

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) June 7, 2001

ALEXION PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in its Charter)

DELAWARE ----- (State or Other Jurisdiction of Incorporation)	0-27756 ----- (Commission File Number)	13-3648318 ----- (IRS Employer Identification No.)
--	---	---

352 KNOTTER DRIVE CHESHIRE, CT ----- (Address of Principal Executive Offices)	06410 ----- (Zip Code)
---	------------------------------

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

NOT APPLICABLE

(Former Name or Former Address, if Changed Since Last Report)

ITEM 5. OTHER EVENTS

On June 7, 2001, Alexion Pharmaceuticals, Inc. issued the press releases filed herewith as Exhibit 99.1 and Exhibit 99.2.

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

(C) EXHIBITS.

99.1 Press Release dated June 7, 2001.

99.2 Press Release dated June 7, 2001.

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.

Date: June 7, 2001

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

Name: Leonard Bell, M.D.
Title: President, Chief Executive Officer,
Secretary and Treasurer

EXHIBIT INDEX

99.1 Press Release dated June 7, 2001.

99.2 Press Release dated June 7, 2001

FOR IMMEDIATE RELEASE

CONTACTS:

Alexion Pharmaceuticals, Inc.	Noonan/Russo Communications, Inc.	Nexus Communications
Leonard Bell, M.D.	Ernie Knewitz (Media) (212) 696-4455 Ext. 204	Rhonda Chiger (Investor)
President & CEO		(917) 322-2569
(203) 272-2596		

ALEXION COMMENCES PHASE II LUPUS NEPHRITIS CLINICAL TRIAL

Cheshire, CT, June 7, 2001 -- Alexion Pharmaceuticals, Inc. (Nasdaq: ALXN) announced today that it commenced treatment in a Phase II trial with its humanized monoclonal antibody C5 complement inhibitor, 5G1.1, for lupus nephritis. This is the Company's second kidney disease trial.

The commencement of the lupus nephritis trial extends Alexion's strategic approach to developing treatments for patients with severe kidney diseases. The currently ongoing trial is in addition to a previously announced Phase II clinical study with 5G1.1 in non-lupus patients suffering from a kidney disease known as membranous nephritis. The new trial is expected to enroll approximately 40 lupus nephritis patients at 4 clinical sites in the United States and is designed to test the safety and biological efficacy of chronic administration of 5G1.1 for up to six months. Alexion previously announced that the National Institutes of Health has awarded an approximately \$1.0 million grant to the University of Colorado Health Sciences Center to fund this multi-center Phase II study of 5G1.1 in patients with lupus nephritis.

"Current treatment for patients with lupus nephritis is difficult and sub-optimal, as it involves the use of immunosuppressive drugs with substantial toxicities," stated Dr. Michael Holers, Smyth Professor of Rheumatology and Head of the Division of Rheumatology at University of Colorado Health Sciences Center. "Many studies using animal models and patient materials performed by ourselves and others have strongly supported an important role for complement in causing tissue injury in lupus nephritis. Because of this, we are excited to have initiated this clinical trial to examine the potential efficacy of the long-acting C5 Inhibitor 5G1.1 in patients with lupus nephritis."

The Lupus Foundation of America estimates that approximately 1,400,000 Americans have lupus and that up to one-half of these individuals have kidney involvement. In its most severe form, lupus kidney disease involves damage to the filtering unit of the kidney. Such lupus nephritis may progress to kidney failure, severe hypertension, or death.

"The commencement of the Phase II lupus nephritis clinical study fits with our strategy to expand the reach of 5G1.1 into additional severe kidney disorders," commented Dr. Leonard Bell, President and Chief Executive Officer of Alexion. "This trial complements our ongoing study with 5G1.1 in non-lupus patients with a kidney disorder known as membranous nephritis. We believe that there is a large number of patients with severe inflammatory kidney disorders who may benefit from 5G1.1."

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 are currently in eight clinical development programs. Alexion is developing its antibody fragment, pexelizumab, in collaboration with Procter & Gamble, and has completed a Phase IIb study in patients undergoing cardiopulmonary bypass, and together the firms are currently conducting two large Phase II studies with pexelizumab in acute myocardial infarction patients. Alexion's other lead product candidate, 5G1.1,

has recently completed a Phase II trial for the treatment of rheumatoid arthritis. 5G1.1 is also in a Phase II trials for the treatment of membranous nephritis and also lupus nephritis and earlier stage clinical trials for the treatment of dermatomyositis and pemphigoid and has completed a pilot trial in psoriasis. Additionally, through the creation of its wholly owned subsidiary, Alexion Antibody Technologies, Inc., Alexion is engaged in discovering and developing a portfolio of additional antibody therapeutics targeting severe unmet medical needs. This press release and further information about Alexion Pharmaceuticals, Inc. can be found on the World Wide Web at: www.alexionpharm.com.

(more)

This news release contains forward-looking statements. Such statements are subject to certain factors which may cause Alexion's plans to differ or results to vary from those expected, including unexpected pre-clinical or clinical results (including any resulting termination or delay in clinical programs or inability to move forward to the next Phase of clinical development), the need for additional research and testing, delays in manufacturing, access to capital and funding, delays and adverse changes in development of commercial relationships and a variety of 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, 2000. Except in special circumstances in which a duty to update arises when prior disclosure becomes materially misleading in light of subsequent events, Alexion does not intend to update any of these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

FOR IMMEDIATE RELEASE

CONTACTS:

Alexion Pharmaceuticals, Inc.	Noonan/Russo Communications, Inc.	Nexus Communications
Leonard Bell, M.D.	Ernie Knewitz (Media) (212) 696-4455 Ext. 204	Rhonda Chiger (Investor)
President & CEO		(917) 322-2569
(203) 272-2596		

ALEXION ANNOUNCES COMPLETION OF PHASE I PSORIASIS PILOT SAFETY STUDY

Cheshire, CT, June 7, 2001 -- Alexion Pharmaceuticals, Inc. (Nasdaq: ALXN) announced today that it has completed a Phase I pilot safety trial in psoriasis patients with its humanized monoclonal antibody C5 complement inhibitor, 5G1.1.

Alexion has completed the preliminary analysis of a pilot clinical study of 5G1.1 administration for two months in 40 psoriasis patients. The primary objective of the trial was to examine safety of 5G1.1 in this psoriasis population. 5G1.1 appeared to be safe and well tolerated in this study population. The few adverse events noted most commonly included headache and nonspecific pain. Forty percent of placebo-treated patients and 10% of drug-treated patients withdrew prematurely. In this pilot Phase I trial, drug administration did not influence the clinical outcome as measured by Psoriasis Area and Severity Index score, although favorable trends in certain measures of disease activity were observed. Drug administration dose-dependently blocked hemolytic activity in the blood of treated patients and dose-dependently reduced deposition of activated terminal complement in psoriatic plaques. The company expects that data will be presented at a subsequent scientific meeting.

"We are encouraged by the observation that drug administration appears to have been well tolerated, blocked complement activation in psoriatic skin plaques, and may have been associated with additional beneficial effects in these patients," commented Dr. Leonard Bell, President and Chief Executive Officer of Alexion. "In this light, following complete analysis of the data and consideration of strategic product development imperatives, we may consider further clinical development of 5G1.1 in patient populations with psoriasis or psoriatic arthritis. Additionally, we are currently evaluating 5G1.1 in five other clinical indications."

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 are currently in eight clinical development programs. Alexion is developing its antibody fragment, pexelizumab, in collaboration with Procter & Gamble, and has completed a Phase IIb study in patients undergoing cardiopulmonary bypass, and together the firms are currently conducting two large Phase II studies with pexelizumab in acute myocardial infarction patients. Alexion's other lead product candidate, 5G1.1, has recently completed a Phase II trial for the treatment of rheumatoid arthritis. 5G1.1 is also in a Phase II trials for the treatment of membranous nephritis and also lupus nephritis and earlier stage clinical trials for the treatment of dermatomyositis and pemphigoid. Additionally, through the creation of its wholly owned subsidiary, Alexion Antibody Technologies, Inc., Alexion is engaged in discovering and developing a portfolio of additional antibody therapeutics targeting severe unmet medical needs. This press release and further information about Alexion Pharmaceuticals, Inc. can be found on the World Wide Web at: www.AlexionPharm.com.

This news release contains forward-looking statements. Such statements are subject to certain factors which may cause Alexion's plans to differ or results to vary from those expected, including unexpected pre-clinical or clinical results (including any resulting termination or delay in clinical programs or inability to move forward to the next Phase of clinical development), the need for additional research and testing, delays in manufacturing, access to capital and funding, delays and adverse changes in development of commercial relationships and a variety of 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, 2000. Except in special circumstances in which a duty to update arises when prior disclosure becomes materially misleading in light of subsequent events, Alexion does not intend to update any of these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.