ALEXION Pharmaceuticals™ Antibody Therapy Shown Effective in Model for Severe Allergic Asthma

- Findings show treatment with anti-C5 complement antibody reduced airway inflammation when used with standard nebulizer -
 - Results Presented at American Association of Immunologists Meeting -

CHESHIRE, CT., May 15, 2006 - Alexion Pharmaceuticals, Inc. (NASDAQ:ALXN) today announced research findings showing that its anti-C5 monoclonal antibody can be effectively delivered to the lungs to substantially block airway inflammation and hyperresponsiveness in preclinical models of acute severe allergic asthma. The compound used in the research is a surrogate of eculizumab, Alexion's lead anti-complement antibody. The study shows that anti-C5 monoclonal antibodies, including eculizumab, can be successfully aerosolized for therapeutic use.

The data were presented today at the annual meeting of the American Association of Immunologists in Boston by Yi Wang, Ph.D., Senior Research Fellow at Alexion.

In the study, the anti-C5 complement antibody was aerosolized with a standard nebulizer, a device commonly used to deliver asthma medication. A single dose was found to be highly effective in blocking the bronchial inflammation and hyperresponsiveness that provoke airway constriction and have been shown to result in shortness of breath, wheezing, chest tightness and other asthma symptoms in asthmatic patients.

Complement is a complex series of blood proteins that work in concert with antibodies. The complement cascade refers to the precise series of events which activate each component of the complement system. The anti-C5 complement antibody inhibits C5 from producing its two inflammatory byproducts, C5a and C5b-9. By blocking both the C5a and C5b-9 inflammatory mediators (as opposed to blocking only the C5a as reported by others), researchers prevented airway inflammation during 10 weeks of repeated administration. The data also showed that combining the antibody with a corticosteroid was more effective than either therapy alone.

"These studies add further to our previously published results (J. Clinical Investigation, Vol. 155, June 2005) demonstrating the utility of complement inhibition in models of severe allergic asthma," said Stephen Squinto, Ph.D., Executive VP and Head of Research at Alexion. "We are further encouraged by the results reported today that anti-C5 antibodies, including eculizumab, can be successfully aerosolized and effectively delivered to the lung to prevent the inflammation that occurs during severe acute allergic asthma. Anti-complement blockade directly in the lung appears to be synergistic with corticosteroid treatment and, therefore, may eventually offer a novel therapeutic approach for treatment of the most severe forms of allergic asthma that often do not respond to standard corticosteroid therapy."

The data also underscore the emergence of complement activation as a key factor in the development of allergic asthma symptoms.

"Complement activation in the lung may be a critical inflammatory mediator in the development of airway hyperresponsiveness in patients with allergic asthma," said Paul O'Bryne, M.D., EJ Moran Campbell Professor of Medicine, Chairman, Department of Medicine, Firestone Institute for Respiratory Health, St. Joseph's Healthcare and McMaster University, Hamilton, Ontario, Canada. "The development of an aerosolized form of eculizumab may, therefore, provide an important new tool for the treatment of 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 two lead product candidates, eculizumab and pexelizumab, are currently undergoing evaluation in several clinical development programs, including two Phase III trials of SolirisTM(eculizumab) 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 trials of SolirisTM (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. On January 26, 2006, Alexion announced that the first of those two PNH trials, the TRIUMPH study, achieved its co-primary endpoints with statistical significance. The Company's Phase III PRIMO-CABG2 trial of pexelizumab in coronary artery bypass graft (CABG) surgery patients undergoing cardiopulmonary bypass (CPB) did not achieve its primary endpoint, and results are unlikely to be sufficient for filing for licensing approval of pexelizumab in that indication. The Company has determined to finalize its ongoing

Phase III APEX-AMI trial of pexelizumab in acute myocardial infarction (AMI) patients with fewer patients than originally planned. The anticipated timing of completion of the APEX-AMI trial will be announced after further discussion with Procter & Gamble Pharmaceuticals (P&G), Alexion's pexelizumab collaborator, and after new definitive determinations have been made. Although the APEX-AMI trial is the subject of an SPA, the number of patients actually enrolled may not be sufficient for the FDA to consider the trial compliant with the SPA. In such event, if results of the APEX-AMI trial are successful, Alexion may still seek approval to market pexelizumab in the AMI indication, but the FDA regulatory process may not be subject to any benefits of the SPA process. 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 characterization of clinical trial results, timing of announcement of clinical trial results, commercial potential of Alexion's drug candidates, the progression of Alexion's drug candidates towards commercial sales and timing for submission of, and decisions with respect to, marketing applications for SolirisTM(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 ongoing clinical trials, delays in completion of analysis of clinical trial results, timing and evaluation by regulatory agencies of the results of these and other clinical trials, the results of pre-clinical or clinical studies (including termination or delay in clinical programs), the need for additional research and testing, decision of the FDA or other regulatory authorities not to approve (or to materially limit) marketing of one or both of Alexion's two drug candidates, 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 earlier clinical trials are not predictive of safety and efficacy results in later clinical trials, dependence on Procter & Gamble Pharmaceuticals for development and commercialization of pexelizumab, the risk that third parties won't agree to license any necessary intellectual property to us on reasonable terms, 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 Transition Report on Form 10-K/T for the five-month transition period ended December 31, 2005 and in our other filings with the Securities and Exchange Commission. P&GP retains the development rights and the termination rights discussed in Alexion's Form 10-K/T referred to above. 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.