VIA EDGAR AND EMAIL

Division of Corporation Finance Securities and Exchange Commission 450 Fifth Street, N.W. Washington, D.C. 20549 Attention: Johnny Gharib

Re: Alexion Pharmaceuticals, Inc.

Registration Statement on Form S-4 (File No. 333-204426)

Ladies and Gentlemen:

Pursuant to Rule 461 promulgated under the Securities Act of 1933, as amended (the "<u>Act</u>"), Alexion Pharmaceuticals, Inc. (the "<u>Registrant</u>") hereby requests that the effectiveness under the Act of the above-captioned Registration Statement on Form S-4 (File No. 333-204426), as amended to date, be accelerated to 9:00 a.m., Eastern time, on Thursday, June 18, 2015, or as soon as thereafter practicable. In connection with the foregoing request for acceleration of effectiveness, the Registrant hereby acknowledges the following:

- should the Securities and Exchange Commission (the "<u>Commission</u>") or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Registrant from its full responsibility for the adequacy and accuracy of the disclosure in the filing;
- the Registrant may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Alison Z. Preiss, Esq. or Sara J. Lewis, Esq. of Wachtell, Lipton, Rosen & Katz at (212) 403-1000 (facsimile: (212) 403-2000) with any questions you may have. In addition, please notify mesdames Preiss and Lewis when this request for acceleration has been granted.

Sincerely,

/s/ Michael V. Greco

Michael V. Greco Vice President of Law and Corporate Secretary Alexion Pharmaceuticals, Inc.