

Via EDGAR

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549

Attention: Jeffrey P. Riedler, Assistant Director
Johnny Gharib, Attorney
Matthew Jones, Attorney Advisor

**Re: Xenon Pharmaceuticals Inc.
Registration Statement Filed on Form S-1
File No. 333-198666**

Ladies and Gentlemen:

In connection with the above-referenced Registration Statement on Form S-1 (File No. 333-198666) (the "**Registration Statement**"), and pursuant to Rule 461 under the Securities Act of 1933, as amended, as representatives for the several underwriters in the offering of common shares of Xenon Pharmaceuticals Inc. (the "**Company**"), pursuant to such Registration Statement (the "**Offering**"), we hereby join the Company in requesting that the effective date for such Registration Statement be accelerated so that it will be declared effective at 4:00 p.m., Eastern Daylight Time, on October 16, 2014, or as soon thereafter as practicable.

We wish to advise you that through the date hereof, the participating underwriters have distributed 1,912 copies of the preliminary prospectus dated October 6, 2014 (the "**Preliminary Prospectus**") as follows: 1,169 to institutional investors and 743 to prospective underwriters, dealers, individuals and others.

We have been informed by the participating underwriters that they will comply with the requirements of Rule 15c2-8 under the Securities Exchange Act of 1934, as amended.

(Signature Page Follows)

Very truly yours,

JEFFERIES LLC
WELLS FARGO SECURITIES, LLC
As representatives of the several underwriters

JEFFERIES LLC

By: /s/ Ashley L. Delp

Name: Ashley L. Delp
Title: Managing Director

WELLS FARGO SECURITIES, LLC

By: /s/ David Herman

Name: David Herman
Title: Director

cc: Ian Mortimer
Karen G. Corraini
Xenon Pharmaceuticals

Jeffrey D. Saper
Steven V. Bernard
Bryan D. King
Wilson Sonsini Goodrich & Rosati, P.C.

Charles S. Kim
Cooley LLP

[SIGNATURE PAGE TO ACCELERATION REQUEST OF THE UNDERWRITERS]