UNITED STATES 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): March 15, 2011

ALEXION PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 000-27756 (Commission File Number) 13-3648318 (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)

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

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

Item 7.01 Regulation FD Disclosure.

Alexion Pharmaceuticals, Inc., or Alexion, today commented on the evolving situation and its operations in Japan. Most importantly, Alexion confirmed that its employees and their families are safe.

In the midst of the evolving situation in Japan, Alexion is focused on maintaining continuity of therapy, service, and support for patients with paroxysmal nocturnal hemoglobinuria, or PNH, including those receiving treatment with Soliris[®] (eculizumab). PNH is a debilitating and ultra-rare life-threatening blood disorder. Soliris was approved in Japan in 2010 for the treatment of patients with PNH.

Alexion notes that:

- It currently has sufficient supply of Soliris in Japan for both existing and anticipated new patients for at least the next three months and has multiple in-country distribution sites.
- It currently believes that there are no significant constraints on its ability to deliver additional supplies of Soliris to Japan to meet future demand.
- None of its facilities or Soliris inventory is in the directly affected areas.
- It has no manufacturing facilities in Japan and does not source any materials from Japan for the manufacture of Soliris.

Alexion continues to focus on maintaining strong support for patients and addressing challenges to the infrastructure in Japan that are likely to contribute to transient disruptions in treatment for individual patients. Based on its current assessment of conditions, Alexion is not making adjustments to its previously announced 2011 financial guidance.

This Current Report on Form 8-K contains forward-looking statements, including statements related to guidance regarding anticipated financial results for 2011, sufficiency of supply of Soliris in Japan and Alexion's ability to continue to deliver Soliris into Japan. Forward-looking statements are subject to factors that may cause Alexion's results and plans to differ from those expected, including for example, decisions of regulatory authorities regarding marketing approval or material limitations on the use of Soliris, delays in arranging and maintaining satisfactory manufacturing and logistical capabilities, worsening of conditions in Japan, 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 period ended December 31, 2010 and in Alexion's 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.

This information is furnished pursuant to Item 7.01 and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, or otherwise subject to the liabilities of that Section, and is not incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act regardless of any general incorporation language in such filing.

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.

By: /s/ Michael V. Greco

Name:Michael V. GrecoTitle:Associate General Counsel and Corporate Secretary

Date: March 15, 2011