problems with Soliris to the FDA, the European Medicines Evaluation Agency, or EMEA, and certain other health agencies. We, the FDA, the EMEA or another health agency may have to notify healthcare providers of any such developments. The discovery of any previously unknown problems with Soliris, a manufacturer or a facility may result in restrictions on Soliris, a manufacturer or a facility, including withdrawal of Soliris from the market. Certain changes to an approved product, including the way it is manufactured or promoted, often require prior regulatory approval before the product as modified may be marketed. Our manufacturing and other facilities and those of any third parties manufacturing Soliris will be subject to inspection prior to grant of marketing approval and subject to continued review and periodic inspections by the regulatory authorities. In December 2009, the E.C. approved the use of our Rhode Island manufacturing facility for the production of Soliris, and we are authorized to sell product that is manufactured in our facility in the European Union and certain other territories. The FDA commenced its inspections during 2009; however we will not be capable of manufacturing Soliris for commercial sale in the United States on our own until such time as we have received the required FDA approval for our facility in Rhode Island, if ever. Any third party we would use to manufacture Soliris for sale must also be licensed by applicable regulatory authorities.

Failure to comply with the laws, including statutes and regulations, administered by the FDA, the EMEA or other agencies could result in:

administrative and judicial sanctions, including, warning letters;

finest and other civil penalties;

withdrawal of a previously granted approval for Soliris;

interruption of production;

operating restrictions;

delays in approving or refusal to approve Soliris or a facility that manufactures Soliris;

product recall or seizure;

injunctive; and

criminal prosecution.

If the use of Soliris harms people, or is perceived to harm patients even when such harm is unrelated to Soliris, our regulatory approvals could be revoked or otherwise negatively impacted and we could be subject to costly and damaging product liability claims.

The testing, manufacturing, marketing and sale of drugs for use in humans exposes us to product liability risks. Side effects and other problems from using Soliris could (1) lessen the frequency with which physicians decide to prescribe Soliris, (2) encourage physicians to stop prescribing Soliris to their patients who previously had been prescribed Soliris, (3) cause serious adverse events and give rise to product liability claims against us, and (4) result in our need to withdraw or recall Soliris from the marketplace. Some of these risks are unknown at this time.

We have tested Soliris in only a small number of patients. As more patients begin to use Soliris, new risks and side effects may be discovered, the rate of known risks or side effects may increase, and risks previously viewed as less significant could be determined to be significant. Previously unknown risks and adverse effects of Soliris may also be discovered in connection with unapproved, or off-label, uses of Soliris. We do not promote, or in any way support or encourage the promotion of Soliris for off-label uses in violation of applicable law, but physicians are permitted to use products for off-label purposes and we are aware of such off-label uses of Soliris. In addition, we are studying and expect to continue to study Soliris in diseases other than PNH in controlled clinical settings, and expect independent investigators to do so as well. In the event of any new risks or adverse effects discovered as new patients are treated for PNH and as Soliris is studied in or used by patients for off-label indications, regulatory authorities may delay or revoke their approvals, we may be required to conduct additional clinical trials, make changes in labeling of Soliris, reformulate Soliris or make changes and obtain new approvals for our and our suppliers' manufacturing facilities. We may also experience a significant drop in the potential sales of Soliris, experience harm to our reputation and the reputation of Soliris in the marketplace or become subject to lawsuits, including class actions. Any of these results could decrease or prevent any sales of Soliris or substantially increase the costs and expenses of commercializing and marketing Soliris.

We may be sued by people who use Soliris, whether as a prescribed therapy, during a clinical trial, during an investigator initiated study, or otherwise. Many patients who use Soliris are already very ill. Any informed consents or waivers obtained from people who enroll in our trials or use Soliris may not protect us from liability or litigation. Our product liability insurance may not cover all potential types of liabilities or may not cover certain liabilities completely. Moreover, we may not be able to maintain our insurance on acceptable terms. In addition, negative publicity relating to the use of Soliris or a product candidate, or to a product liability claim, may make it more difficult, or impossible, for us to market and sell Soliris. As a result of these factors, a product liability claim, even if successfully defended, could have a material adverse effect on our business, financial condition or results of operations.

Patients who use Soliris already often have severe and advanced stages of disease and known as well as unknown significant pre-existing and potentially life-threatening health risks, including for example bone marrow failure. During the course of treatment, patients may suffer adverse events, including death, for reasons that may or may not be related to Soliris. Such events could subject us to costly litigation, require us to pay substantial amounts of money to injured patients, delay, negatively impact or end our opportunity to receive or maintain regulatory approval to market Soliris, or require us to suspend or abandon our commercialization efforts. Even in a circumstance in which we do not believe that an adverse event is related to Soliris, the investigation into the circumstance may be time consuming or may be inconclusive. These investigations may interrupt our sales efforts, delay our regulatory approval process in other countries, or impact and limit the type of regulatory approvals Soliris receives or maintains.

Some patients treated with Soliris for PNH or other diseases, including patients who have participated in our clinical trials, have died or suffered potentially life-threatening diseases either during or after ending their Soliris treatments. In particular, use of C5 Inhibitors, such as Soliris, is associated with an increased risk for certain types of infection, including *Neisseria* bacteria. Serious cases of *Neisseria* infection can result in severe illness, including but not limited to brain damage, loss of limbs or parts of limbs, kidney failure, or death. PNH patients in our TRIUMPH and SHEPHERD trials all received vaccination against *Neisseria* bacteria prior to first administration of Soliris and all patients who are prescribed Soliris are required by prescribing guidelines to be vaccinated prior to receiving their first dose; however, vaccination does not eliminate all risk of becoming infected with *Neisseria* bacteria. Some patients treated with Soliris, who had been vaccinated, including patients who have participated in our trials of Soliris for the treatment of PNH and other diseases, have become infected with *Neisseria* bacteria, including patients who have suffered serious illness or death. Each such incident is required to be reported to appropriate regulatory agencies in accordance with relevant regulations.

We are also aware of a potential risk for PNH patients who delay a dose of Soliris or discontinue their treatment of Soliris. Treatment with Soliris blocks complement and allows complement-sensitive PNH red blood cells to increase in number. If treatment with Soliris is thereafter delayed or discontinued, a greater number of red blood cells therefore would become susceptible to destruction when the patient's complement system is no longer blocked. The rapid destruction of a larger number of a patient's red blood cells may lead to numerous complications, including death. Several PNH patients in our studies of Soliris have received delayed doses or discontinued their treatment. In none of those circumstances were significant complications shown to be due to rapid destruction of a larger number of PNH red blood cells; however, we have not studied the delay or termination of treatment in enough patients to determine that such complications in the future are unlikely to occur. Additionally, such delays or discontinuations may be associated with significant complications without evidence of such rapid cell destruction. Clinical evaluations of outcomes in the post-marketing setting are required to be reported to appropriate regulatory agencies in accordance with relevant regulations. Determination of significant complications associated with the delay or discontinuation of Soliris could have a material adverse effect on our ability to sell Soliris for PNH.

Although we obtained regulatory approval of Soliris for PNH in the United States, Europe and other territories, we cannot guarantee that we will obtain regulatory approval for Soliris in each territory where we seek approval.

Governments in countries outside the United States and Europe regulate the distribution of drugs in such countries and the facilities where such drugs are manufactured, and obtaining their approvals can be lengthy, expensive and highly uncertain. The approval process varies from country to country, and the requirements governing the conduct of clinical trials, product manufacturing, product licensing, pricing and reimbursement vary greatly from country to country. In certain jurisdictions, we are required to finalize operational, reimbursement, price approval and funding processes prior to marketing our products, even in countries where marketing approval has been obtained. Soliris became commercially available in certain countries in Europe in the fourth quarter of 2007. We received regulatory approval for Soliris for treatment of patients with PNH in Canada and Australia in 2009 and in South Korea and Switzerland in 2010. We may not receive regulatory approval for Soliris in any other territories for at least the next several years, if ever.

Regulatory agencies may require additional information or data with respect to our submissions for Soliris for PNH. We may have to conduct additional lengthy clinical testing and other costly and time-consuming procedures to satisfy foreign regulatory agencies. Even with approval of Soliris in certain countries, the regulatory agencies in other countries may not agree with our interpretations of our clinical trial data for Soliris

and may decide that our results are not adequate to support approval for marketing of Soliris. In those circumstances, we would not be able to obtain regulatory approval in such country on a timely basis, if ever. Even if approval is granted in such country, the approval may require limitations on the indicated uses for which the drug may be marketed. The foreign regulatory approval process includes all of the risks associated with FDA approval as well as country-specific regulations. We must obtain approval of a product by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. For example, we were required to conduct clinical studies with Soliris in patients with PNH in Japan; however, there is no assurance that the Japanese regulatory agency will find these studies sufficient for registration of Soliris in Japan.

Commercial quantities of Soliris can only be manufactured at two facilities, including our own facility in Rhode Island, and we are currently entirely dependent on a single third party to manufacture commercial quantities of Soliris for sale in the United States. Our commercialization of Soliris may be stopped, delayed or made less profitable if we or any other supply vendor fails to provide sufficient quantities of Soliris.

Until December 2009, only Lonza Sales AG, or Lonza, was capable of manufacturing commercial quantities of Soliris. In December 2009, the E.C. approved the use of our Rhode Island manufacturing facility for the production of Soliris and we are authorized to sell product that is manufactured in our facility in the European Union and certain other territories. However, we will not be capable of manufacturing Soliris for commercial sale in the United States on our own until such time as we have received the required FDA approval for our manufacturing facility in Rhode Island, if ever. Therefore, we will continue to depend entirely on one company, Lonza, to manufacture Soliris for commercial sale in the United States until that time.

The manufacture of Soliris is difficult. Manufacture of a biologic requires a multi-step controlled process and even minor problems or deviations could result in defects or failures. We cannot be certain that we or Lonza will be able to perform uninterrupted supply chain services. The failure to manufacture appropriate supplies of Soliris, on a timely basis, or at all, may prevent or interrupt the commercialization of Soliris. If we or Lonza were unable to manufacture Soliris for any period, or if we do not obtain approval of our facility by the FDA, we may incur substantial loss of sales. If we are forced to find an alternative supplier for Soliris, in addition to loss of sales, we may also incur significant costs in establishing a new arrangement.

We also depend on a few outside vendors for other services with respect to our clinical and commercial requirements, including product finishing, packaging, vialing and labeling. We do not have control over any third-party manufacturer s, vialer s or other third party provider s compliance with the rules and regulations of the FDA, EMEA or any other applicable regulations or standards. Any difficulties or delays in our third party manufacturing and supply of Soliris and other product candidates, or any failure of our third party providers to maintain compliance with the applicable regulations and standards could increase our costs, constrain our ability to satisfy demand for Soliris from customers, cause us to lose revenue, make us postpone or cancel clinical trials, or cause our products to be recalled or withdrawn.

We are dependent upon a small number of customers for a significant portion of our revenue, and the loss of, or significant reduction or cancellation in sales to, any one of these customers could adversely affect our operations and financial condition.

In the United States, we sell Soliris to specialty pharmacies and specialty distributors who in turn sell to patient health-care providers. We do not promote Soliris to these distributors, and they do not set or determine

demand for Soliris. For the year ended December 31, 2009, our single largest customer, AmerisourceBergen, accounted for 20% of our Soliris net product sales, and our three largest customers accounted for approximately 35% of our net product sales. As of December 31, 2009, our single largest customer, AmerisourceBergen, accounted for 20% of the accounts receivable balance. We expect such customer concentration to continue for the foreseeable future. Our ability to successfully commercialize Soliris will depend, in part, on the extent to which we are able to provide adequate distribution of Soliris to patients. Although a number of specialty distributors and specialty pharmacies, which supply physician office clinics, hospital outpatient clinics, infusion clinics, home health care providers, and governmental organizations, distribute Soliris, they generally carry a very limited inventory and may be reluctant to distribute Soliris in the future if demand for the product does not increase. Further, it is possible that our distributors could decide to change their policies or fees, or both, at some time in the future. This could result in their refusal to distribute smaller volume products such as Soliris, or cause higher product distribution costs, lower margins or the need to find alternative methods of distributing our product. Although we believe we can find alternative distributors on a relatively short notice, our revenue during that period of time may suffer and we may incur additional costs to replace a distributor. The loss of any large customer, a significant reduction in sales we make to them, any cancellation of orders they have made with us or any failure to pay for the products we have shipped to them could materially and adversely affect our results of operations and financial condition.

If we are unable to establish and maintain effective sales, marketing and distribution capabilities, or to enter into agreements with third parties to do so, we will be unable to successfully commercialize Soliris.

We are marketing and selling Soliris ourselves in the United States, Europe and several other territories, but have only limited experience thus far with marketing, sales or distribution of drug products. We have established commercial capabilities in the United States and in Europe. If we are unable to establish and/or expand the capabilities to sell, market and distribute Soliris, either through our own capabilities or by entering into agreements with others, or to maintain such capabilities in countries where we have already commenced commercial sales, we will not be able to successfully sell Soliris. In that event, we will not be able to generate significant revenues. We cannot guarantee that we will be able to establish and maintain our own capabilities or enter into and maintain any marketing or distribution agreements with third-party providers on acceptable terms, if at all. Even if we hire the qualified sales and marketing personnel we need in the United States and in Europe to support our objectives, or enter into marketing and distribution agreements with third parties on acceptable terms, we may not do so in an efficient manner or on a timely basis. We may not be able to correctly judge the size and experience of the sales and marketing force and the scale of distribution capabilities necessary to successfully market and sell Soliris. Establishing and maintaining sales, marketing and distribution capabilities are expensive and time-consuming. Our expenses associated with building up and maintaining the sales force and distribution capabilities around the world may be disproportional compared to the revenues we may be able to generate on sales of Soliris. We cannot guarantee that we will be successful in commercializing Soliris.

If we market Soliris in a manner that violates health care fraud and abuse laws, we may be subject to civil or criminal penalties.

In addition to FDA and related regulatory requirements, we are subject to health care fraud and abuse laws, such as the federal False Claims Act, the anti-kickback provisions of the federal Social Security Act, and other state and federal laws and regulations. Federal and state anti-kickback laws prohibit, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce, or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any health care item or service

reimbursable under Medicare, Medicaid, or other federally or state financed health care programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, patients, purchasers and formulary managers on the other. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain common activities from prosecution, the exemptions and safe harbors are drawn narrowly, and practices that involve remuneration intended to induce prescribing, purchasing, or recommending may be subject to scrutiny if they do not qualify for an exemption or safe harbor.

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

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

The majority of states also have statutes or regulations similar to the federal anti-kickback law and false claims laws, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. Sanctions under these federal and state laws may include civil monetary penalties, exclusion of a manufacturer's products from reimbursement under government programs, criminal fines, and imprisonment. Even if we are not determined to have violated these laws, government investigations into these issues typically require the expenditure of significant resources and generate negative publicity, which would also harm our financial condition. Because of the breadth of these laws and the narrowness of the safe harbors and because government scrutiny in this area is high, it is possible that some of our business activities could come under that scrutiny.

In recent years, several states and localities, including California, the District of Columbia, Maine, Minnesota, Nevada, New Mexico, Vermont, and West Virginia, have enacted legislation requiring pharmaceutical companies to establish marketing compliance programs, file periodic reports with the state or make periodic public disclosures on sales, marketing, pricing, clinical trials, and other activities. Similar legislation is being considered in other states. Many of these requirements are new and uncertain, and the

penalties for failure to comply with these requirements are unclear. Nonetheless, if we are found not to be in full compliance with these laws, we could face enforcement action and fines and other penalties, and could receive adverse publicity.

Risks Related to Development, Clinical Testing and Regulatory Approval of Our Product Candidates, Including Eculizumab for Indications Other than PNH

None of our product candidates except for Soliris has received regulatory approvals. Soliris has not been approved for any indication other than for the treatment of patients with PNH. If we are unable to obtain regulatory approvals to market one or more of our product candidates, including Soliris for other indications, our business may be adversely affected.

All of our product candidates except Soliris are in early stages of development, and we do not expect our other product candidates to be commercially available for several years, if at all. Similarly, Soliris has not been approved for any indication other than for the treatment of patients with PNH, and we do not expect approval for use of Soliris in other indications for several years, if at all. Our product candidates are subject to strict regulation by regulatory authorities in the United States and in other countries. We cannot market any product candidate until we have completed all necessary preclinical studies and clinical trials and have obtained the necessary regulatory approvals. We do not know whether regulatory agencies will grant approval for any of our product candidates. Even if we complete preclinical studies and clinical trials successfully, we may not be able to obtain regulatory approvals or we may not receive approvals to make claims about our products that we believe to be necessary to effectively market our products. Data obtained from preclinical studies and clinical trials are subject to varying interpretations that could delay, limit or prevent regulatory approval, and failure to comply with regulatory requirements or inadequate manufacturing processes are examples of other problems that could prevent approval. In addition, we may encounter delays or rejections due to additional government regulation from future legislation, administrative action or changes in the FDA policy. Even if the FDA approves a product, the approval will be limited to those indications covered in the approval.

Outside the United States, our ability to market any of our potential products is dependent upon receiving marketing approvals from the appropriate regulatory authorities. These foreign regulatory approval processes include all of the risks associated with the FDA approval process described above. If we are unable to receive regulatory approvals, we will be unable to commercialize our product candidates, and our business may be adversely affected.

Completion of preclinical studies or clinical trials does not guarantee advancement to the next phase of development.

Completion of preclinical studies or clinical trials does not guarantee that we will initiate additional studies or trials for our product candidates, that if the studies or trials are initiated what the scope and phase of the trial will be or that they will be completed, or that if the studies or trials are completed, that the results will provide a sufficient basis to proceed with further studies or trials or to apply for or receive regulatory approvals or to commercialize products. Results of clinical trials could be inconclusive, requiring additional or repeat trials. If the results achieved in our clinical trials are insufficient to proceed to further trials or to regulatory approval of our product candidates, our company could be materially adversely affected. Failure of a preclinical study or a clinical trial to achieve its pre-specified primary endpoint generally increases the likelihood that additional studies or trials will be required if we determine to continue development of the product candidate, reduces the

likelihood of timely development of and regulatory approval to market the product candidate, and may decrease the chances for successfully achieving the primary endpoint in scientifically similar indications.

There are many reasons why drug testing could be delayed or terminated.

For human trials, patients must be recruited and each product candidate must be tested at various doses and formulations for each clinical indication. In addition, to ensure safety and effectiveness, the effect of drugs often must be studied over a long period of time, especially for the chronic diseases that we are studying. Unfavorable results or insufficient patient enrollment in our clinical trials could delay or cause us to abandon a product development program. We may decide to abandon development of a product candidate at any time, or we may have to spend considerable resources repeating clinical trials or conducting additional trials, either of which would increase costs and delay any revenue from those product candidates, if any.

Additional factors that can cause delay, impairment or termination of our clinical trials or our product development efforts include:

slow patient enrollment, including for example due to the rarity of the disease being studied;

long treatment time required to demonstrate effectiveness;

lack of sufficient supplies of the product candidate;

disruption of operations at the clinical trial sites;

adverse medical events or side effects in treated patients;

the failure of patients taking the placebo to continue to participate in our clinical trials;

insufficient clinical trial data to support effectiveness of the product candidates;

lack of effectiveness or safety of the product candidate being tested;

lack of sufficient funds;

inability to manufacture sufficient quantities of the product candidate for development or commercialization activities in a timely and cost-efficient manner; or

failure to obtain the necessary regulatory approvals for the product candidate or the approvals for the facilities in which such product candidate is manufactured.

The regulatory approval process is costly and lengthy and we may not be able to successfully obtain all required regulatory approvals.

The preclinical development, clinical trials, manufacturing, marketing and labeling of pharmaceuticals are all subject to extensive regulation by numerous governmental authorities and agencies in the United States and other countries. We must obtain regulatory approval for each of our product candidates before marketing or selling any of them. It is not possible to predict how long the approval processes of the FDA or any other applicable federal or foreign regulatory authority or agency for any of our product candidates will take or whether any such approvals ultimately

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will be granted. The FDA and foreign regulatory agencies have substantial discretion in the drug approval process, and positive results in preclinical testing or early phases of clinical studies offer no assurance of success in later phases of the approval process. The approval process varies from country to country and the requirements governing the conduct of clinical trials, product manufacturing,

product licensing, pricing and reimbursement vary greatly from country to country. Generally, preclinical and clinical testing of product candidates can take many years and require the expenditure of substantial resources, and the data obtained from these tests and trials can be susceptible to varying interpretations that could delay, limit or prevent regulatory approval. If we encounter significant delays in the regulatory process that result in excessive costs, this may prevent us from continuing to develop our product candidates. Any delay in obtaining, or failure to obtain, approvals could adversely affect the marketing of our products and our ability to generate product revenue. The risks associated with the approval process include:

failure of our product candidates to meet a regulatory agency's requirements for safety, efficacy and quality;

limitation on the indicated uses for which a product may be marketed;

unforeseen safety issues or side effects; and

governmental or regulatory delays and changes in regulatory requirements and guidelines.

Even if our drug candidates obtain regulatory approval, they may not gain market acceptance among physicians, patients and health care payors.

Physicians may elect not to recommend our drugs even if they receive marketing approval for a variety of reasons, including the timing of the market introduction of competitive drugs; lower demonstrated clinical safety and efficacy compared to other drugs; lack of cost-effectiveness; lack of availability of reimbursement from third-party payors; convenience and ease of administration; prevalence and severity of adverse side effects; other potential advantages of alternative treatment methods; and ineffective marketing and distribution support. Sales of pharmaceutical products depend in significant part on the coverage and reimbursement policies of government programs, including Medicare and Medicaid in the United States and programs in other countries, and other third-party payors. These health insurance programs may restrict coverage of some products by using payor formularies under which only selected drugs are covered, variable co-payments that make drugs that are not preferred by the payor more expensive for patients, and by using utilization management controls, such as requirements for prior authorization or failure on another type of treatment. Payors may especially impose these obstacles to coverage for higher-priced drugs, and consequently our drug candidates may be subject to payor-driven restrictions. 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, countries in the European Union may restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices and/or reimbursement of medicinal products for human use. A member state may approve a specific price or level of reimbursement 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. The reimbursement or budget identified by a government or non-government payor for Soliris in an indication other than PNH, if obtained, may be adversely affected by the reimbursement or budget for Soliris in PNH and/or adversely affect the reimbursement or budget for Soliris in PNH by that payor.

Inability to contract with third-party manufacturers and other third parties on commercially reasonable terms, or failure or delay by us or our third-party manufacturers or other third party providers to provide services with respect to our drug products in the volumes and quality required, would have a material adverse effect on our business.

Clinical quantities of eculizumab are manufactured by us in our Rhode Island facility and by Lonza. Clinical quantities of samalizumab are manufactured solely by us in Rhode Island. Manufacture of our drug products is

highly technical, and only a small number of companies have the ability and capacity to manufacture our drug products for our development and commercialization needs. Due to the highly technical requirements of manufacturing our drug products, we and our third-party collaborators may be unable to manufacture our drug products despite our and their efforts. In addition, we cannot be certain that any third party will be able or willing to honor the terms of its agreement, including any obligations to manufacture the drug products in accordance with regulatory requirements and to our quality specifications and volume requirements.

Manufacture of drug products, including the need to develop and utilize manufacturing processes that consistently produce our drug products to their required quality specifications, is highly regulated by the FDA and other domestic and foreign authorities. Regulatory authorities must approve the facilities in which our products are manufactured prior to granting marketing approval for any product candidate. Manufacturing facilities are also subject to ongoing inspections, and minor changes in manufacturing processes may require additional regulatory approvals. We cannot assure you that we or our third-party collaborators will successfully comply with all requirements and regulations, which failure could have a material adverse effect on our business.

We currently have limited experience in manufacturing drug products in volumes that would be necessary to support commercial sales, and we can provide no assurance that we will be able to do so successfully. We acquired a commercial-scale manufacturing plant in Smithfield, Rhode Island in July 2006. In December 2009, the E.C. approved the use of our facility for the production of Soliris, and we are authorized to sell Soliris manufactured in our facility in the European Union and certain other territories. However, the plant is not currently approved by the FDA or other regulatory agencies to manufacture Soliris and we will not be capable of manufacturing Soliris for commercial sale in the United States on our own until such time as we have received FDA approval of our manufacturing facility, if ever. Until December 2009, we have depended on a single third party for commercial supply of Soliris, and until our facility is approved by the FDA, we are still entirely dependent on this third party for commercial quantities of Soliris for sale in the United States. We have limited experience in developing commercial-scale manufacturing. We can provide no assurance that we will be able to manufacture our drug products at our Smithfield, Rhode Island plant under conditions required by the FDA or foreign regulatory agencies on a timely basis, if at all. Our plant in Smithfield, Rhode Island is subject to approval by other national and regional regulatory agencies before we can begin sales of Soliris or other drug products manufactured in this facility in such country or region, and we will continue to be subject to ongoing regulatory inspections thereafter.

We, and our outside manufacturers, may experience higher manufacturing failure rates than in the past, if and when, we attempt to substantially increase production volume. If we experience interruptions in the manufacture of our products, our drug development and commercialization efforts will be delayed. If any of our outside manufacturers stops manufacturing our products or reduces the amount manufactured, or is otherwise unable to manufacture our required amounts at our required quality, we may need to find other alternatives, which is likely to be expensive and time consuming, and also may result in reduced revenue during this period. Even if we are able to find alternatives they may ultimately be insufficient for our needs. As a result, our ability to conduct testing and drug trials and our plans for commercialization could be materially adversely affected. Submission of products and new development programs for regulatory approval, as well as our plans for commercialization, would be delayed or suspended. Our competitive position and our prospects for achieving or maintaining profitability could be materially and adversely affected.

Due to the nature of the current market for third-party commercial manufacturing, many arrangements require substantial penalty payments by the customer for failure to use the manufacturing capacity for which it contracted. Penalty payments under these agreements typically decrease over the life of the agreement, and may be substantial initially and de minimis or non-existent in the final period. The payment of a substantial penalty could harm our financial condition.

Risks Related to Intellectual Property

If we cannot protect the confidentiality and proprietary nature of our trade secrets, and other intellectual property, our business and competitive position will be harmed.

Our business requires using sensitive technology, techniques and proprietary compounds that we protect as trade secrets. However, we may also rely heavily on collaboration with suppliers, outside scientists and other drug companies. Collaboration presents a strong risk of exposing our trade secrets. If our trade secrets were exposed, it would help our competitors and adversely affect our business prospects.

In order to protect our drugs and technology more effectively, we need to obtain and maintain patents covering the drugs and technologies we develop. We may obtain patents or the right to practice patents through ownership or license. Soliris and our drug candidates are expensive and time-consuming to test and develop. Without patent protection, competitors may copy our methods, or the chemical structure or other aspects of our drugs. Even if we obtain and maintain patents, the patents may not be broad enough to protect our drugs from copycat products.

If we are found to be infringing on patents owned by others, we may be forced to pay damages to the patent owner and/or obtain a license to continue the manufacture, sale or development of our drugs. If we cannot obtain a license, we may be prevented from the manufacture, sale or development of our drugs, including Soliris, which would adversely affect our business.

Parts of our technology, techniques and proprietary compounds and potential drug candidates, including those which are or may be in-licensed, may be found to infringe patents owned by or granted to others. We previously reported that three civil actions were filed against us relating to the commercialization of Soliris and the intellectual property rights of third parties. Each of these cases was resolved in 2008, however, additional third parties may claim that the manufacture, use or sale of Soliris or other drugs under development infringes patents owned or granted to such third parties. We are aware of broad patents owned by others relating to the manufacture, use and sale of recombinant humanized antibodies, recombinant human antibodies, and recombinant human single chain antibodies. Soliris and many of our product candidates are either genetically engineered antibodies, including recombinant humanized antibodies, recombinant human antibodies, or recombinant human single chain antibodies. In addition to the actions described above, we have received notices from the owners of some of these patents claiming that their patents may be infringed by the development, manufacture or sale of Soliris or some of our drug candidates. We are also aware of other patents owned by third parties that might be claimed by such third parties to be infringed by the development and commercialization of Soliris and some of our drug candidates. In respect to some of these patents, we have obtained licenses, or expect to obtain licenses. However, with regard to such other patents, we have determined in our judgment that:

Soliris and our product candidates do not infringe the patents;

the patents are not valid; or

we have identified and are testing various modifications that we believe should not infringe the patents and which should permit commercialization of our product candidates.

Any holder of these patents or other patents covering similar technology could sue us for damages and seek to prevent us from manufacturing, selling or developing our drugs. Legal disputes can be costly and time consuming to defend. If we cannot successfully defend against any future actions or conflicts, if they arise, we

may incur substantial legal costs and may be liable for damages, be required to obtain costly licenses or need to stop manufacturing, using or selling Soliris, which would adversely affect our business. A required license may be costly or may not be available on acceptable terms, if at all. A costly license, or inability to obtain a necessary license, could have a material adverse effect on our business.

There can be no assurance that we would prevail in a patent infringement action; that we would be able to obtain a license to any third-party patent on commercially reasonable terms; successfully develop non-infringing alternatives on a timely basis; or license alternative non-infringing technology, if any exists, on commercially reasonable terms. Any impediment to our ability to manufacture or sell approved forms of Soliris or our product candidates could have a material adverse effect on our business and prospects.

Risks Related to Our Operations

We have had a history of losses and cannot guarantee that we will achieve our financial goals, including our ability to maintain profitability on a quarterly or annual basis in the future.

Until the quarter ended June 30, 2008, we had never been profitable since we started our company in January 1992. We have maintained profitability on a quarterly basis since the quarter ended June 30, 2008 and on an annual basis for the years ended December 31, 2009 and 2008. We believe that we formulate our annual operating budgets with reasonable assumptions and targets, however we cannot guarantee that we will be able to generate sufficient revenues or control expenses to achieve our financial goals, including continued profitability. Even if we do achieve profitability in any subsequent quarters, we may not be able to sustain or increase profitability on a quarterly or annual basis. You should not consider our revenue growth in recent periods as indicative of our future performance. Our revenue in future periods could decline. We may make errors in predicting and reacting to relevant business trends or our business may be subject to factors beyond our control, which could harm our operations. Since we began our business, we have focused on research and development of product candidates. We launched Soliris for sale in the United States during April 2007 and began commercial sales in Europe during the fourth quarter of 2007. We cannot guarantee that we will be successful in marketing and selling Soliris in countries or regions where we have obtained marketing approval, including the United States and Europe, on a continued basis, and we do not know when we will have Soliris available for sale in territories where we have applied or will apply for marketing approval, if ever. All of our other product candidates are still in the early stages of research and development. We will have substantial expenses as we continue our research and development efforts, continue to conduct clinical trials, and continue to develop manufacturing, sales, marketing and distribution capabilities in the United States and abroad. The achievement of our financial goals, including the extent of our future profitability, depends on many factors, including our ability to successfully market Soliris in the United States, Europe and other territories, on receiving regulatory, pricing, coverage, and reimbursement approvals of Soliris in additional countries and regions, our ability to successfully market Soliris in additional countries and regions, and our ability to successfully manufacture and commercialize our drug candidates.

If our competitors get to the marketplace before we do, or with better or cheaper drugs, Soliris and our product candidates may not be profitable to continue to pursue.

Both the FDA and the E.C. granted orphan drug designation for Soliris in the treatment of PNH, which entitles us to exclusivity for a total of seven years in the United States and for ten years in Europe. However, if a competitive product that is the same as Soliris, as defined under the applicable regulations, is shown to be

clinically superior to Soliris in the treatment of PNH, or if a competitive product is different from Soliris, as defined under the applicable regulations, the orphan drug exclusivity we have obtained may not block the approval of such competitive product. Several biotechnology and pharmaceutical companies throughout the world have programs to develop complement inhibitor therapies or have publicly announced their intentions to develop drugs which target the inflammatory effects of complement in the immune system. Other companies have publicly announced intentions to develop therapeutic human antibodies from libraries of human antibody genes or therapeutic human antibodies from mice that have been bred to include some human antibody genes. A number of biotechnology and pharmaceutical companies are developing new products for the treatment of the same diseases being targeted by us. These and other companies, many of which have significantly greater resources than us, may develop, manufacture, and market better or cheaper drugs than Soliris or our product candidates. They may establish themselves in the marketplace before Alexion for Soliris for other indications or for any of our other product candidates. Other pharmaceutical companies also compete with us to attract academic research institutions as drug development partners, including for licensing these institutions proprietary technology. If our competitors successfully enter into such arrangements with academic institutions, we will be precluded from pursuing those unique opportunities and may not be able to find equivalent opportunities elsewhere.

If we fail to obtain the capital necessary to fund our operations, we will be unable to continue the commercialization of Soliris or continue or complete our product development.

We believe that revenues and collections from sales of Soliris along with our existing cash and cash equivalents will provide sufficient capital to fund our operations and product development for at least twelve months. We may need to raise additional capital before or after that time to complete or continue the development or commercialization of our products and product candidates. We are currently selling or preparing for the commercialization of Soliris in the United States, Europe and several other territories, evaluating and preparing regulatory submissions for Soliris in several countries, and conducting, preparing or evaluating several clinical trials. Funding needs may shift between projects and potentially accelerate and increase as we continue launch and commercialization activities throughout the world and as we initiate or continue clinical trials for our product candidates.

Additional financing could take the form of public or private debt or equity offerings, equity line facilities, bank loans, collaborative research and development arrangements with corporate partners and/or the sale or licensing of some of our property. The amount of capital we may need depends on many factors, including:

the cost necessary to sell, market and distribute Soliris;

the rate of new patient sales and drug utilization by treated patients;

the time and cost necessary to obtain and maintain regulatory approvals for Soliris and for eculizumab for other indications in multiple countries;

the ability to obtain and maintain reimbursement approvals and funding for Soliris and the time necessary to obtain such approvals and funding;

the time and cost necessary to develop sales, marketing and distribution capabilities outside the United States;

the time and cost necessary to purchase or to further develop manufacturing processes, arrange for contract manufacturing or build manufacturing facilities and obtain and maintain the necessary regulatory approvals for those facilities;

changes in applicable governmental regulatory policies or requests by regulatory agencies for additional information or data;

the progress, timing and scope of our research and development programs;

the progress, timing and scope of our preclinical studies and clinical trials; and

any new collaborative, licensing or other commercial relationships that we may establish.

We may not receive funding when we need it or funding may only be available on unfavorable terms. Financial markets in the U.S., Europe and the rest of the world have been experiencing significant volatility in security prices, substantially diminished liquidity and credit availability, rating downgrades of certain investments and declining valuations of others. There can be no assurance that we will be able to access credit or equity markets in order to finance our operations in the United States or Europe, grow our operations in any territory, or expand development programs for our product candidates, or that there will not be a further deterioration in financial markets and confidence in economies. If we cannot raise adequate funds to satisfy our capital requirements, we may have to delay, scale-back or eliminate our research and development activities or future operations. We might have to license our technology to others or relinquish commercialization rights. This could result in sharing revenues that we might otherwise retain for ourselves. Any of these actions would harm our business.

If we fail to recruit and retain personnel, we may not be able to implement our business strategy.

We are highly dependent upon the efforts of our senior management and scientific personnel, particularly Dr. Leonard Bell, M.D., our Chief Executive Officer and a member of our Board of Directors, and Stephen P. Squinto, Ph.D., our Executive Vice President and Head of Research and Development. There is intense competition in the biopharmaceutical industry for qualified scientific and technical personnel. Since our business is science-oriented and specialized, we need to continue to attract and retain such people. We may not be able to continue to attract and retain the qualified personnel necessary for developing our business. We have employment agreements with Dr. Bell and Dr. Squinto. None of our key personnel is nearing retirement age or to our knowledge, planning to retire. To our knowledge, there is no tension between any of our key personnel and the Board of Directors. If we are unable to retain and recruit highly qualified personnel, our ability to execute our business plan will be materially and adversely affected.

In particular, we highly value the services of Dr. Bell, our Chief Executive Officer. The loss of his services could materially and adversely affect our ability to achieve our objectives.

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

We are subject to various federal, state and local environmental laws and regulations that govern our operations, including the handling and disposal of non-hazardous and hazardous wastes, including medical and biological wastes, and emissions and discharges into the environment, including air, soils and water sources. Failure to comply with such laws and regulations could result in costs for corrective action, penalties or the imposition of other liabilities. We also are subject to laws and regulations that impose liability and clean-up responsibility for releases of hazardous substances into the environment. Under certain of these laws and regulations, a current or previous owner or operator of property may be liable for the costs of remediating its property or locations to which wastes were sent from its facilities, without regard to whether the owner or

operator knew of, or necessarily caused, the contamination. Such obligations and liabilities, which to date have not been material, could have a material impact on our business and financial condition.

We may expand our business through acquisitions or in-licensing opportunities that could disrupt our business and harm our financial condition.

Our business strategy includes expanding our products and capabilities, and we may seek acquisitions or in-licensing of business or products to do so. Acquisitions of new businesses or products and in-licensing of new products involve numerous risks, including:

substantial cash expenditures;

potentially dilutive issuance of equity securities;

incurrence of debt and contingent liabilities, some of which may be difficult or impossible to identify at the time of acquisition;

difficulties in assimilating the operations of the acquired companies;

diverting our management's attention away from other business concerns;

risks of entering markets in which we have limited or no direct experience; and

the potential loss of our key employees or key employees of the acquired companies.

We compete with pharmaceutical companies that have significantly greater resources than us for many of the same acquisition and in-licensing opportunities. Such pharmaceutical companies that are less leveraged and have better access to capital resources may preclude us from completing any acquisition or in-licensing. Even if we are able to complete an acquisition or in-licensing, we cannot assure you that any acquisition or in-licensing of new products will result in short-term or long-term benefits to us. We may incorrectly judge the value or worth of an acquired company or business or an acquired or in-licensed product. In addition, our future success would depend in part on our ability to manage the rapid growth associated with any such acquisitions or in-licensing. We cannot assure you that we will be able to make the combination of our business with that of acquired businesses or companies work or be successful. We may not be able to acquire the rights to additional product candidates and approved products on terms that we find acceptable, or at all. Furthermore, the development or expansion of our business, any acquired business or any acquired or in-licensed products may require a substantial capital investment by us. We may not have these necessary funds or they might not be available to us on acceptable terms or at all. We may also seek to raise funds by selling shares of our capital stock, which could dilute current stockholders' ownership interest in our company, or securities convertible into our capital stock, which could dilute current stockholders' ownership interest in our company upon conversion.

Our ability to use net operating loss carry forwards to reduce future tax payments may be limited if there is a change in ownership of Alexion, or if taxable income does not reach sufficient levels.

As of December 31, 2009, we have approximately \$665.7 million of U.S. Federal net operating loss carryforwards, or NOLs, available to reduce taxable income in future years. A portion of these NOLs are currently subject to an annual limitation under section 382 of the Internal Revenue Code of 1986, as amended. We believe it is more likely than not that we will use the net operating losses. However, the ability to use net operating loss carryforwards will be dependent on our ability to generate taxable income. The net operating loss carryforwards may expire before we generate sufficient taxable income. NOLs totaling \$3.8 million expired in the year ended December 31, 2007. No NOLs expired during the years ended December 31, 2009 and 2008.

Our ability to utilize the NOLs may be further limited if we undergo an ownership change, as defined in section 382. This ownership change could be triggered by substantial changes in the ownership of our outstanding stock, which are generally outside of our control. An ownership change would exist if the stockholders, or group of stockholders, who own or have owned, directly or indirectly, 5% or more of the value of our stock, or are otherwise treated as 5% stockholders under section 382 and the regulations promulgated there under, increase their aggregate percentage ownership of our stock by more than 50 percentage points over the lowest percentage of our stock owned by these stockholders at any time during the testing period, which is generally the three-year period preceding the potential ownership change. In the event of an ownership change, section 382 imposes an annual limitation on the amount of post-ownership change taxable income a corporation may offset with pre-ownership change NOLs. The limitation imposed by section 382 for any post-change year would be determined by multiplying the value of our stock immediately before the ownership change (subject to certain adjustments) by the applicable long-term tax-exempt rate. Any unused annual limitation may be carried over to later years, and the limitation may under certain circumstances be increased by built-in gains which may be present with respect to assets held by us at the time of the ownership change that are recognized in the five-year period after the ownership change. Our use of NOLs arising after the date of an ownership change would not be affected.

We may have exposure to additional tax liabilities which could have a material impact on our results of operations and financial position.

As a company with international operations, we are subject to income taxes, as well as non-income based taxes, in both the United States and various foreign jurisdictions. Significant judgment is required in determining our worldwide tax liabilities. Although we believe our estimates are reasonable, the ultimate outcome with respect to the taxes we owe may differ from the amounts recorded in our financial statements. If the Internal Revenue Service, or other taxing authority, disagrees with the positions taken by our company, we could have additional tax liability, and this could have a material impact on our results of operations and financial position. In addition, the United States government and other governments are considering and may adopt tax reform measures that significantly increase our worldwide tax liabilities and materially harm our business, financial condition and results of operations.

Our international sales and operations are subject to the economic, political, legal and business conditions in the countries in which we do business, and our failure to operate successfully or adapt to changes in these conditions could cause our international sales and operations to be limited or disrupted.

Over the past few years, we have significantly expanded our international operations and expect to continue to do so in the future. Our operations in foreign countries subject us to the following additional risks:

fluctuations in currency exchange rates;

economic problems or political instability that disrupts foreign healthcare payment systems;

difficulties or inability to obtain financing in international markets;

unexpected changes in tariffs, trade barriers and regulatory requirements;

difficulties enforcing contractual and intellectual property rights;

changes in laws, regulations or enforcement practices with respect to our business, including without limitation laws relating to reimbursement, competition, pricing and sales and marketing of our products;

trade restrictions and restrictions on direct investments by foreign entities;

compliance with tax, employment and labor laws;

costs and difficulties in staffing, managing and monitoring international operations; and

longer payment cycles.

Our business and marketing methods are also subject to regulation by the governments of the countries in which we operate. The United States Foreign Corrupt Practices Act, or FCPA, and similar anti-bribery laws in other countries prohibit companies and their representatives from offering, promising, authorizing or making payments to foreign officials for the purpose of obtaining or retaining business. We have policies and procedures designed to help ensure that we and our representatives, including our employees, comply with such laws, however we cannot guarantee that these policies and procedures will protect us against liability under the FCPA or other anti-bribery laws for actions taken by our representatives. Failure to comply with the laws and regulations of the countries in which we operate could materially harm our business.

We conduct a substantial portion of our business in currencies other than the U.S. dollar, primarily the Euro, Japanese Yen, Swiss Franc and British Pound. While we attempt to hedge certain currency risks, currency fluctuations between the U.S. dollar and the currencies in which we do business have caused foreign currency transaction gains and losses in the past and will likely do so in the future. Likewise, past currency fluctuations have at times resulted in foreign currency transaction gains, and there can be no assurance that these gains can be reproduced.

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

Sales of Soliris are dependent, in large part, on reimbursement from government health administration organizations and private and governmental third-party payors, and also co-payments from individual patients in certain situations. As a result of the current credit and financial market conditions, and the overall financial climate, these governmental organizations and payors, and/or individuals, may reduce or delay initiation of treatment, may be unable to satisfy their reimbursement obligations, may delay payment or may seek to reduce reimbursement for Soliris in the future, which could have a material adverse effect on our business and results of operations. Payment defaults by a government payor could require us to expense previously recorded revenue as uncollectable, and might cause us to end or restrict sales to patients in that country. Further, the risk of payment default by a government payor could require us to revise our revenue recognition policies in regard to that payor, causing revenue to be recorded only on a cash basis, and we may be required to end or restrict sales to patients in that country.

Additionally, we rely upon third-parties for certain parts of our business, including Lonza, licensees, wholesale distributors of Soliris, contract clinical trial providers, contract manufacturers and other third-party suppliers and financial institutions. Because of the recent volatility in the financial markets, there may be a disruption or delay in the performance or satisfaction of commitments to us by these third parties which could have a material adverse effect on our business and results of operations.

Healthcare reform measures could adversely affect our business.

The United States government and governments in foreign countries have shown significant interest in pursuing healthcare reform in order to reduce costs of healthcare. Any government-adopted reform measures

could adversely impact the pricing of Soliris or the amount of reimbursement available for Soliris from governmental agencies or other third-party payors. The pricing and reimbursement environment for Soliris may become more challenging due to, among other reasons, policies of the administration or new healthcare legislation passed by Congress, or other changes in policy in the United States or in foreign countries. While we cannot predict what, if any, legislative or regulatory proposals will be adopted, the announcement or adoption of such proposals could delay or prevent our entry into new markets, affect our reimbursement or sales in the markets where we are already selling Soliris and materially harm our business, financial condition and results of operations.

Risks Related to Our Common Stock

If the trading price of our common stock continues to fluctuate in a wide range, our stockholders will suffer considerable uncertainty with respect to an investment in our common stock.

The trading price of our common stock has been volatile and may continue to be volatile in the future. Factors such as announcements of fluctuations in our or our competitors' operating results or clinical or scientific results, fluctuations in the trading prices or business prospects of our competitors and collaborators, changes in our prospects, particularly with respect to sales of Soliris, and market conditions for biopharmaceutical stocks in general could have a significant impact on the future trading prices of our common stock and our convertible senior notes. In particular, the trading price of the common stock of many biopharmaceutical companies, including ours, has experienced extreme price and volume fluctuations, which have at times been unrelated to the operating performance of the companies whose stocks were affected. This is due to several factors, including general market conditions, sales of Soliris, the announcement of the results of our clinical trials or product development and the results of our efforts to obtain regulatory approval for our products. In particular, between January 1, 2008 and December 31, 2009, the closing sales price of our common stock fluctuated from a low of \$25.49 per share to a high of \$48.82 per share, as reported after giving effect to the forward two-for-one stock split effected on August 22, 2008. While we cannot predict our future performance, if our stock price continues to fluctuate in a wide range, an investment in our common stock may result in considerable uncertainty for an investor.

Anti-takeover provisions of Delaware law, provisions in our charter and bylaws and our stockholders' rights plan, or poison pill, could make a third-party acquisition of us difficult and may frustrate any attempt to remove or replace our current management.

Because we are a Delaware corporation, the anti-takeover provisions of Delaware law could make it more difficult for a third party to acquire control of us, even if the change in control would be beneficial to stockholders. We are subject to the provisions of Section 203 of the Delaware General Laws, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Our corporate charter and by-law provisions and stockholder rights plan may discourage certain types of transactions involving an actual or potential change of control that might be beneficial to Alexion or its stockholders. Our bylaws provide that special meetings of our stockholders may be called only by the Chairman of the Board, the President, the Secretary, or a majority of the Board of Directors, or upon the written request of stockholders who together own of record 50% of the outstanding stock of all classes entitled to vote at such

meeting. Our bylaws also specify that the authorized number of directors may be changed only by resolution of the board of directors. Our certificate does not include a provision for cumulative voting for directors, which may have enabled a minority stockholder holding a sufficient percentage of a class of shares to elect one or more directors. Under our certificate of incorporation, our board of directors has the authority, without further action by stockholders, to designate up to 5,000,000 shares of preferred stock in one or more series. The rights of the holders of common stock will be subject to, and may be adversely affected by, the rights of the holders of any class or series of preferred stock that may be issued in the future.

Pursuant to our stockholder rights plan, each share of common stock has an associated preferred stock purchase right. The rights will not trade separately from the common stock until, and are exercisable only upon, the acquisition or the potential acquisition through tender offer by a person or group of 20% or more of the outstanding common stock. The rights are designed to make it more likely that all of our stockholders receive fair and equal treatment in the event of any proposed takeover of us and to guard against the use of partial tender offers or other coercive tactics to gain control of us. These provisions could delay or discourage transactions involving an actual or potential change in control of us or our management, including transactions in which stockholders might otherwise receive a premium for their shares over then current prices. These provisions could also limit the ability of stockholders to remove current management or approve transactions that stockholders may deem to be in their best interests and could adversely affect the price of our common stock.

Item 1B. UNRESOLVED STAFF COMMENTS.

None.

Item 2. PROPERTIES.

We conduct our operations at owned and leased facilities described below.

Location	Operations Conducted	Approximate Square Feet	Lease Expiration Date
Cheshire, Connecticut	Executive, sales and research offices	141,454	2017
Smithfield, Rhode Island	Commercial and research manufacturing	56,500	N/A
Lausanne, Switzerland	Regional executive and sales office	5,249	2013

We believe that our administrative office space is adequate to meet our needs for the foreseeable future. We also believe that our research and development facilities and our manufacturing facility, together with third party manufacturing facilities, will be adequate for our on-going activities. In addition to the locations above, we also lease offices in certain countries to facilitate our operations as a global organization.

Item 3. LEGAL PROCEEDINGS.

None

Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

There were no matters submitted to a vote of security holders during the fourth quarter of 2009.

EXECUTIVE OFFICERS OF THE COMPANY

The executive officers of the Company and their respective ages and positions as of February 16, 2010 are as follows:

Name	Age	Position with Alexion
Leonard Bell, M.D.	51	Chief Executive Officer, Secretary, Treasurer, Director
Stephen P. Squinto, Ph.D.	53	Executive Vice President and Head of Research and Development
Patrice Coissac	61	Senior Vice President, and President of Alexion International, Sàrl
Thomas I.H. Dubin, J.D.	47	Senior Vice President and Chief Legal Officer
David L. Hallal	43	Senior Vice President, Commercial Operations, Americas
Vikas Sinha, M.B.A., C.A., C.P.A.	46	Senior Vice President and Chief Financial Officer

Leonard Bell, M.D. is the principal founder of Alexion, and has been a director of Alexion since February 1992 and the Company's President and Chief Executive Officer, Secretary and Treasurer from January 1992, and Chief Executive Officer, Secretary and Treasurer since April 2002. From 1991 to 1992, Dr. Bell was an Assistant Professor of Medicine and Pathology and co-Director of the program in Vascular Biology at the Yale University School of Medicine. From 1990 to 1992, Dr. Bell was an attending physician at the Yale-New Haven Hospital and an Assistant Professor in the Department of Internal Medicine at the Yale University School of Medicine. Dr. Bell was a recipient of the Physician Scientist Award from the National Institutes of Health and Grant-in-Aid from the American Heart Association as well as various honors and awards from academic and professional organizations. His work has resulted in more than 20 scientific publications and 9 patent applications. Dr. Bell was also a director of The Medicines Company from May 2000 until April 2005. Dr. Bell received his A.B. from Brown University and M.D. from Yale University School of Medicine. Dr. Bell is currently an Adjunct Assistant Professor of Medicine and Pathology at the Yale University School of Medicine.

Stephen P. Squinto, Ph.D. is a founder of Alexion and has been Executive Vice President and Head of Research and Development since June 2007. He held the position of Executive Vice President and Head of Research between August 2000 and June 2007. He also held the positions of Senior Vice President and Chief Technical Officer from March 1998 to July 2000, Vice President of Research, Molecular Sciences, from August 1994 to March 1998, Senior Director of Molecular Sciences from July 1993 to July 1994, and Director of Molecular Development from 1992 to July 1993. From 1989 to 1992, Dr. Squinto held various positions at Regeneron Pharmaceuticals, Inc. most recently serving as Senior Scientist and Assistant Head of the Discovery Group. From 1986 to 1989, Dr. Squinto was an Assistant Professor of Biochemistry and Molecular Biology at Louisiana State University Medical Center and an Adjunct Professor of Neuroscience at the Tulane University Medical School. Dr. Squinto's work has led to over 70 scientific papers in the fields of gene regulation, growth factor biology and gene transfer. Dr. Squinto's work is primarily in the fields of molecular and cellular biology. Dr. Squinto served as a Director of the Biotechnology Research and Development Corporation, a biotechnology consortium, from 1997 to 2003. Dr. Squinto received his B.A. in Chemistry and Ph.D. in Biochemistry and Biophysics from Loyola University of Chicago.

Patrice Coissac has been Senior Vice President, and President of Alexion International Sàrl since April 2009. He was Senior Vice President, and President of Alexion Europe SAS from November 2005 to March 2009. In 2004-2005, he founded and ran his own consulting firm to serve biopharmaceutical companies in their

strategic development. From 1999 to mid 2003, prior to the Pfizer acquisition, Mr. Coissac served as President of Pharmacia SAS France and was responsible for the integration of Monsanto (Searle) with Pharmacia & Upjohn in France. Before 1999 Mr. Coissac held a number of managerial positions at leading pharmaceutical companies including Head of Operations for Novartis Belgium and President of Boehringer Mannheim Therapeutics France. In 1994 Mr. Coissac also served as Marketing Senior Vice President for global pharmaceutical operations at Corange International. Previously at Sandoz Pharmaceuticals, he held various global marketing positions in several countries including Japan where he was posted during several years, Switzerland at Sandoz World Headquarters and France at the beginning of his career.

Thomas I.H. Dubin, J.D. has been Senior Vice President and Chief Legal Officer since January 2010. He was Senior Vice President and General Counsel from August 2005 to December 2009. He was Vice President and General Counsel from January 2001 to July 2005. From February 1999 to September 2000 he served as Vice President, General Counsel and Secretary for ChiRex Inc., a NASDAQ-traded international corporation providing advanced process development services and specialty manufacturing to the pharmaceutical industry, which in September 2000 was acquired by and merged into Rhodia. From 1992 to 1999, Mr. Dubin held various positions with Warner-Lambert Company, including Assistant General Counsel, Pharmaceuticals. Prior to his tenure with Warner-Lambert, Mr. Dubin was a corporate attorney for five years with Cravath, Swaine & Moore in New York. Mr. Dubin received his J.D. from New York University and his B.A., cum laude, from Amherst College.

David L. Hallal has been Senior Vice President, Commercial Operations, Americas since November 2008. He was Senior Vice President, US Commercial Operations from November 2007 until November 2008. Prior to that, Mr. Hallal was Vice President, US Commercial Operations from June 2006 until November 2007. Mr. Hallal is responsible for all Commercial Functions in the U.S., Canada, and Latin America, including marketing, sales, reimbursement and product access. Mr. Hallal is also responsible for Alexion's Global Marketing Team. Prior to Alexion, from April 2004 to June 2006, Mr. Hallal was Vice President of Sales at OSI Eyetech where he led the U.S. launch of the first-in-class anti-VEGF therapy, Macugen for age-related macular degeneration. From August 2002 to February 2004, Mr. Hallal was Senior Director of Sales for Biogen Idec's Immunology Sales Team, where he built a sales organization dedicated to the launch of the first-in-class biologic Amevive for psoriasis. For more than ten years starting in 1992, Mr. Hallal held various leadership positions at Amgen, focusing on Epogen®, Neupogen®, Neulasta® and Aranesp® in the hematology and oncology marketplace. More specifically from April 1999 to August 2002, he served as the Southeast Oncology Sales Director and Oncology Health Systems Sales Director. From 1998 to 1999, Mr. Hallal served as Amgen's Director of Oncology National Accounts. From 1992 to 1998, Mr. Hallal served in roles of escalating responsibility for the promotion of Epogen and Neupogen, including National Account Manager where he was responsible for working with national managed care organizations in the U.S. He holds a B.A. from the University of New Hampshire.

Vikas Sinha, M.B.A., C.A., CPA. joined Alexion as Senior Vice President and Chief Financial Officer in September 2005. From June 1994 to August 2005, Mr. Sinha held various positions with Bayer AG in the United States, Japan, Germany, and Canada, most recently serving since February 2001 as Vice President and Chief Financial Officer of Bayer Pharmaceuticals Corporation, USA. Mr. Sinha has been responsible for financial and business risk management, strategic planning, contracting, customer services, information systems, and supply chain and site administration in North America. Mr. Sinha was also a member of the Pharmaceutical Management Committee for North America. Prior to his appointment in the United States, Mr. Sinha was Vice President and Chief Financial Officer of Bayer Yakuhin Ltd., in Japan and Manager, Mergers and Acquisitions with Bayer AG in Germany. He began his career at Bayer in Toronto as part of an executive development

program in the healthcare division. Prior to Bayer, Mr. Sinha held several positions of increasing responsibilities with ANZ Bank and Citibank in South Asia. Mr. Sinha holds a Masters of Business Administration from the Asian Institute of Management which included an exchange program with the University of Western Ontario (Richard Ivey School of Business). He is also a qualified Chartered Accountant from the Institute of Chartered Accountants of India and a CPA from USA.

PART II**Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.**

Our common stock is quoted on The Nasdaq Stock Market, LLC under the symbol ALXN. The following table sets forth the range of high and low sales prices for our common stock on The Nasdaq Stock Market, LLC for the periods indicated since January 1, 2008.

Fiscal 2008	High	Low
First Quarter		
(January 1, 2008 to March 31, 2008)	\$ 38.56	\$ 25.49
Second Quarter		
(April 1, 2008 to June 30, 2008)	\$ 36.46	\$ 30.51
Third Quarter		
(July 1, 2008 to September 30, 2008)	\$ 47.51	\$ 36.66
Fourth Quarter		
(October 1, 2008 to December 31, 2008)	\$ 42.04	\$ 31.00
Fiscal 2009		
First Quarter		
(January 1, 2009 to March 31, 2009)	\$ 40.17	\$ 31.65
Second Quarter		
(April 1, 2009 to June 30, 2009)	\$ 41.11	\$ 32.59
Third Quarter		
(July 1, 2009 to September 30, 2009)	\$ 46.67	\$ 36.87
Fourth Quarter		
(October 1, 2009 to December 31, 2009)	\$ 48.82	\$ 43.11

As of February 16, 2010, we had 449 stockholders of record of our common stock and an estimated 51,251 beneficial owners. The closing sale price of our common stock on February 16, 2010 was \$47.92 per share.

DIVIDEND POLICY

We have never paid cash dividends. We do not expect to declare or pay any cash dividends on our common stock in the near future. We intend to retain all earnings, if any, to invest in our operations. The payment of future dividends is within the discretion of our board of directors and will depend upon our future earnings, if any, our capital requirements, financial condition and other relevant factors.

EQUITY COMPENSATION PLAN INFORMATION (shares in thousands)

Plan Category	Number of shares of common stock to be issued upon exercise of outstanding options (2)	Weighted-average exercise price of outstanding options	Weighted-average term to expiration of options outstanding	Number of shares of common stock remaining available for future issuance under equity compensation plans
Equity compensation plans approved by stockholders (1)	6,476	24.78	6.77	4,439
Equity compensation plans not approved by stockholders				

(1) Reflects number of shares of common stock to be issued upon exercise of outstanding options under all our equity compensation plans, including our 2004 Incentive Plan. No shares of common stock are available for future issuance under any of our equity compensation plans, except the 2004 Incentive Plan.

(2) Does not include 944 restricted shares outstanding that were issued under the 2004 Incentive Plan.

The outstanding options and restricted shares are not transferable for consideration and do not have dividend equivalent rights attached.

THE COMPANY'S STOCK PERFORMANCE

The following graph compares cumulative total return of the Company's Common Stock with the cumulative total return of (i) the NASDAQ Stock Market-United States, and (ii) the NASDAQ Biotechnology Index. The graph assumes (a) \$100 was invested on July 31, 2003 in each of the Company's Common Stock, the stocks comprising the NASDAQ Stock Market-United States and the stocks comprising the NASDAQ Biotechnology Index, and (b) the reinvestment of dividends. The comparisons shown in the graph are based on historical data and the stock price performance shown in the graph is not necessarily indicative of, or intended to forecast, future performance of our stock.

CUMULATIVE TOTAL RETURN

	7/04	7/05	12/05	12/06	12/07	12/08	12/09
Alexion Pharmaceuticals, Inc.	100.00	163.57	127.20	253.71	471.29	454.65	613.32
NASDAQ Composite	100.00	116.09	117.27	131.94	143.17	84.61	122.22
NASDAQ Biotechnology	100.00	123.52	132.12	131.93	136.42	127.47	140.04

Item 6. SELECTED CONDENSED CONSOLIDATED FINANCIAL DATA.

The following selected financial data is derived from, and should be read in conjunction with, the financial statements, including the notes thereto, and Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this Form 10-K.

(amounts in thousands, except per share amounts)

Consolidated Condensed Statement of Operations:

		Year Ended December 31,			Five Month Period Ended December 31,	Year Ended July 31,
	2009	2008	2007	2006	2005	2005
Revenues:						
Net product sales	\$ 386,800	\$ 259,004	\$ 66,381	\$	\$	\$
Contract research revenue		95	5,660	1,558	664	1,064
Total revenues	386,800	259,099	72,041	1,558	664	1,064
Cost of sales	45,059	28,366	6,696			
Operating expenses:						
Research and development	81,915	62,581	68,961	83,225	48,238	91,388
Selling, general and administrative	172,767	133,543	96,142	55,418	12,763	18,951
Total operating expenses	254,682	196,124	165,103	138,643	61,001	110,339
Operating income (loss)	87,059	34,609	(99,758)	(137,085)	(60,337)	(109,275)
Other income (expense)	(3,745)	121	6,723	5,198	1,931	(240)
Income (loss) before income taxes	83,314	34,730	(93,035)	(131,887)	(58,406)	(109,515)
Income tax provision (benefit)	(211,852)	1,581	(745)	(373)	(450)	(765)
Net income (loss)	\$ 295,166	\$ 33,149	\$ (92,290)	\$ (131,514)	\$ (57,956)	\$ (108,750)
Earnings (loss) per common share						
Basic	\$ 3.46	\$ 0.43	\$ (1.27)	\$ (2.07)	\$ (0.95)	\$ (1.95)
Diluted	\$ 3.26	\$ 0.39	\$ (1.27)	\$ (2.07)	\$ (0.95)	\$ (1.95)
Shares used in computing earnings (loss) per common share						
Basic	85,326	77,680	72,622	63,402	61,046	55,704
Diluted	90,582	89,967	72,622	63,402	61,046	55,704

Consolidated Condensed Balance Sheet Data:

	2009	2008	As of December 31,		2005	As of July 31, 2005
			2007	2006		
Cash, cash equivalents and marketable securities	\$ 176,220	\$ 139,711	\$ 106,712	\$ 250,148	\$ 212,456	\$ 195,404
Trade accounts receivable	113,731	74,476	46,278			
Inventories	40,885	49,821	32,907	2,314		
Total current assets	373,456	277,101	205,354	236,776	217,551	201,162
Property, plant and equipment	164,691	139,885	104,280	39,135		
Total assets	786,401	477,551	334,357	333,537	262,711	248,122
Notes payable		27,500				
Mortgage loan		44,000	44,000	26,000		
Convertible notes	9,918	97,222	150,000	150,000	150,000	150,000
Total stockholders' equity	688,356	247,001	101,556	124,677	81,890	67,671

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.
(amounts in thousands, except per share data)

In addition to historical information, this report contains forward-looking statements that involve risks and uncertainties, which may cause our actual results to differ materially from plans and results discussed in forward-looking statements. We encourage you to review the risks and uncertainties, discussed in the section entitled item 1A Risk Factors, and the Note Regarding Forward-Looking Statements, included at the beginning of this Form 10-K. The risks and uncertainties can cause actual results to differ significantly from those forecasted in forward-looking statements or implied in historical results and trends.

The following discussion should be read in conjunction with our consolidated financial statements and related notes appearing elsewhere in this Form 10-K.

Overview

We are a biopharmaceutical company engaged in the discovery, development and commercialization of biologic therapeutic products aimed at treating patients with severe and life-threatening disease states, including hematologic, kidney and neurologic diseases, transplant rejection, cancer and autoimmune disorders. Our marketed product Soliris® (eculizumab) is the first and only therapy approved for the treatment of patients with paroxysmal nocturnal hemoglobinuria, or PNH.

Soliris is designed to inhibit a specific aspect of the complement component of the immune system and thereby treat inflammation associated with chronic hematologic, kidney and neurological disorders, transplant rejection, and autoimmune disorders. Soliris is a humanized monoclonal antibody that generally blocks complement activity for one to two weeks after a single dose at the doses currently prescribed. The initial indication for which we received approval for Soliris is PNH. PNH is a rare, debilitating and life-threatening, acquired genetic deficiency blood disorder defined by the destruction of red blood cells, or hemolysis. The chronic hemolysis in patients with PNH may be associated with life-threatening thromboses, recurrent pain, kidney disease, disabling fatigue, impaired quality of life, severe anemia, pulmonary hypertension, shortness of breath and intermittent episodes of dark-colored urine (hemoglobinuria).

Soliris was granted marketing approval by the U.S. Food and Drug Administration, or FDA, and by the European Commission, or E.C., in 2007 and now has received approval in several other countries throughout the world. Additionally, Soliris was granted orphan drug designation for the treatment of PNH in the United States, Europe, Japan and several other territories.

In 2009, the FDA and E.C. granted Soliris orphan drug designation for the treatment of patients with atypical Hemolytic Uremic Syndrome, or aHUS, a rare, inherited, and life-threatening complement-inhibitor deficiency disease that often progresses to end-stage kidney disease or failure. Alexion is currently enrolling patients in four clinical studies of Soliris as an investigational treatment for adolescent and adult patients with aHUS.

Critical Accounting Policies and the Use of Estimates

The significant accounting policies and basis of preparation of our consolidated financial statements are described in Note 1, Business Overview and Summary of Significant Accounting Policies. Under accounting

principles generally accepted in the United States, we are required to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and disclosure of contingent assets and liabilities in our financial statements. Actual results could differ from those estimates.

We believe the judgments, estimates and assumptions associated with the following critical accounting policies have the greatest potential impact on our consolidated financial statements:

Revenue recognition

Royalties

Inventories

Research and development expenses

Stock-based compensation

Income taxes

Revenue Recognition

Net Product Sales

Our principal source of revenue is product sales. We have applied the following principles in recognizing revenue:

To date, our product sales have consisted solely of Soliris. We recognize revenue from product sales when persuasive evidence of an arrangement exists, risk of loss has passed to the customer, the price is fixed or determinable, collection from the customer is reasonably assured and we have no further performance obligations. Amounts collected from customers and remitted to governmental authorities, which are primarily comprised of value-added taxes (VAT) in foreign jurisdictions, are presented on a net basis in the Company's statements of operations, and do not impact net product sales.

In the United States, our customers are primarily specialty distributors and specialty pharmacies who supply physician office clinics, hospital outpatient clinics, infusion clinics or home health care providers. In some cases, we also sell Soliris to government agencies. Outside the United States, our customers are primarily hospitals, hospital buying groups, pharmacies, other health care providers and distributors.

In addition to sales where Soliris is commercially available, we have also recorded revenue on sales for individual patients through named-patient programs outside the United States. The relevant authorities or institutions in those countries have agreed to reimburse for product sold on a named-patient basis where Soliris has not received final approval for commercial sales.

Because of the pricing of Soliris, the limited number of patients, the short period from sale of product to patient infusion and the lack of contractual return rights, Soliris customers generally carry limited inventory. We monitor inventory within our distribution channel to determine whether deferral of sales is required. To date, actual refunds and returns have been negligible.

We record estimated rebates payable under governmental programs, including Medicaid and programs in Europe, as a reduction of revenue at the time product sales are recorded. Our calculations related to these rebate accruals require estimates, including estimates of customer mix, to determine which sales will be subject to

rebates and the amount of such rebates. We update our estimates and assumptions each period and record any necessary adjustments. Generally, the length of time between product sale and the processing and reporting of the rebates is three to six months. Upon review of historical rebate payments compared to our accruals, we revise our estimates of rebates payable, which may have an impact on revenue in the period in which the adjustment is made.

We have provided balances and activity in the rebates payable account for the years ended December 31, 2009, 2008 and 2007 as follows:

	Rebates Payable
Balance at December 31, 2006	\$
Current provisions relating to sales in current year	(1,024)
Payments/credits relating to sales in current year	18
Balance at December 31, 2007	\$ (1,006)
Current provisions relating to sales in current year	(3,723)
Payments/credits relating to sales in current year	1,189
Payments/credits relating to sales in prior years	193
Balance at December 31, 2008	\$ (3,347)
Current provisions relating to sales in current year	(6,024)
Payments/credits relating to sales in current year	2,165
Payments/credits relating to sales in prior years	3,138
Balance at December 31, 2009	\$ (4,068)

We record distribution and other fees paid to our customers as a reduction of revenue. These costs are typically known at the time of sale, resulting in minimal adjustments subsequent to the period of sale.

Royalties

Our cost of sales includes royalties to third parties related to the sale and commercial manufacture of Soliris. We estimate our royalty obligations based on existing contractual obligations and our assessment of estimated royalties owed to other third parties. These estimates may be influenced by the outcome of future litigation or other claims, if any, the results of which are uncertain. On a periodic basis and based on specific events such as the outcome of litigation or settlement of claims, we may reassess these estimates, resulting in adjustments to cost of sales.

Inventories

Inventories are stated at the lower of cost or estimated realizable value. We determine the cost of inventory using the average cost method.

For products that are in initial clinical development, we capitalize inventory costs prior to regulatory approval, but subsequent to the filing of the Biologics License Application, or BLA, when we determine that the inventory has probable future economic benefit. Inventory is not capitalized prior to completion of a Phase III

clinical trial. We also capitalize the cost of inventory manufactured at our manufacturing plant in property, plant and equipment prior to approval of the facility by regulatory authorities.

We analyze our inventory levels to identify inventory that may expire prior to sale, inventory that has a cost basis in excess of its estimated realizable value, or inventory in excess of expected sales requirements. Although the manufacturing of our product is subject to strict quality control, certain batches or units of product may, after a period of time, no longer meet quality specifications or may expire, at which point we would adjust our inventory values. Soliris currently has a maximum estimated life of 48 months and, based on our sales forecasts, we expect to realize the carrying value of the Soliris inventory.

The determination of whether or not inventory costs will be realizable requires estimates by our management. A critical input in this determination is future expected inventory requirements based on internal sales forecasts. We then compare these requirements to the expiry dates of inventory on hand. To the extent that inventory is expected to expire prior to being sold, we will write down the value of inventory. If actual results differ from those estimates, additional inventory write-offs may be required.

In the future, reduced demand, quality issues or excess supply beyond those anticipated by management may result in an adjustment to inventory levels, which would be recorded as an increase to cost of sales.

Research and Development Expenses

We accrue costs for clinical trial activities based upon estimates of the services received and related expenses incurred that have yet to be invoiced by the contract research organizations (CROs), clinical study sites, laboratories, consultants, or other clinical trial vendors that perform the activities. Related contracts vary significantly in length, and may be for a fixed amount, a variable amount based on actual costs incurred, capped at a certain limit, or for a combination of these elements. Activity levels are monitored through close communication with the CROs and other clinical trial vendors, including detailed invoice and task completion review, analysis of expenses against budgeted amounts, analysis of work performed against approved contract budgets and payment schedules, and recognition of any changes in scope of the services to be performed. Certain CRO and significant clinical trial vendors provide an estimate of costs incurred but not invoiced at the end of each quarter for each individual trial. The estimates are reviewed and discussed with the CRO or vendor as necessary, and are included in research and development expenses for the related period. For clinical study sites, which are paid periodically on a per-subject basis to the institutions performing the clinical study, we accrue an estimated amount based on subject screening and enrollment in each quarter. The estimates may differ from the actual amount subsequently invoiced, which may result in adjustment to research and development expense several months after the related services were performed.

Stock-Based Compensation

We have one stock-based compensation plan known as the 2004 Incentive Plan. Under this plan, restricted stock, restricted stock units, stock options and other stock-related awards may be granted to our directors, officers, employees and consultants or advisors of the Company or any subsidiary.

Our estimates of employee stock option values rely on estimates of factors we input into the Black-Scholes model. The key factors involve an estimate of future uncertain events. Significant assumptions include the use of historical volatility to determine the expected stock price volatility. We also estimate expected term until

exercise, forfeiture or cancellation, as well as the reduction in the expense from expected forfeitures. We currently use historical exercise and cancellation patterns as our best estimate of future estimated life. Actual volatility and lives of options may be significantly different from our estimates. If factors change and we employ different assumptions, the compensation expense that we record in future periods may differ significantly from our prior recorded amounts.

Income Taxes

We utilize the asset and liability method of accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement carrying amounts and tax basis of assets and liabilities using enacted tax rates in effect for years in which the temporary differences are expected to reverse. We provide a valuation allowance when it is more likely than not that deferred tax assets will not be realized.

We follow the authoritative guidance regarding accounting for uncertainty in income taxes, which prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. These unrecognized tax benefits relate primarily to issues common among multinational corporations in our industry. We apply a variety of methodologies in making these estimates which include studies performed by independent economists, advice from industry and subject experts, evaluation of public actions taken by the Internal Revenue Service and other taxing authorities, as well as our own industry experience. We provide estimates for unrecognized tax benefits which may be subject to material adjustments until matters are resolved with taxing authorities or statutes expire. If our estimates are not representative of actual outcomes, our results of operations could be materially impacted.

In the fourth quarter of 2009, we reversed the valuation allowance recorded against a significant portion of our deferred tax assets in the United States, resulting in a tax benefit of \$215,516. The decision to reverse the valuation allowance was made after management determined that it was more likely than not that these deferred tax assets would be realized. We made the determination after evaluation of our levels of recent profitability, as well as forecasts of future taxable income which impact utilization of tax attributes, primarily net operating losses and research income tax credits.

We continue to maintain a valuation allowance against certain other deferred tax assets where realizability is not certain. We periodically evaluate the likelihood of the realization of deferred tax assets and reduce the carrying amount of these deferred tax assets by a valuation allowance to the extent we believe a portion will not be realized. We consider many factors when assessing the likelihood of future realization of deferred tax assets, including our recent cumulative earnings experience by taxing jurisdiction, expectations of future taxable income, carryforward periods available to us for tax reporting purposes, various income tax strategies and other relevant factors. Significant judgment is required in making this assessment and, to the extent future expectations change we would have to assess the recoverability of our deferred tax assets at that time. If we determine that the deferred tax assets are not realizable in a future period, we would record material changes to income tax expense in that period.

Results of Operations

The following table sets forth consolidated statements of operations data for the periods indicated. This information has been derived from the consolidated financial statements included elsewhere in this Form 10-K.

	Year Ended December 31,		
	2009	2008	2007
Revenues:			
Net product sales	\$ 386,800	\$ 259,004	\$ 66,381
Contract research revenue		95	5,660
Total revenues	386,800	259,099	72,041
Cost of sales	45,059	28,366	6,696
Research and development expenses	81,915	62,581	68,961
Selling, general and administrative expenses	172,767	133,543	96,142
Total operating expenses	254,682	196,124	165,103
Operating income (loss)	87,059	34,609	(99,758)
Other income (expense)	(3,745)	121	6,723
Income (loss) before income taxes	83,314	34,730	(93,035)
Income tax provision (benefit)	(211,852)	1,581	(745)
Net income (loss)	\$ 295,166	\$ 33,149	\$ (92,290)
Earnings (loss) per common share:			
Basic	\$ 3.46	\$ 0.43	\$ (1.27)
Diluted	\$ 3.26	\$ 0.39	\$ (1.27)

Comparison of the Year Ended December 31, 2009 to the Year Ended

December 31, 2008

Revenues

During the year ended December 31, 2009, we recorded sales of Soliris in the United States of \$159,829 and outside the United States of \$226,971. We recorded a gain of \$3,363 related to our foreign currency cash flow hedging program, included in revenue from outside the United States. During the year ended December 31, 2008, we recorded sales of Soliris in the United States of \$113,204 and outside the United States of \$145,800. We recorded a gain of \$4,141 related to our foreign currency cash flow hedging program, included in revenue from outside the United States.

The increases in revenue for fiscal year 2009 versus 2008 were due to an increased number of patients treated with Soliris in the United States and outside the United States.

As additional physicians request Soliris and as governmental reimbursement for Soliris is provided for in more territories, we expect that the number of patients receiving Soliris treatment will increase, resulting in an increase in product sales in existing countries. We also expect product sales in the rest of the world to increase as we progress with appropriate authorities on the regulatory, price approval and reimbursement process in additional territories.

We recorded no contract research revenues in the year ended December 31, 2009 and \$95 for the year ended December 31, 2008.

Cost of Sales

Cost of sales was \$45,059 and \$28,366, or 12% and 11% of product revenue, for the years ended December 31, 2009 and 2008, respectively. Cost of sales includes manufacturing costs as well as actual and estimated royalty expenses associated with sales of Soliris.

On a periodic basis and based on events such as the outcome of litigation, we may reassess the estimates of royalties owed to certain third parties. Changes in these estimates could have a material impact on our cost of sales in future periods.

Research and Development Expenses

Our research and development expense includes personnel, facility and external costs associated with the research and development of our product candidates, as well as product development costs.

We group our research and development expenses into two major categories: external direct expenses and all other R&D expenses.

External direct expenses are comprised of costs paid to outside parties for clinical development, product development and discovery research. Clinical development costs are comprised of costs to conduct and manage clinical trials related to eculizumab and other product candidates. Product development costs are those incurred in performing duties related to pre- and post-approval manufacturing development and regulatory functions. Discovery research costs are incurred in conducting laboratory studies and performing preclinical research for

other uses of eculizumab and other product candidates. Clinical development costs have been accumulated and allocated to each of our programs, while product development and discovery research costs have not been allocated.

All other R&D expenses consist of costs to compensate personnel, to maintain our facility, equipment and overhead and similar costs of our research and development efforts. These costs relate to efforts on our clinical and preclinical products as well as our discovery research efforts. These costs have not been allocated directly to each program.

The following table provides information regarding research and development expenses:

	Year Ended December 31, 2009	Year Ended December 31, 2008	\$ Variance	% Variance
Clinical development	\$ 20,858	\$ 17,889	\$ 2,969	17%
Product development	10,630	8,258	2,372	29%
Discovery research	1,776	1,201	575	48%
Total external direct expenses	33,264	27,348	5,916	22%
Labor expenses	39,899	27,555	12,344	45%
Operating and occupancy	4,935	4,192	743	18%
Depreciation and amortization	3,817	3,486	331	9%
Total other R&D expenses	48,651	35,233	13,418	38%
Research and development expense	\$ 81,915	\$ 62,581	\$ 19,334	31%

The following table summarizes external direct expenses related to our clinical development programs. Please refer to Item 1, Business, for a description of each of these programs:

	Year Ended December 31, 2009	Year Ended December 31, 2008	Year Ended December 31, 2007	Accumulated Expenditures since January 1, 2006
External direct expenses				
Soliris: PNH program	\$ 7,850	\$ 14,112	\$ 14,741	\$ 53,604
Soliris: non-PNH programs	8,938	1,657	679	11,274
Samalizumab	1,222	699		1,921
Pexelizumab			1,847	13,713
Unallocated	2,848	1,421	2,667	10,431
	\$ 20,858	\$ 17,889	\$ 19,934	\$ 90,943

Prior to January 1, 2006, we spent approximately \$475,838 on all research & development programs. Substantially all of our research and development expenses prior to the year ended December 31, 2006 were related to two products, eculizumab and pexelizumab. We obtained approval for eculizumab for the treatment of PNH in 2007 in the United States and European Union, and we made the decision to cease development of pexelizumab in 2006. Expenses for the pexelizumab program recorded in 2007 related to the termination of the program.

The successful development of our drug candidates is uncertain and subject to a number of risks. We cannot guarantee that results of clinical trials will be favorable or sufficient to support regulatory approvals for our other programs. We could decide to abandon development or be required to spend considerable resources not otherwise contemplated. For additional discussion regarding the risks and uncertainties regarding our development programs, please refer to the Risk Factors in this Form 10-K.

During the year ended December 31, 2009, we incurred research and development expenses of \$81,915, an increase of \$19,334, or 31% versus the \$62,581 incurred during the year ended December 31, 2008. The increase was primarily due to the following:

Increase of \$12,344 in research and development payroll and benefit expense related primarily to global expansion of staff supporting our expanding number of clinical programs and manufacturing and product development activities at our production facility in Smithfield RI.

Increase of \$2,969 external clinical development expenses related primarily to an expansion of studies of eculizumab for non-PNH indications, as well as growth of our samalizumab program, offset by decreases in spending on the PNH program (see table above).

Increase of \$2,372 in external product development expenses related primarily to increases in manufacturing development activities at our production facility in Smithfield RI.

We expect our research and development expenses to increase, at a lower rate than our revenue, in 2010 due to clinical development and manufacturing costs related to our expanding eculizumab and samalizumab development programs. For additional information on these programs, please refer to Product and Development Programs in Item I of this Form 10-K.

Selling, General and Administrative Expenses

Our selling, general and administrative expense includes commercial and administrative personnel, corporate facility and external costs required to support the marketing and sales of our commercialized products. These selling, general and administrative costs include: corporate facility operating expenses and depreciation; marketing and sales operations in support of Soliris; human resources; finance, legal, information technology and support personnel expenses; and other corporate costs such as telecommunications, insurance, audit and legal expenses.

During the year ended December 31, 2009, we incurred selling, general and administrative expenses of \$172,767, an increase of \$39,224, or 29%, versus the \$133,543 incurred during the year ended December 31, 2008. The increase was primarily due to the following:

During the year ended December 31, 2009, salaries, benefits and other labor expenses increased to \$88,622, an increase of \$21,766, or 33%, versus \$66,856 incurred during the year ended December 31, 2008. The increase was a result of increased headcount related to commercial development activities, including increases in payroll and benefits costs of \$15,108 related to our global commercial operations teams. Other increases related to payroll and benefits within our executive, finance, information technology, human resources and legal groups to support our growth as a commercial entity.

Increase in external selling, general and administrative expenses of \$17,458 was due primarily to increases in marketing and consulting services of \$5,693, travel costs of \$3,006, occupancy and

depreciation expenses of \$4,901 relating to new and expanded office space in Europe, Japan, Canada, Australia and Latin America and \$1,348 in telecommunications and information technology expenses.

We expect our selling, general and administrative expenses to increase, at a lower rate than our revenue, in 2010, reflecting our growth as a commercial organization throughout the world.

Other Income (Expense)

During the year ended December 31, 2009, we recognized \$530 of foreign currency loss, an increase of \$248, versus a loss of \$282 incurred during the year ended December 31, 2008. The increase was primarily a result of the fluctuation in exchange rates on the portion of our monetary assets and liabilities that were not fully hedged as part of our hedging programs.

During the year ended December 31, 2009, investment income decreased \$2,024, or 72% to \$786 due primarily to reduced interest rates earned in money market funds.

During the year ended December 31, 2009, interest expense decreased \$1,801, or 75%, to \$606 due primarily to lower principal balance of our convertible notes as a result of the note conversion in October 2008 and exchange in April and May 2009.

During the year ended December 31, 2009, interest expense decreased \$1,801, or 75%, to \$606 due primarily to lower principal balance of our convertible notes as a result of the note conversion in October 2008 and exchange in April and May 2009.

Income Taxes

During the year ended December 31, 2009, we recorded an income tax benefit of \$211,852, compared to a provision of \$1,581 for the year ended December 31, 2008. The tax benefit reported in 2009 includes a benefit of \$215,516 attributable to the release of valuation allowances against US deferred tax assets, offset principally by income tax provisions for profitable foreign subsidiaries. The valuation allowance was reversed after management determined that a significant portion of the deferred tax assets relating to the United States would be realized. We made the determination after evaluation of our levels of recent profitability, as well as forecasts of future taxable income which impact utilization of tax attributes, primarily net operating losses and research income tax credits. The income tax provision for 2008 is principally attributable to entities in certain foreign jurisdictions who achieved profitability during the year, offset by the reversal of valuation allowances in those foreign jurisdictions and the exchange of Federal research credits for cash.

Due to reversal of the valuation allowance during the year ended December 31, 2009, we will record income taxes at an effective tax rate, starting in 2010, which is significantly higher than historical tax rates. The Company was granted an incentive tax holiday in the Canton of Vaud in Switzerland effective January 1, 2010, with a final expiration date in 2019. The tax holiday will exempt the Company from most local corporate income taxes in Switzerland through the end of 2014 and is expected to be renewed for an additional 5 years.

Comparison of the Year Ended December 31, 2008 to the Year Ended December 31, 2007

Revenues

During the year ended December 31, 2008, we recorded sales of Soliris related to commercial sales in the United States of \$113,204 and commercial and named-patient sales outside the United States of \$145,800. We recorded a gain of \$4,141 related to our foreign currency cash flow hedging program, included in revenue from outside the United States. During the year ended December 31, 2007, we recorded sales of Soliris related to commercial sales in the United States of \$46,196 and commercial and named-patient sales in the European Union of \$20,185. The increases in revenue for fiscal year 2008 versus 2007 were due to an increased number of patients treated with Soliris as a result of our product launch in the United States and in various countries in Europe.

We recorded contract research revenues of \$95 and \$5,660 for the years ended December 31, 2008 and 2007, respectively. Of the \$5,660 in contract research revenues recorded in 2007, \$5,343 relates to the termination of our collaborative agreement with Proctor & Gamble, effective March 30, 2007.

Cost of Sales

Cost of sales was \$28,366 and \$6,696 for the years ended December 31, 2008 and 2007, respectively. Cost of sales includes actual and estimated royalty expenses associated with sales of Soliris, as well as other manufacturing costs. Changes in the estimates of royalties owed to certain third parties could have a material impact on our cost of sales in future periods.

Product sold during the year ended December 31, 2007 included inventory that was previously expensed prior to submission of our BLA and therefore is not included in the cost of sales during this period. During the fourth quarter of 2007, we exhausted the supply of previously expensed inventory. Beginning in 2008, our cost of sales reflected the full manufacturing cost of the inventory.

In the fourth quarter of 2008, we entered into a patent license agreement and settlement agreement with PDL BioPharma in which we were obligated to pay a total of \$25,000 for a fully paid, perpetual license. As a result of the settlement and evaluation of other potential royalties, we recorded a reduction in cost of goods sold of approximately \$1,800 related to an adjustment of estimated accrued royalties for sales of Soliris prior to the fourth quarter.

Research and Development Expenses

The following table provides information regarding research and development expenses:

	Year Ended December 31, 2008	Year Ended December 31, 2007	\$ Variance	% Variance
Clinical development	\$ 17,889	\$ 19,934	\$ (2,045)	-10%
Product development	8,258	8,651	(393)	-5%
Discovery research	1,201	2,801	(1,600)	-57%
Total external direct expenses	27,348	31,386	(4,038)	-13%
Payroll and benefits	27,555	30,287	(2,732)	-9%
Operating and occupancy	4,192	4,615	(423)	-9%
Depreciation and amortization	3,486	2,673	813	30%
Total other R&D expenses	35,233	37,575	(2,342)	-6%
Research and development expense	\$ 62,581	\$ 68,961	\$ (6,380)	-9%

The following table summarizes external direct expenses related to our clinical development programs. Please refer to Item 1, Business, for a description of each of these programs:

	Year Ended December 31, 2008	Year Ended December 31, 2007
External direct expenses		
Soliris: PNH program	\$ 14,112	\$ 14,741
Soliris: non-PNH programs	1,657	679
Samalizumab	699	
Pexelizumab		1,847
Unallocated	1,421	2,667
	\$ 17,889	\$ 19,934

During the year ended December 31, 2008, we incurred research and development expenses of \$62,581, a decrease of \$6,380, or 9.3% versus the \$68,961 incurred during the year ended December 31, 2007. The decrease was primarily due to the following:

Decrease of \$2,732 in research and development payroll and benefit expense related primarily to a reduction in stock-based compensation due to employee forfeitures and additional capitalization to inventory and property, plant and equipment.

Decrease of \$2,045 external clinical development expenses related primarily to termination of our pexelizumab program in 2007 and decreases in spending for Soliris for PNH. These are offset by the expansion of studies of eculizumab for non-PNH indications, as well as growth of our samalizumab program (see table above).

Decrease of \$1,600 in discovery research was primarily due to a reduction in external research and consulting fees.

Increase of \$813 in depreciation and amortization related primarily to the amortization of costs associated with our new pilot plant located at our manufacturing facility in Smithfield, RI, which was placed in service in the fourth quarter 2007.

Selling, General and Administrative Expenses

During the year ended December 31, 2008, we incurred selling, general and administrative expenses of \$133,543, an increase of \$37,401 or 38.9% versus the \$96,142 incurred during the year ended December 31, 2007. The increase was primarily due to the following:

During the year ended December 31, 2008, salaries, benefits and other labor expenses increased to \$66,856, an increase of \$17,335, or 35%, versus \$49,521 incurred during the year ended December 31, 2007. The increase was a result of increased headcount related to commercial development activities, including increases in payroll and benefits costs of \$17,211 related to our global commercial operations teams. Other increases related to payroll and benefits within our executive, finance, information technology, human resources and legal groups to support our growth as a commercial entity.

Increase in non-labor commercial operations of \$14,746 for the year ended December 31, 2008 was primarily due to the expansion of our foreign operations, which we expanded significantly in the latter half of 2007.

Increase in non-labor general and administration of \$5,977 primarily related to increases in legal costs associated with ongoing litigation and increases in infrastructure costs to support our growth as a commercial entity.

Decrease in non-labor information technology of \$1,293 primarily related to the costs associated with the build out of our European operations in 2007.

Other Income (Expense)

During the year ended December 31, 2008, we recognized \$282 of foreign currency loss, versus a gain of \$1,132 incurred during the year ended December 31, 2007. The decreased impact of foreign currency fluctuations was due to our hedging programs implemented in 2008.

During the year ended December 31, 2008, investment income decreased \$5,270, or 65.2% to \$2,810 due primarily to reduced interest rates earned in money market funds.

During the year ended December 31, 2008, interest expense of \$2,407 was consistent with the amounts recognized during the year ended December 31, 2007.

Income Taxes

During the year ended December 31, 2008, we recorded an income tax provision of \$1,581, compared to an income tax benefit of \$745 for the year ended December 31, 2007. The tax expense during 2008 is principally attributable to entities in certain foreign jurisdictions who achieved profitability during the year, offset by the reversal of valuation allowances in these foreign jurisdictions and the exchange of federal research tax credits for cash. The income tax benefit for 2007 is attributable to the exchange of state research tax credits for cash.

Liquidity and Capital Resources *(amounts in thousands, except per share data)*

As of December 31, 2009, our consolidated cash, cash equivalents, and marketable securities totaled \$176,220. The \$38,208 increase from December 31, 2008 is largely attributable to the significantly increased sales and the resulting collection of accounts receivable and proceeds from employee option exercises, offset by payments against our mortgage loan of \$44,000, payments related to the PDL settlement of \$25,000 and OMRF patent purchase agreement of \$2,500 and capital expenditures associated with validation and regulatory approval of our Smithfield, Rhode Island facility. Until required for use in the business, we invest our cash reserves in money market funds and high quality commercial, corporate and U.S. Government notes in accordance with our investment policy.

Financial instruments that potentially expose the Company to concentrations of credit risk are limited to cash equivalents, corporate bonds, accounts receivable and our foreign exchange derivative contracts. At December 31, 2009, one individual customer accounted for 20% of the accounts receivable balance.

At December 31, 2009, we have foreign currency forward contracts with notional amounts totaling \$284,895. These outstanding foreign currency forward contracts had a net fair value of \$2,528, of which an unrealized gain of \$5,209 is included in other current assets, \$2,061 is included in other assets and an unrealized loss of \$4,742 is included in other current liabilities. The counterparty to these forward contracts is a large multinational commercial bank, and we believe the risk of nonperformance is not material. However, we can not be assured that the financial institution will not be further impacted by the negative economic environment.

In January 2010, we amended and restated our existing credit agreement with Bank of America, N.A. to, among other things, increase our revolving credit facility by \$25,000. The amended agreement provides for a \$50,000 revolving credit facility, with up to a \$20,000 sublimit for letters of credit that can be used for working capital requirements and other general corporate purposes. With the consent of the lenders and the administrative agent and subject to satisfaction of certain conditions, we may increase the facility to \$75,000 in accordance with its terms.

At December 31, 2009, our working capital was \$288,194, compared to \$192,683 at December 31, 2008. At December 31, 2009, our current ratio was 4.38, compared to 3.28 at December 31, 2008. The increase in current ratio relates primarily to increases in our accounts receivable and cash and cash equivalents as well as reductions in amounts payable to PDL and OMRF.

We anticipate that cash generated from operations and our existing available cash should provide us adequate resources to fund our operating expenses and capital requirements as currently planned for at least the next twelve months.

Cash Flows from Operating Activities

Net cash provided by operating activities was \$113,841 for the year ended December 31, 2009 versus \$53,199 provided by operating activities for the year ended December 31, 2008. The change is primarily due to the increase in pre-tax income achieved in 2009 versus the same period in 2008. The components of cash provided by operating activities, as reported in our Statement of Cash Flows, for the period ended December 31, 2009 are as follows:

Our reported net income, adjusted for non-cash items, including depreciation and amortization, non-cash debt exchange expense, unrealized currency gain, unrealized hedge gains, deferred taxes and stock compensation, was \$128,080 for the year ended December 31, 2009 versus \$64,959 for the year ended December 31, 2008.

Net cash outflow due to changes in operating assets and liabilities of \$14,239, primarily relates to increases in accounts receivable of \$36,440, offset by an increase in accounts payable and accrued expenses of \$14,131 and a decrease in inventory of \$14,596. In 2010, we expect changes in cash from operations to be highly dependent on sales levels, and the related cash collections, from Soliris.

Cash Flows from Investing Activities

Net cash used in investing activities was \$81,423 for the year ended December 31, 2009 versus \$38,650 used in investing activities for the year ended December 31, 2008. For the year ended December 31, 2009, the net cash used for investing activities consisted of the following:

Additions to property, plant and equipment of \$35,275, of which \$20,900 was attributable to expenditures related to our Rhode Island manufacturing facility, with the remaining attributable to spending on information technology and facility capital costs.

Final payments of \$25,000 and \$2,500 related to a settlement agreement with PDL Biopharma and purchase of patents from Oklahoma Medical research Foundation, or OMRF, respectively.

In July 2006, we acquired a manufacturing plant in Smithfield, Rhode Island for the future commercial production of Soliris and development and manufacturing of future products. Since this date, we have incurred costs related to the construction of the plant to support full-scale commercial manufacturing. We have also capitalized costs related to validation activities, including engineering runs and inventory production necessary to obtain approval of the facility from government regulators for the production of a commercially approved drug. In December 2009, we received final regulatory approval for production of commercial quantities of eculizumab by the E.C. Accordingly, our plant is substantially complete and ready for its intended use, and therefore we placed the plant into service. In the fourth quarter of 2009, the FDA commenced its inspection of our Rhode Island manufacturing facility and requested additional information regarding our manufacturing processes which we expect to address in 2010.

Through December 31, 2009, we have capitalized \$143,822 related to the facility, which includes all costs associated with construction, renovation and upgrades, engineering runs, pre-approval inventory production and capitalized interest.

Cash Flows from Financing Activities

Net cash (used in) provided by financing activities was \$(14,270) and \$28,308 for the years ended December 31, 2009 and 2008, respectively. This amount related to proceeds from the issuance of common stock related to the exercise of stock options of \$30,733 and \$28,893, respectively. For the year ended December 31, 2009, this amount was offset by the \$44,000 prepayment in full of our mortgage loan.

Contractual Obligations

We have contractual obligations related to our third party manufacturer, certain other third parties described below, for open letters of credit totaling \$5,263 and for our \$9,918 1.375% Convertible Senior Notes due February 2012.

The following table summarizes our contractual obligations at December 31, 2009 and the effect such obligations and commercial commitments are expected to have on our liquidity and cash flow in future fiscal years. These do not include milestones and assume non-termination of agreements. These obligations, commitments and supporting arrangements represent payments based on current operating forecasts, which are subject to change:

	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Contractual obligations:					
Convertible notes payable	\$ 9,918	\$	\$ 9,918	\$	\$
Interest expense	340	136	204		
Capital and operating leases	39,331	8,943	15,272	9,310	5,806
Total contractual obligations	\$ 49,589	\$ 9,079	\$ 25,394	\$ 9,310	\$ 5,806
Commercial commitments:					
Clinical and manufacturing development	\$ 35,175	\$ 11,250	\$ 15,725	\$ 8,200	\$
Licenses	1,840	365	740	735	
Total commercial commitments	\$ 37,015	\$ 11,615	\$ 16,465	\$ 8,935	\$

The contractual obligations table above does not include contingent royalties and other contingent contractual payments we may owe to third parties in the future because such payments are contingent on future sales of our products and the existence and scope of third party intellectual property rights and other factors described under the **Risk Factors**. The table above also does not include a liability for unrecognized tax benefits related to various federal, state and foreign income tax matters of \$7,305 at December 31, 2009. The timing of the settlement of these amounts was not reasonably estimable at December 31, 2009. We do not expect payment of amounts related to the unrecognized tax benefits within the next twelve months.

Convertible Notes

We have outstanding \$9,918 principal amount of 1.375% Convertible Senior Notes due February 1, 2012, or the 1.375% Notes. We pay interest on these notes on a semi-annual basis on February 1 and August 1 of each year. However, no principal payments are due until February 2012, except under certain circumstances such as liquidation, merger or business combination. The convertible notes payable do not contain covenants related to our financial performance.

In October 2008, certain holders of the 1.375% Notes exercised conversion rights with respect to an aggregate principal amount of \$52,778 of the 1.375% Notes resulting in the issuance of 3,356 shares of common stock. The shares were issued in November 2008. In April and May 2009, we issued an aggregate of 5,644 shares of our common stock in exchange for \$87,304 principal amount of our 1.375% Convertible Senior Notes due 2012 owned by certain note holders.

The 1.375% Notes are convertible into our common stock at an initial conversion rate of 63.5828 shares of common stock (equivalent to a conversion price of approximately \$15.73 per share) per \$1 principal amount of the 1.375% Notes, subject to adjustment, at any time prior to the close of business on the final maturity date of the notes. We do not have the right to redeem any of the 1.375% Notes prior to maturity. The conversion rate and conversion price have been adjusted for the stock split effected on August 22, 2008.

As of December 31, 2009, the market value of our \$9,918 principal amount of 1.375% Notes, based on quoted market prices, was estimated at \$30,732 versus \$211,106 at December 31, 2008. The decrease of \$180,374 from December 31, 2008 is largely attributable to the issuance of 5,644 shares of our common stock in exchange for \$87,304 principal amount of the Notes in the second quarter of 2009.

Mortgage Loan

We had a mortgage loan of \$44,000 to finance the purchase and construction of our manufacturing facility in Smithfield, Rhode Island. In June 2009, we amended the mortgage loan agreement to permit the prepayment of the loan without penalty. We prepaid a portion of the mortgage loan each month beginning in July 2009 and made a final payment of the remaining principal balance in October 2009.

Revolving Credit Facility

In February 2008, we entered into a Credit Agreement with a financial institution to provide for an available \$25,000 revolving credit facility that could be used for working capital requirements and other general corporate purposes. The loan was collateralized by substantially all of Alexion Pharmaceuticals, Inc.'s assets, including the pledge of the equity interests of certain direct subsidiaries, but excluding intellectual property, assets of foreign subsidiaries and assets related to our manufacturing facility in Smithfield, Rhode Island. The borrowing base was limited to the lesser of \$25,000 or 80% of eligible domestic receivables. At December 31, 2009, we had no outstanding balance under the revolving credit facility and were in compliance with all financial debt covenants.

In January 2010, we amended and restated the credit agreement, the Amended Credit Agreement, to, among other things, increase the revolving credit facility by \$25,000. The Amended Credit Agreement provides for a \$50,000 facility, with up to a \$20,000 sublimit for letters of credit that can be used for working capital requirements and other general corporate purposes. With the consent of the lenders and the administrative agent and subject to satisfaction of certain conditions, we may increase the facility to \$75,000 in accordance with the Amended Credit Agreement. The loan is secured by substantially all of Alexion Pharmaceuticals, Inc.'s assets, including the pledge of the equity interests of certain direct subsidiaries and the real estate owned by Alexion Manufacturing LLC, its wholly owned subsidiary, but excluding intellectual property and assets of foreign subsidiaries. We have not borrowed under the Amended Credit Agreement but may borrow under the agreement from time to time based on its needs.

We may elect that the loans under the agreement bear interest at a rate per annum equal to (i) LIBOR plus 2.50% to 3.00% depending on the ratio of our cash to liabilities (as calculated in accordance with the agreement), or (ii) a Base Rate equal to the higher of the (A) Prime Rate then in effect, (B) Federal Funds Rate then in effect plus 0.50%, and (C) Eurodollar Rate then in effect plus 1%, plus 0.50% to 1.00% depending on the ratio of our cash to liabilities (as calculated in accordance with the agreement). We may prepay the loans, in whole or in part, in minimum amounts without premium or penalty, other than customary breakage costs with respect to LIBOR borrowings. Interest is payable quarterly for Base Rate loans and, in the case of LIBOR-based loans, at the end of the applicable interest period, with the principal due on January 22, 2013, the maturity date. We may borrow, repay and reborrow under the facility until January 22, 2013.

The Amended Credit Agreement requires us to comply with certain financial covenants on a quarterly basis. Further, the agreement includes negative covenants, subject to exceptions, restricting or limiting our ability and the ability of our subsidiaries to, among other things, incur additional indebtedness, grant liens, engage in certain

investment, acquisition and disposition transactions, and enter into transactions with affiliates. The agreement also contains customary representations and warranties, affirmative covenants and events of default, including payment defaults, breach of representations and warranties, covenant defaults and cross defaults. If an event of default occurs, the interest rate would increase and the administrative agent would be entitled to take various actions, including the acceleration of amounts due under the loan.

Capital Leases

We currently lease office equipment under capital lease agreements expiring in 2013. The assets and liabilities under capital lease agreements are recorded at the lower of the present value of the minimum lease payments or the fair value of the asset. The assets are amortized over the lower of their related lease terms or their estimated useful lives. The average interest rates on the above capital leases is 3.76% and is imputed based on the lower of our incremental borrowing rate at the inception of each lease.

Operating Leases

Our operating leases are principally for facilities and equipment. We currently lease 141,454 square feet of space at our headquarters and research and development facility in Cheshire, Connecticut and approximately 5,249 square feet of space at our regional executive and sales offices in Lausanne, Switzerland. Additionally, we lease research space in San Diego, California. In connection with the closure of Alexion Antibody Technologies in 2006, we accrued the fair value of future payments under the lease (see Note 7 of the Consolidated Financial Statements included in this Form 10-K). In September 2007, we entered into a sub-lease for the AAT facility, which provides for sub-lease payments to us through the term of the lease, or 2012.

We believe that our administrative office space is adequate to meet our needs for the foreseeable future. We also believe that our research and development facilities and our manufacturing facility, together with third party manufacturing facilities, will be adequate for our on-going activities. In addition to the locations above, we also lease offices in certain countries to facilitate our operations as a global organization.

Commercial Commitments

Our commercial commitments consist of research and development, license, operational, clinical development, and manufacturing cost commitments, along with anticipated supporting arrangements, subject to certain limitations and cancellation clauses. The timing and level of our commercial scale manufacturing costs, which may or may not be realized, are contingent upon the progress of our clinical development programs and our commercialization plans. Our commercial commitments are represented principally by our supply agreement with Lonza Sales AG.

Lonza Agreement

We have a supply agreement with Lonza Sales AG relating to the manufacture of Soliris, which requires payments to Lonza at the inception of the contract and as product is manufactured. On an ongoing basis, we evaluate our plans for future levels of production by Lonza, which depends upon our commercial requirements, the progress of our clinical development programs and the production levels of our Smithfield, Rhode Island manufacturing facility.

We have agreed to purchase certain minimum quantities of product from Lonza under our existing arrangements. If we terminate the Lonza Agreement without cause, we will be required to pay for batches of product scheduled for manufacture under our arrangement.

Additional Commercial Commitments

Additional payments related to our commercial commitments, such as licenses, aggregating to approximately \$1,350, would be required if we elect to continue development under our current preclinical development programs and if specified development milestones are reached (including achievement of commercialization). These amounts are not included in the above table.

Income Taxes

At December 31, 2009, we have pre-tax federal and state net operating loss carryforwards of \$665,740, and \$117,778, respectively. These NOL s expire between 2010 and 2028. We also have federal and state income tax credit carryforwards of approximately \$34,208 and \$7,689, respectively. These income tax credits expire between 2010 and 2029. Due to the amount of our NOL s and credit carryforwards, we do not anticipate paying substantial U.S. federal income taxes in the foreseeable future. We do expect to pay cash taxes in various U.S. states and in foreign jurisdictions where we have operations and have utilized all of our net operating losses. We were again subject to the alternative minimum tax during 2009 and expect that we will continue to be subject to cash payments for the alternative minimum tax in the near term. The payment of an alternative minimum tax amount generates a credit that may be carried forward indefinitely and used to offset our regular income tax liability.

The Tax Reform Act of 1986 contains certain provisions that can limit a taxpayer s ability to utilize net operating loss and tax credit carryforwards in any given year resulting from cumulative changes in ownership interests in excess of 50 percent over a three-year period. We have determined that these limiting provisions were triggered during a prior year. However, we believe that such limitation is not expected to result in the expiration or loss of any of our federal NOL s.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK. (amounts in thousands, except per share data)

Interest Rate Risk

As of December 31, 2009, we held all of our cash and cash equivalents in bank accounts and money market funds, which are not subject to significant interest rate risk.

At December 31, 2009, we held \$18,916 in marketable securities with maturity dates of less than one year. These financial instruments are subject to interest rate risk and will decline in value if interest rates increase. However, we expect to hold time-based investments, such as corporate bonds, through maturity. We estimate that a change of 100 basis points in interest rates would result in an increase or decrease of approximately \$19 in the fair value of our cash and investments, which had a weighted average duration of approximately 6.2 months at December 31, 2009.

Our outstanding long-term liabilities as of December 31, 2009 included our \$9,918, 1.375% Convertible Senior Notes due February 1, 2012. As the notes bear interest at a fixed rate, our results of operations would not be impacted by interest rate changes.

During the first quarter of 2008, we entered into a revolving credit facility with a financial institution to borrow up to \$25,000. In January 2010, we amended and restated the credit agreement, the Amended Credit Agreement, to, among other things, increase the revolving credit facility to \$50,000. We may elect that the loans under the agreement bear interest at a rate per annum equal to (i) LIBOR plus 2.50% to 3.00% depending on the ratio of our cash to liabilities (as calculated in accordance with the agreement), or (ii) a Base Rate equal to the higher of the (A) Prime Rate then in effect, (B) Federal Funds Rate then in effect plus 0.50%, and (C) Eurodollar Rate then in effect plus 1%, plus 0.50% to 1.00% depending on the ratio of our cash to liabilities (as calculated in accordance with the agreement). We do not expect changes in interest rates related to our revolving credit facility to have a material effect on our financial statements.

Foreign Exchange Market Risk

As a result of our foreign operations, we face exposure to movements in foreign currency exchange rates, primarily the Euro, Japanese Yen, Swiss Franc and British Pound. The current exposures arise primarily from cash, accounts receivable, intercompany receivables and payables, and product sales denominated in foreign currencies. Both positive and negative impacts to our international product sales from movements in foreign currency exchange rates are partially mitigated by the natural, opposite impact that foreign currency exchange rates have on our international operating expenses.

We currently have a derivative program in place to achieve two goals: 1) limit the foreign currency exposure of our monetary assets and liabilities on our balance sheet and 2) hedge a portion of our forecasted product sales, using contracts with duration of up to 24 months, to mitigate fluctuations in foreign exchange rates. Both programs utilize forward foreign exchange contracts intended to reduce, not eliminate, the impact of fluctuations in foreign currency rates.

As of December 31, 2009, we held foreign currency forward contracts with notional amounts totaling \$284,895. As of December 31, 2009, our outstanding foreign currency forward contracts had a net fair value of \$2,528.

We do not use derivative financial instruments for speculative trading purposes. The counterparty to these forward contracts is a multinational commercial bank. We believe the risk of counterparty nonperformance is not material.

Since our foreign currency hedges are designed to offset gains and losses on our monetary assets and liabilities, we do not expect that a hypothetical 10% adverse change fluctuation in exchange rates would result in a material change in the fair value of our foreign currency sensitive assets, which include our monetary assets and liabilities and our forward contracts. The analysis above does not consider the impact that hypothetical changes in foreign currency exchange rates would have on future transactions such as anticipated sales.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The consolidated financial statements and supplementary data of the Company required in this item are set forth beginning on page F-1.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.
None.

Item 9A. CONTROLS AND PROCEDURES.
Disclosure Controls and Procedures.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act,) as of December 31, 2009. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2009, our disclosure controls and procedures were effective to provide reasonable assurance that information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure, and ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms.

Management's Report on Internal Control over Financial Reporting.

Management of Alexion Pharmaceuticals, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management utilized the criteria set forth in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission, or COSO, to conduct an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2009. Based on the assessment, management has concluded that, as of December 31, 2009, our internal control over financial reporting is effective.

The effectiveness of our internal control over financial reporting as of December 31, 2009 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

Changes in Internal Control over Financial Reporting.

There has been no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2009 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9A(T). CONTROLS AND PROCEDURES.

Not applicable

Item 9B. OTHER INFORMATION.

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information required by this item with respect to our executive officers is provided under the caption entitled Executive Officers of the Company in Part I of this Annual Report on Form 10-K and is incorporated by reference herein. The information required by this item with respect to our directors and our audit committee and audit committee financial expert will be set forth in our definitive Proxy Statement under the captions General Information About the Board of Directors and Election of Directors, to be filed within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, and is incorporated herein by reference to our Proxy Statement.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

The information concerning our directors regarding compliance with Section 16(a) of the Securities Exchange Act of 1934 required by this Item will be set forth in our definitive Proxy Statement under the caption Section 16(a) Beneficial Ownership Reporting Compliance, to be filed within 120 days after the end of the fiscal year covered by this annual report on Form 10-K, and is incorporated herein by reference to our Proxy Statement.

CODE OF ETHICS

We have adopted the Alexion Pharmaceuticals, Inc. Code of Conduct, or code of ethics, that applies to directors, officers and employees of Alexion and its subsidiaries and complies with the requirements of Item 406 of Regulation S-K and the listing standards of the Nasdaq Global Market. Our code of ethics is located on our website (<http://ir.alexionpharm.com/governance.cfm>). We amended the code of ethics in September 2009 and any future amendments or waivers to our code of ethics will be promptly disclosed on our website and as required by applicable laws, rules and regulations of the Securities and Exchange Commission and Nasdaq.

Item 11. EXECUTIVE COMPENSATION.

The information required by this Item will be set forth in our definitive Proxy Statement, to be filed within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, and is incorporated herein by reference to our Proxy Statement.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information required by this Item will be set forth in our definitive Proxy Statement, to be filed within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, and is incorporated herein by reference to our Proxy Statement.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information required by this Item will be set forth in our definitive Proxy Statement, to be filed within 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K, and is incorporated herein by reference to our Proxy Statement.

PART IV

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

The information required by this Item will be set forth in our definitive Proxy Statement under the caption Independent Registered Public Accounting Firm, to be filed within 120 days after the end of the year ended December 31, 2009 covered by this Annual Report on Form 10-K, and is incorporated herein by reference to our Proxy Statement.

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(1) Financial Statements

The financial statements required by this item are submitted in a separate section beginning on page F-1 of this report.

(2) Financial Statement Schedules

Schedules have been omitted because of the absence of conditions under which they are required or because the required information is included in the financial statements or notes thereto beginning on page F-1 of this report.

(3) Exhibits:

- 3.1 Certificate of Incorporation, as amended. (1)
- 3.2 Bylaws, as amended. (2)
- 4.1 Specimen Common Stock Certificate. (3)
- 4.2 Rights Agreement between the Company and Continental Stock Transfer & Trust Company, Rights Agent, dated as of February 14, 1997. (4)
- 4.3 Amendment No. 1 to Rights Agreement, dated as of September 18, 2000, between the Company and Continental Stock Transfer and Trust Company. (5)
- 4.4 Amendment No. 2 to Rights Agreement, dated as of December 12, 2001, between the Company and Continental Stock Transfer and Trust Company, which includes as Exhibit B the form of Right Certificate. (6)
- 4.5 Amendment No. 3 to Rights Agreement, dated as of November 16, 2004, between the Company and Continental Stock Transfer and Trust Company. (7)
- 4.6 Amendment No. 4 to Rights Agreement, dated February 23, 2007, between the Company and Continental Stock Transfer and Trust Company. (8)
- 4.7 Indenture, dated January 25, 2005, between the Company and U.S. Bank National Association relating to Alexion Pharmaceuticals, Inc.'s 1.375% Convertible Senior Notes due 2012. (9)
- 4.8 Registration Rights Agreement, dated January 25, 2005, between the Company, Morgan Stanley & Co. Incorporated, Bear, Stearns & Co. Inc., SG Cowen & Co., LLC and J.P. Morgan Securities Inc. (9)
- 10.1 Employment Agreement, dated as of February 14, 2006, between the Company and Dr. Leonard Bell. (10)

10.2	Amendment No. 1 to the Employment Agreement, dated as of December 23, 2009, between the Company and Dr. Leonard Bell.
10.3	Employment Agreement, dated as of February 14, 2006, between the Company and Dr. Stephen P. Squinto. (10)
10.4	Amendment No. 1 to the Employment Agreement, dated as of December 23, 2009, between the Company and Dr. Stephen P. Squinto.
10.5	Employment Agreement, dated as of February 14, 2006, between the Company and Vikas Sinha. (10)
10.6	Amendment No. 1 to the Employment Agreement, dated as of December 23, 2009, between the Company and Vikas Sinha.
10.7	Employment Agreement, dated November 7, 2005, between the Company and Patrice Coissac. (11)
10.8	Amendment to Employment Agreement, dated July 25, 2007, between the Company and Patrice Coissac. (12)
10.9	Amendment to Employment Agreement, dated January 14, 2008, between the Company and Patrice Coissac. (12)
10.10	Severance Letter Agreement, dated as of November 7, 2005, by and between Alexion Europe SAS and Patrice Coissac. (11)
10.11	Form of Employment Agreement (Senior Vice Presidents). (10)
10.12	Form of Amendment No. 1 to Employment Agreements (Senior Vice Presidents).
10.13	Agreement of Lease, dated May 9, 2000, between the Company and WE Knotter L.L.C. (13)
10.14	Company's 1992 Stock Option Plan, as amended. (14)
10.15	Company's 2000 Stock Option Plan, as amended. (2)
10.16	Company's 1992 Outside Directors Stock Option Plan, as amended. (14)
10.17	Company's Amended and Restated 2004 Incentive Plan. (15)
10.18	License Agreement dated March 27, 1996 between the Company and Medical Research Council. (16)+
10.19	Research and Development Facility lease, dated February 1, 2002, between the Company and PMSI SRF L.L.C. (17)
10.20	Large-Scale Product Supply Agreement, dated December 18, 2002, between Alexion International Sarl and Lonza Sales AG, as amended. (18)+
10.21	Amendment No. 13 to the Large-Scale Product Supply Agreement dated December 18, 2002, between Alexion International Sarl and Lonza Sales AG, dated June 8, 2007. (15)+
10.22	Form of Stock Option Agreement for Directors. (19)
10.23	Form of Stock Option Agreement for Executive Officers (Form A). (20)
10.24	Form of Stock Option Agreement for Executive Officers (Form B). (20)
10.25	Form of Restricted Stock Award Agreement for Executive Officers (Form A). (21)

10.26	Form of a Stock Option Agreement for named executive officer(s) of Alexion Europe SAS. (12)
10.27	Form of a Restricted Stock Agreement for named executive officer(s) of Alexion Europe SAS. (12)
10.28	Form of Stock Option Agreement (Incentive Stock Options). (15)
10.29	Form of Stock Option Agreement (Nonqualified Stock Options). (15)
10.30	Form of Restricted Stock Award Agreement. (15)
10.31	Form of Stock Option Agreement for Participants in France. (15)
10.32	Form of Restricted Stock Unit Agreement for Participants in France. (15)
10.33	Patent License Agreement, dated December 31, 2008, between the Company and PDL BioPharma, Inc. (15)+
10.34	Settlement Agreement, dated December 31, 2008, between the Company and PDL BioPharma, Inc. (15)+
10.35	Settlement and Assignment Agreement, dated as of February 8, 2008, between the Company and Oklahoma Medical Research Foundation. (22)
10.36	Amended and Restated Credit Agreement, dated January 22, 2010, between the Company, Bank of America, N.A. as administrative agent, the other lenders party thereto, Banc of America Securities LLC and J.P. Morgan Securities Inc. as joint lead arrangers, and Banc of America Securities LLC as lead book manager.
10.37	Amended and Restated Security Agreement, dated January 22, 2010, between the Company, Bank of America, N.A., and the other loan parties named therein.
12.1	Statement Regarding Computation of Ratio of Earnings to Fixed Charges. (1)
21.1	Subsidiaries of Alexion Pharmaceuticals, Inc.
23.1	Consent of PricewaterhouseCoopers LLP.
31.1	Certificate of Chief Executive Officer pursuant to Exchange Act Rules 13a-14 and 15d-14, as adopted pursuant to Section 302 Sarbanes Oxley Act of 2002.
31.2	Certificate of Chief Financial Officer pursuant to Exchange Act Rules 13a-14 and 15d-14, as adopted pursuant to Section 302 of Sarbanes Oxley Act of 2002.
32.1	Certificate of Chief Executive Officer pursuant to Section 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes Oxley Act.
32.2	Certificate of Chief Financial Officer pursuant to Section 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes Oxley Act.

- (1) Incorporated by reference to our Registration Statement on Form S-3 (Reg. No. 333-128085), filed on September 2, 2005.
- (2) Incorporated by reference to our Quarterly Report on Form 10-Q for the quarter ended January 31, 2004.
- (3) Incorporated by reference to our Registration Statement on Form S-1 (Reg. No. 333-00202).
- (4) Incorporated by reference to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on February 21, 1997.

- (5) Incorporated by reference to Amendment No. 1 to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on October 6, 2000.
- (6) Incorporated by reference to Amendment No. 2 to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on February 12, 2002.
- (7) Incorporated by reference to Amendment No. 3 to our Registration Statement on Form 8-A (Reg. No. 000-27756), filed on November 17, 2004.
- (8) Incorporated by reference to our Annual Report on Form 10-K for the year ended December 31, 2006, filed on February 23, 2007.
- (9) Incorporated by reference to our report on Form 8-K, filed on January 25, 2005.
- (10) Incorporated by reference to our Report on Form 8-K filed on February 16, 2006.
- (11) Incorporated by reference to our report on Form 8-K, filed on November 14, 2005.
- (12) Incorporated by reference to our Annual Report on Form 10-K for the fiscal year ended December 31, 2007.
- (13) Incorporated by reference to our Registration Statement on Form S-3 (Reg. No. 333-36738) filed on May 10, 2000.
- (14) Incorporated by reference to our Registration Statement on Form S-8 (Reg. No. 333-71879) filed on February 5, 1999.
- (15) Incorporated by reference to our Annual Report on Form 10-K for the fiscal year ended December 31, 2008.
- (16) Incorporated by reference to our Annual Report on Form 10-K for the fiscal year ended July 31, 1996.
- (17) Incorporated by reference to our quarterly report on Form 10-Q for the quarter ended January 31, 2002.
- (18) Incorporated by reference to our Quarterly Report on Form 10-Q for the quarter ended January 31, 2003.
- (19) Incorporated by reference to our report on Form 8-K, filed on December 16, 2004.
- (20) Incorporated by reference to our Quarterly Report on Form 10-Q for the quarter ended January 31, 2005.
- (21) Incorporated by reference to our report on Form 8-K, filed on March 14, 2005.
- (22) Incorporated by reference to our report on Form 8-K, filed on February 14, 2008.
- + Confidential treatment was granted for portions of such exhibit.

Item 15(b) Exhibits

See (a) (3) above.

Item 15(c) Financial Statement Schedules

See (a) (2) above.

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.

ALEXION PHARMACEUTICALS, INC.

By: /s/ LEONARD BELL
Leonard Bell, M.D.

*Chief Executive Officer,
Secretary and Treasurer*

Dated: February 23, 2010

By: /s/ VIKAS SINHA
Vikas Sinha, M.B.A., C.A.

Senior Vice President and Chief Financial Officer

Dated: February 23, 2010

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

/s/ LEONARD BELL Leonard Bell, M.D.	Chief Executive Officer, Secretary, Treasurer and Director (principal executive officer)	February 23, 2010
/s/ VIKAS SINHA Vikas Sinha, M.B.A., C.A.	Senior Vice President and Chief Financial Officer (principal financial officer)	February 23, 2010
/s/ SCOTT PHILIPS Scott Phillips	Corporate Controller and Chief Accounting Officer (principal accounting officer)	February 23, 2010
/s/ MAX LINK Max Link, Ph.D.	Chairman of the Board of Directors	February 23, 2010
/s/ WILLIAM R. KELLER William R. Keller	Director	February 23, 2010
/s/ LARRY L. MATHIS Larry L. Mathis	Director	February 23, 2010
/s/ JOSEPH A. MADRI Joseph A. Madri, Ph.D., M.D.	Director	February 23, 2010

/s/ R. DOUGLAS NORBY	Director	February 23, 2010
R. Douglas Norby		
/s/ ALVIN S. PARVEN	Director	February 23, 2010
Alvin S. Parven		
/s/ RUEDI E. WAEGER	Director	February 23, 2010
Ruedi E. Waeger, Ph.D.		

Alexion Pharmaceuticals, Inc.

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders

of Alexion Pharmaceuticals, Inc.:

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Alexion Pharmaceuticals, Inc. and its subsidiaries at December 31, 2009 and December 31, 2008, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2009 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2009, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Hartford, Connecticut

February 23, 2010

Alexion Pharmaceuticals, Inc.

Consolidated Balance Sheets

(amounts in thousands, except per share amounts)

	December 31,	
	2009	2008
Assets		
Current Assets:		
Cash and cash equivalents	\$ 157,172	\$ 138,012
Marketable securities	19,048	
Trade accounts receivable, net	113,731	74,476
Inventories	40,885	49,821
Prepaid manufacturing costs	5,762	1,864
Deferred tax assets	16,726	972
Prepaid expenses and other current assets	20,132	11,956
Total current assets	373,456	277,101
Property, plant and equipment, net	164,691	139,885
Intangible assets, net	28,589	32,325
Goodwill, net	19,954	19,954
Restricted cash	1,088	1,699
Deferred tax assets	194,308	3,397
Other assets	4,315	3,190
Total assets	\$ 786,401	\$ 477,551
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	\$ 11,530	\$ 8,655
Accrued expenses	71,657	46,200
Deferred revenue	1,652	1,128
License payable		25,000
Deferred tax liabilities	1	639
Current debt obligations		2,500
Current portion of capital lease obligations	422	296
Total current liabilities	85,262	84,418
Capital lease obligations, less current portion	503	203
Mortgage loan		44,000
Convertible notes	9,918	97,222
Deferred tax liabilities	204	906
Other liabilities	2,158	3,801
Total liabilities	98,045	230,550
Commitments and contingencies (Notes 1 and 10)		
Stockholders' equity:		
Preferred stock, \$.0001 par value; 5,000 shares authorized, no shares issued or outstanding		
Common stock, \$.0001 par value; 145,000 shares authorized; 89,097 and 81,532 shares issued at December 31, 2009 and 2008, respectively	5	5
Additional paid-in capital	1,093,933	941,439
Treasury stock, at cost, 97 and 57 shares at December 31, 2009 and 2008, respectively	(2,676)	(1,260)
Accumulated other comprehensive income (loss)	(1,942)	2,947
Accumulated deficit	(400,964)	(696,130)
Total stockholders' equity	688,356	247,001

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Total liabilities and stockholders' equity	\$ 786,401	\$ 477,551
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The accompanying notes are an integral part of these consolidated financial statements.

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Alexion Pharmaceuticals, Inc.

Consolidated Statements of Operations

(amounts in thousands, except per share amounts)

	Year Ended December 31,		
	2009	2008	2007
Revenues:			
Net product sales	\$ 386,800	\$ 259,004	\$ 66,381
Contract research revenues		95	5,660
Total revenues	386,800	259,099	72,041
Cost of sales	45,059	28,366	6,696
Operating expenses:			
Research and development	81,915	62,581	68,961
Selling, general and administrative	172,767	133,543	96,142
Total operating expenses	254,682	196,124	165,103
Operating income (loss)	87,059	34,609	(99,758)
Other income and expense:			
Investment income	786	2,810	8,080
Interest expense	(606)	(2,407)	(2,489)
Foreign currency gain (loss)	(530)	(282)	1,132
Debt exchange expense	(3,395)		
Income (loss) before income taxes	83,314	34,730	(93,035)
Income tax provision (benefit)	(211,852)	1,581	(745)
Net income (loss)	\$ 295,166	\$ 33,149	\$ (92,290)
Earnings (loss) per common share			
Basic	\$ 3.46	\$ 0.43	\$ (1.27)
Diluted	\$ 3.26	\$ 0.39	\$ (1.27)
Shares used in computing earnings (loss) per share			
Basic	85,326	77,680	72,622
Diluted	90,582	89,967	72,622

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

Alexion Pharmaceuticals, Inc.

Consolidated Statements of Changes in Stockholders' Equity and Comprehensive Income (Loss)

(amounts in thousands)

	Common Stock		Additional Paid-In Capital	Treasury Stock at Cost		Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity	Comprehensive Income (Loss)
	Shares Issued	Amount		Shares	Amount				
Balances, December 31, 2006	71,136	4	763,691	57	(1,260)	(177)	(637,581)	124,677	\$ (131,376)
Adoption of FASB Interpretation No. 48							592	592	
Opening balance at January 1, 2007, as adjusted	71,136	4	763,691	57	(1,260)	(177)	(636,989)	125,269	
Foreign currency translation						(1,316)		(1,316)	\$ (1,316)
Net change in unrealized gains on marketable securities						50		50	50
Issuance of common stock from exercise of options	4,192		47,005					47,005	
Issuance of restricted common stock	418								
Recognition of equity impact on R&D tax credit			813					813	
Share-based compensation expense			22,025					22,025	
Net loss							(92,290)	(92,290)	(92,290)
Balances, December 31, 2007	75,746	4	833,534	57	(1,260)	(1,443)	(729,279)	101,556	\$ (93,556)
Foreign currency translation						(74)			