October 14, 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 DirectorJohnny Gharib, AttorneyJoel Parker, Accounting Branch ChiefTabatha 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: October 16, 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-l (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

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

Charles S. Kim Cooley LLP