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): May 7, 2012

ALEXION PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**000-27756**	**13-3648318**
(State or other jurisdiction of 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 May 7, 2012 at the annual meeting of the Association for Research in Vision and Ophthalmology in Fort Lauderdale, Florida, researchers presented six-month results of an investigator initiated exploratory study using systemic complement inhibition for the potential treatment of non-exudative age related macular degeneration, or dry AMD. The lead investigator concluded that the drug, eculizumab, was safe in the patients studied. The lead investigator also concluded that systemic inhibition of complement did not significantly improve the prospectively identified primary endpoints of the study, measurements of dry AMD.

Alexion Pharmaceuticals, Inc. is a biopharmaceutical company focused on serving patients with severe and ultra-rare disorders through the innovation, development and commercialization of life-transforming therapeutic products. Alexion is developing five drug candidates in eight lead development programs, each of which would address a severe or life-threatening, ultra-rare disorder: Soliris for STEC-HUS, acute humoral kidney transplant rejection, neuromyelitis optica, and myasthenia gravis; asfotase alfa for hypophosphatasia; cPMP replacement therapy for molybdenum cofactor deficiency; ALXN 1102, a unique inhibitor of the alternative complement pathway; and ALXN1007, a novel anti-inflammatory antibody.

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.

Date: May 7, 2012

ALEXION PHARMACEUTICALS, INC.

By: /s/ Michael V. Greco

Name: Michael V. Greco
Title: Associate General Counsel and
Corporate Secretary