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

FORM 8-K

CURRENT REPORT
PURSUANT TO SECTION 13 OR 15(D) OF THE
THE SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): September 20, 2006

ALEXION PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**000-27756**	**13-3648318**
(State or other jurisdiction of incorporation or organization)	**(Commission File Number)**	**(I.R.S. Employer Identification No.)**

352 Knotter Drive, Cheshire, Connecticut 06410
(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (203) 272-2596

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

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

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

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

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

Item 8.01 Other Events.

On September 20, 2006, Alexion Pharmaceuticals, Inc. (the "Company") issued a press release announcing that the Company has submitted a Biologics License Application with the U.S. Food and Drug Administration for its lead product candidate Soliris™ (eculizumab), as a treatment for patients diagnosed with paroxysmal nocturnal hemoglobinuria, a rare life-threatening genetic blood disorder ("PNH"). A copy of that press release is furnished as Exhibit 99.1 to this Form 8-K.

On September 26, 2006, the Company issued a press release announcing that Alexion Europe, a wholly-owned subsidiary of the Company, has submitted a Market Authorization Application to the European Medicines Evaluation Agency for Soliris™ (eculizumab) as a treatment for patients diagnosed with PNH. A copy of that press release is furnished as Exhibit 99.2 to this
Form 8-K.

Item 9.01 Financial Statements and Exhibits.

(c) Exhibits

99.1 Press Release issued by Alexion Pharmaceuticals, Inc. on September 20, 2006.

99.2 Press Release issued by Alexion Pharmaceuticals, Inc. on September 26, 2006.

Signature

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

ALEXION PHARMACEUTICALS, INC.

Date: October 5, 2006

By: /s/ Thomas I. H. Dubin
Name: Thomas I. H. Dubin
Title: Senior Vice President and General Counsel

Index to Exhibits

Exhibit No.	Description
99.1	Press Release issued by Alexion Pharmaceuticals, Inc. on September 20, 2006.
99.2	Press Release issued by Alexion Pharmaceuticals, Inc. on September 26, 2006.

Exhibit 99.1

Alexion Pharmaceuticals Submits Biologics License Application for Soliris™ (eculizumab)

- European Application on Track for Submission in 2006 -

CHESHIRE, Conn., September 20, 2006– Alexion Pharmaceuticals, Inc. (Nasdaq: ALXN) today announced that it has submitted a Biologics License Application (BLA) with the U.S. Food and Drug Administration (FDA) for its lead product candidate Soliris™ (eculizumab) as a treatment for patients diagnosed with paroxysmal nocturnal hemoglobinuria (PNH), a rare life-threatening genetic blood disorder.

“There currently is no treatment specifically available for PNH, which can be a debilitating disease that often shortens lives,” said Leonard Bell, M.D., Chief Executive Officer of Alexion. “We believe Soliris represents a significant advance in the management of PNH and in improving the lives of patients diagnosed with the disease. We look forward to working with the FDA as it reviews our application and we remain on track to submit a Marketing Authorization Application (MAA) in Europe by the end of this year.”

The BLA submission is based on data from the pivotal Phase III TRIUMPH trial which met all pre-specified primary and secondary endpoints with high levels of statistical significance. Details regarding the TRIUMPH study results are included in an article published today in the New England Journal of Medicine. The BLA submission also includes interim data of at least six months from the open-label Phase III SHEPHERD safety trial. Final 12-month data from the SHEPHERD trial will be submitted to the application. The TRIUMPH trial included 87 PNH patients and the SHEPHERD trial has enrolled 97 PNH patients. An additional 11 PNH patients were enrolled in an earlier pilot study.

Alexion has requested Priority Review designation for this BLA from the FDA. If granted, the FDA has up to six months from submission date to take action on the BLA. Priority Review may be granted to drug products that provide significant improvement compared to existing treatments for a disease. Alexion has already been granted Accelerated Assessment by the EMEA for Soliris™ (eculizumab) in Europe once the MAA is submitted.

PNH, a rare and life-threatening form of hemolytic anemia, is an acquired genetic blood disorder characterized by destruction of red blood cells by the body’s complement system (a component of the immune system). Patients with PNH lack naturally-occurring complement inhibitors which normally prevent red blood cell destruction. SolirisTM (eculizumab), a long-acting C5 terminal complement inhibitor, is a monoclonal antibody drug that is designed to selectively block terminal complement activation and thereby restore complement inhibition in the blood of patients with PNH. Soliris™ (eculizumab) has been granted Orphan Drug Status in the PNH indication from both the FDA and European regulatory agencies. There currently is no approved therapy specifically available for treatment of PNH.

Based upon scientific investigations and presentations of the prevalence of patients diagnosed with abnormal PNH cells in their blood, it is currently estimated that approximately 8,000 to 10,000 people in North America and Europe suffer from PNH. Patients with PNH may suffer from severe hemolysis, anemia, chronic fatigue, recurrent pain, pulmonary hypertension and intermittent episodes of dark colored urine, known as hemoglobinuria. Importantly, PNH patients are at increased risk of forming life-threatening blood clots, or thromboses, which are a major cause of death in this disease.

About Alexion

Alexion Pharmaceuticals is a biotechnology company working to develop and deliver life-changing drug therapies for patients with serious and life-threatening medical conditions. Alexion is engaged in the discovery and development of therapeutic products aimed at treating patients with a wide array of severe

disease states, including hematologic diseases, cancer, and autoimmune disorders. Alexion's lead product candidate, Soliris™ (eculizumab), is currently undergoing evaluation in several clinical development programs, including for the treatment of paroxysmal nocturnal hemoglobinuria (PNH). Under the Special Protocol Assessment (SPA) process, the FDA has agreed to the design of protocols for the two phase III trials of Soliris™ (eculizumab) in PNH patients that could, if successful, serve as the primary basis of review for approval of a licensing application for eculizumab in the PNH indication. In January, 2006, Alexion announced that the first of those two PNH trials, the TRIUMPH study, achieved its co-primary endpoints with statistical significance. In June 2006, Alexion announced that interim results from the second of those two PNH trials, the SHEPHERD study, showed that eculizumab appeared to be safe and well tolerated and that all primary and secondary efficacy endpoints were achieved with statistical significance. Alexion is engaged in discovering and developing a pipeline of additional antibody therapeutics targeting severe unmet medical needs. This press release and further information about Alexion Pharmaceuticals, Inc. can be found at: http://www.alexionpharm.com.

This news release contains forward-looking statements, including statements related to potential benefits and commercial potential of Soliris™, clinical trial results, the timing of submission of additional clinical trial results, estimates of the number of PNH patients, and timing for submission of, and regulatory authorities' decisions with respect to, marketing applications for Soliris™ (eculizumab). Forward-looking statements are subject to factors that may cause Alexion's results and plans to differ from those expected, including delays in completion of the SHEPHERD trial, delays in completion of analysis of clinical trial results, requests by the FDA or other regulatory authorities for additional information or data either prior to their acceptance of our submission for filing or following their review of our applications, timing and evaluation by regulatory agencies of our applications, the need for additional research and testing, decision of the FDA or other regulatory authorities not to approve (or to materially limit) marketing of Soliris™, delays in arranging satisfactory manufacturing capability, inability to acquire funding on timely and satisfactory terms, delays in developing or adverse changes in commercial relationships, the possibility that results of clinical trials are not predictive of the safety and efficacy of Soliris™, the risk that third parties won't agree to license any necessary intellectual property to us on reasonable terms, the risk that third party payors will not reimburse for the use of Soliris™ at acceptable rates or at all, the risk that estimates regarding the number of PNH patients are inaccurate and a variety of other risks set forth from time to time in Alexion's filings with the Securities and Exchange Commission, including but not limited to the risks discussed in Alexion's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, and in our other filings with the Securities and Exchange Commission. Alexion does not intend to update any of these forward- looking statements to reflect events or circumstances after the date hereof, except when a duty arises under law.

Exhibit 99.2

Alexion Submits Market Authorization Application for Soliris(TM) (eculizumab) in the Treatment of Paroxysmal Nocturnal Hemoglobinuria to the European Medicines Agency

- Soliris(TM) (eculizumab) to be reviewed under European Accelerated Assessment Procedure -

CHESHIRE, Conn., Sept. 26 /PRNewswire-FirstCall/ — Alexion Pharmaceuticals, Inc. (Nasdaq: ALXN) today announced that its wholly-owned subsidiary, Alexion Europe, has submitted a Market Authorization Application (MAA) to the European Medicines Evaluation Agency (EMEA) for Soliris(TM) (eculizumab) for the treatment of paroxysmal nocturnal hemoglobinuria (PNH), a rare, life-threatening genetic blood disorder. If accepted, Alexion anticipates that the evaluation by the EMEA will commence in the fourth quarter. As reported on September 20, 2006, Alexion has previously submitted a Biologics License Application with the U.S. Food and Drug Administration (FDA) for Soliris(TM) (eculizumab).

“This MAA submission is the second significant regulatory milestone for Soliris this month, following closely behind our U.S. Biologics License Application submitted to the FDA,” said Leonard Bell, M.D., Chief Executive Officer of Alexion. “There currently is no treatment specifically available for PNH, which can be a debilitating disease that often shortens lives. We believe Soliris, if approved, would represent an important treatment option in the management of PNH and in improving the lives of patients diagnosed with the disease. We look forward to working with the EMEA as it reviews the Soliris application.”

The MAA submission will be reviewed under the centralized licensing procedure, which, if approval is granted, provides a marketing license valid in all 25 member states of the European Community. The EMEA has determined that the Accelerated Assessment Procedure can be utilized for the Soliris(TM) (eculizumab) application review. Accelerated Assessment is given for medicinal products of major therapeutic interest and shortens the timeframe for review by the agency.

The MAA submission includes data from the pivotal Phase III TRIUMPH trial, which met all pre-specified primary and secondary endpoints with high levels of statistical significance. Details regarding the TRIUMPH study results are included in an article published in the September 21, 2006 issue of the New England Journal of Medicine. The Soliris(TM) (eculizumab) application also includes interim six months data from the open-label Phase III SHEPHERD safety trial. Twelve month data from the SHEPHERD trial is expected to be submitted at a later date to the MAA. The TRIUMPH trial included 87 PNH patients and the SHEPHERD trial enrolled 97 PNH patients. An additional 11 PNH patients were enrolled in an earlier pilot PNH study.

PNH, a rare and life-threatening form of hemolytic anemia, is an acquired genetic blood disorder characterized by destruction of red blood cells by the body’s terminal complement system (a component of the immune system). Patients with PNH lack naturally-occurring complement inhibitors which normally prevent red blood cell destruction. Soliris(TM) (eculizumab), a long- acting C5 complement inhibitor, is a humanized monoclonal antibody drug that is designed to selectively block terminal complement activation in the blood of patients with PNH. Soliris(TM) (eculizumab) has been granted Orphan Drug Status in the PNH indication from both the FDA and European regulatory agencies. There currently is no approved therapy specifically available for treatment of PNH.

Based upon scientific investigations and presentations of the prevalence of patients diagnosed with abnormal PNH cells in their blood, it is currently estimated that approximately 8,000 - 10,000 people in North America and Europe suffer from PNH. Patients with PNH may suffer from severe hemolysis, anemia, chronic fatigue, recurrent pain, pulmonary hypertension and intermittent episodes of dark colored urine, known as hemoglobinuria. Importantly, PNH patients are at increased risk of forming life-threatening blood clots, or thromboses, which are a major cause of death in this disease.

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This news release contains forward-looking statements, including statements related to potential benefits and commercial potential of Soliris(TM), clinical trial results, the timing of submission of additional clinical trial results, estimates of the number of PNH patients, and timing for submission of, and regulatory authorities' decisions with respect to, marketing applications for Soliris(TM) (eculizumab). Forward-looking statements are subject to factors that may cause Alexion's results and plans to differ from those expected, including delays in completion of the SHEPHERD trial, delays in completion of analysis of clinical trial results, requests by the FDA or other regulatory authorities for additional information or data either prior to their acceptance of our submission for filing or following their review of our applications, timing and evaluation by regulatory agencies of our applications, the need for additional research and testing, decision of the FDA or other regulatory authorities not to approve (or to materially limit) marketing of Soliris(TM), delays in arranging satisfactory manufacturing capability, inability to acquire funding on timely and satisfactory terms, delays in developing or adverse changes in commercial relationships, the possibility that results of clinical trials are not predictive of the safety and efficacy of Soliris(TM), the risk that third parties won't agree to license any necessary intellectual property to us on reasonable terms, the risk that third party payors will not reimburse for the use of Soliris(TM) at acceptable rates or at all, the risk that estimates regarding the number of PNH patients are inaccurate and a variety of other risks set forth from time to time in Alexion's filings with the Securities and Exchange Commission, including but not limited to the risks discussed in Alexion's Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, and in our other filings with the Securities and Exchange Commission. Alexion does not intend to update any of these forward-looking statements to reflect events or circumstances after the date hereof, except when a duty arises under law.