SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 4, 2003

ALEXION PHARMACEUTICALS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation)

0-27756	13-3648318
(Commission File Number)	(IRS Employer Identification No.)

352 Knotter Drive
Cheshire, CT 06410
(Address of Principal Executive Offices)

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

None
(Former Name or Former Address, if Changed Since Last Report.)

ITEM 7. FINANCIAL STATEMENTS, PRO FORMA FINANCIAL INFORMATION AND EXHIBITS.

(a) Financial Statements.

None.

(b) Pro Forma Financial Information.

None.

(c) Exhibits

99.1. Press Release of Alexion Pharmaceuticals, Inc. (the "Company") issued on August 4, 2003 announcing preliminary results of its Phase III PRIMO-CABG Trial.

ITEM 5. OTHER EVENTS AND REGULATION FD DISCLOSURE.

On August 4, 2003, the Company announced preliminary results of its Phase III PRIMO-CABG Trial. A copy of the press release issued by the Company relating thereto is furnished herewith as Exhibit 99.1.

SIGNATURES

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.

/s/ Leonard Bell

By: Leonard Bell
Title: Chief Executive Officer

Dated: August 4, 2003

EXHIBIT 99.1

Alexion Pharmaceuticals Reports Preliminary Results Of Its Phase III PRIMO-CABG Trial

Conference Call Scheduled for Tuesday, August 5 at 9:00 a.m. Eastern Time

CHESHIRE, Conn., Aug. 4 /PRNewswire-FirstCall/ -- Alexion Pharmaceuticals,Inc. (Nasdaq: ALXN) announced today preliminary results of its Phase III study in a large, multinational trial consisting of greater than 3,000 patients undergoing coronary artery bypass graft ("CABG") surgery with cardiopulmonary bypass, a study referred to as "Pexelizumab for Reduction in Infarction and Mortality in Coronary Artery Bypass Graft Surgery," or PRIMO-CABG. The primary endpoint in this trial was a composite of the incidence of death or myocardial infarction, measured at 30 days post-procedure, in patients undergoing CABG without concomitant valve surgery.

Although there was reduction in the primary endpoint, it was not achieved with statistical significance. However, key pre-specified secondary endpoints consisting of the same composite in the total study population, which included all patients undergoing CABG with or without concomitant valve surgery, were achieved. Several other pre-specified secondary endpoints were met as well.

The company announced that further details of PRIMO-CABG will be provided after all data analyses are complete, and will be presented by Dr. Verrier in the Late-Breaking Clinical Trials Session of the 2003 Scientific Sessions Meeting of the American Heart Association in Orlando, Florida, during the second week of November. Dr. Edward D. Verrier is William K. Edmark Professor and Chief of Cardiovascular Surgery at the University of Washington, and Chairman of the PRIMO-CABG Steering Committee.

"These preliminary observations are encouraging in that they support the role of Pexelizumab in potentially further improving patient outcomes in bypass surgery," noted Dr. Verrier. "I look forward to presenting the exciting PRIMO-CABG clinical results at the AHA scientific sessions this November."

"Although our objective to achieve statistical significance in the primary endpoint was not met, this study has provided us with encouraging clinical information, which extends important positive results seen in our Phase II trial," said Dr. Leonard Bell, Chief Executive Officer of Alexion. "The achievement of the composite of death or myocardial infarction in the total population reinforces our enthusiasm for progressing pexelizumab development and we feel that the fully completed analysis will lead to findings that have the promise of significant clinical, scientific, and commercial merit. We look forward, in collaboration with Procter & Gamble Pharmaceuticals, to completing the final data analysis and discussing with the FDA the next steps in going forward."

Conference Call Information

Alexion will host a conference call to discuss matters mentioned in this release. The call is scheduled for Tuesday, August 5th at 9:00 a.m., Eastern Time. To participate in this call, dial 913-981-4900, confirmation code 501849, shortly before 9:00 a.m. A replay of the call will be available for a limited period following the call, beginning 12:00 p.m., Eastern Time. The replay number is 719-457-0820, confirmation code 501849.

Alexion is engaged in the discovery and development of therapeutic products aimed at treating patients with a wide array of severe disease states, including cardiovascular and autoimmune disorders, inflammation and cancer. Alexion's two lead product candidates, pexelizumab and eculizumab, are currently undergoing evaluation in several clinical development programs. Alexion is developing pexelizumab, an antibody fragment, in collaboration with Procter & Gamble Pharmaceuticals. Together the firms have completed a Phase III clinical study with pexelizumab in CABG patients undergoing cardiopulmonary bypass, and two large Phase II studies with pexelizumab in acute myocardial infarction patients. In addition, eculizumab is currently in Phase II clinical trials in rheumatoid arthritis and membranous nephritis, and has been evaluated in pilot programs for the treatment of paroxysmal nocturnal hemoglobinuria and dermatomyositis. Alexion is engaged in discovering and developing a pipeline of additional antibody therapeutics targeting severe unmet medical needs, through its wholly owned subsidiary, Alexion Antibody Technologies, Inc. This press release and further information about Alexion Pharmaceuticals, Inc. can be found on the World Wide Web at: http://www.alexionpharm.com.

This news release contains forward-looking statements. Such statements are subject to factors that may cause Alexion's results and plans to differ from those expected, including the results of pre-clinical or clinical studies(including termination or delay in clinical programs), the need for additional research and testing, 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 Annual Report on Form 10-K for the year ended July 31, 2002 and Quarterly Report on Form 10-Q for the quarter ended October 31, 2002. In particular, Alexion is not currently able to predict the reaction of the United States Food and Drug Administration (FDA) and other regulatory agencies to the results of the PRIMO-CABG trial. Such reactions may include, but not be limited to, the view that the results may be sufficient for filing and approval of a Biologics License Application (BLA), supportive of the filing and approval of a BLA together with additional studies, or not supportive of the filing or approval of a BLA. Further, Alexion is not currently able to predict the reaction of P&GP to the results of the PRIMO-CABG trial, including how those results may affect P&GP's views of pexelizumab for CABG or other indications. P&GP retains the development rights and the termination rights discussed in Alexion's Form 10-K and 10-Q 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.

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