



DIVISION OF
CORPORATION FINANCE

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

January 8, 2014

Via E-mail

David J. Main
President and Chief Executive Officer
Aquinox Pharmaceuticals Inc.
430-5600 Parkwood Way
Richmond, B.C., Canada V6V 2M2

**Re: Aquinox Pharmaceuticals (USA) Inc.
Amendment No. 1 to Draft Registration Statement on Form S-1
Submitted December 24, 2013
CIK No. 0001404644**

Dear Mr. Main:

We have reviewed your amended draft registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to these comments and your amended draft registration statement or filed registration statement, we may have additional comments.

Special Note Regarding Forward-Looking Statements and Industry Data, page 45

1. We note your response to Comment 14 and reissue the comment. Please revise your disclosure to remove the statement that you "have not independently verified any third-party information."

Executive Compensation, page 110

2. In your next amendment, please revise your executive compensation disclosure to reflect the compensation awarded to named executive officers during the most recently completed fiscal year ended December 31, 2013. Please also note that your Summary Compensation Table should continue to include the compensation awarded to NEOs in the fiscal year ended December 31, 2012. Please refer to Instruction 1 to Item 402(n) of Regulation S-K.

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If you intend to respond to these comments with an amended draft registration statement, please submit it and any associated correspondence in accordance with the guidance we provide in the Division's October 11, 2012 announcement on the SEC website at <http://www.sec.gov/divisions/corpfin/cfannouncements/drsfilingprocedures101512.htm>.

You may contact Donald Abbott at (202) 551-3608 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Scot Foley at (202) 551-3383, Bryan Pitko at (202) 551-3203 or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Bryan J. Pitko for

Jeffrey P. Riedler
Assistant Director

cc: Michael E. Tenta
Gordon H. Empey
Cooley LLP
1700 Seventh Avenue, Suite 1900
Seattle, WA 98101