

November 3, 2014

VIA EDGAR

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549-3720

Attention: Jeffrey P. Riedler, Assistant Director
Johnny Gharib, Attorney
Joel Parker, Accounting Branch Chief
Tabatha Akins, Staff Accountant

**Re: Xenon Pharmaceuticals Inc.
Registration Statement on Form S-1 (File No. 333-198666)
Form 8-A (File No. 001-36687)**

Acceleration Request

Requested Date: November 4, 2014

Requested Time: 4:00 P.M. Eastern Time

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, and Rule 12d1-2 of the Securities Exchange Act of 1934, as amended, Xenon Pharmaceuticals Inc. (the "**Company**") hereby requests that the above-referenced Registration Statement on Form S-1 (File No. 333-198666) (the "**Registration Statement**") be declared effective at the "Requested Date" and "Requested Time" set forth above or at such later time as the Company or its counsel may orally request via telephone call to the staff (the "**Staff**") of the Division of Corporation Finance of the Securities and Exchange Commission (the "**Commission**"). Once the Registration Statement has been declared effective, please orally confirm that event with our counsel, Wilson Sonsini Goodrich & Rosati, P.C., by calling Bryan King at (206) 883-2535.

In connection with the acceleration request, the Company hereby acknowledges that:

- should the Commission or the Staff, acting pursuant to delegated authority, declare the Registration Statement effective, it does not foreclose the Commission from taking any action with respect to the Registration Statement;

- the action of the Commission or the Staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the Company from its full responsibility for the adequacy and accuracy of the disclosure in the Registration Statement; and
- the Company 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.

[Signature page follows]

* * * *

Sincerely,

XENON PHARMACEUTICALS INC.

/s/ Karen Corraini

Karen Corraini

General Counsel and Corporate Secretary

cc: Simon Pimstone
Ian Mortimer
Xenon Pharmaceuticals Inc.

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

Charles S. Kim
Cooley LLP

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 Time, on November 4, 2014, or as soon thereafter as practicable.

We wish to advise you that through the date hereof, the participating underwriters have distributed 1,995 copies of the preliminary prospectus dated October 8, 2014 (the "**Preliminary Prospectus**") as follows: 1,277 to institutional investors and 718 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 Inc.

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]