



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

October 7, 2014

Via E-mail

Ms. Karen Corraini
General Counsel and Corporate Secretary
Xenon Pharmaceuticals, Inc.
200 – 3650 Gilmore Way
Burnaby, British Columbia V5G 4W8, Canada

**Re: Xenon Pharmaceuticals, Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed October 6, 2014
File No. 333-198666**

Dear Ms. Corraini:

We have reviewed amendment no. 1 to your registration statement filed on October 6, 2014 and have the following comment. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to our comment, we may have additional comments.

Capitalization, page 55

1. On page F-17, you state “Each of the Series A, Series B and Series E preferred shares will automatically convert into common shares in connection with an IPO satisfying certain threshold requirements.” Please disclose these threshold requirements in the notes to the financial statements, and expand your pro forma disclosures throughout the filing to explain why assuming that the convertible preferred stock will be converted into common stock is factually supportable. Refer to rule 11-02(b)(6) of Regulation S-X.

Karen Corraini
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You may contact Tabatha McCullom at (202) 551-3658 or Joel Parker at (202) 551-3615 if you have questions regarding comments on the financial statements and related matters. Please contact Johnny Gharib at (202) 551-3170 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Jeffrey P. Riedler

Jeffrey P. Riedler
Assistant Director

Via E-mail
Bryan D. King, Esq.
Wilson Sonsini Goodrich & Rosati, P.C.