

April 27, 2015

Jeffrey P. Riedler
Assistant Director
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549

Re: Jaguar Animal Health, Inc.
Amendment No. 6 to Registration Statement on Form S-1
Filed April 17, 2015
File No. 333-198383

Dear Mr. Riedler:

On behalf of our client, Jaguar Animal Health, Inc., a Delaware corporation (the "Company"), we hereby provide responses to comments (the "Comments") of the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission") issued in a letter dated April 24, 2015 (the "Letter") regarding the Company's above-referenced Amendment No. 6 to Registration Statement on Form S-1 (the "Registration Statement"), as filed with the Commission on April 17, 2015. Contemporaneous with this filing, the Company is filing on the EDGAR system an Amendment No. 7 to the Registration Statement on Form S-1 (the "Form S-1/A") reflecting the responses of the Company below.

The Company's responses are numbered to correspond to the Comments as numbered in the Letter. For your convenience, each of the Comments contained in the Letter have been restated in bold below in their entirety, with the Company's corresponding response set forth immediately under such comment. In the responses below, page number references are to the Form S-1/A.

Balance Sheets, page F-2

1. **It appears that you are applying a convention to your pro forma column to reflect only amounts in that column that have changed from your historical balances. If this is true, please make the following revisions to the pro forma column or explain to us why these revisions are not necessary:**

- **Please add a dash to the "warrant liability" line (similar to that used in the preferred stock line) to indicate that this liability is zero on a pro forma basis; and**
- **Replace the "total current liabilities" line to reflect the appropriate total. In this regard, it appears that the amount should be \$2,785,401.**

Response: The Company respectfully acknowledges the Staff's Comment and has revised the disclosure on page F-3 of the Form S-1/A accordingly.

[remainder of page intentionally left blank]

NEW YORK · LONDON · HONG KONG · CHICAGO · WASHINGTON, D.C. · BEIJING · PARIS · LOS ANGELES · SAN FRANCISCO · PHILADELPHIA · SHANGHAI · PITTSBURGH
SINGAPORE · MUNICH · ABU DHABI · PRINCETON · NORTHERN VIRGINIA · WILMINGTON · SILICON VALLEY · DUBAI · CENTURY CITY · RICHMOND · GREECE

Jeffrey P. Riedler
April 27, 2015
Page 2



Should you have any questions concerning any of the foregoing, please contact me by telephone at (415) 659-5936.

Sincerely,

/s/ Marianne C. Sarrazin
Marianne C. Sarrazin
Reed Smith LLP

Cc: Lisa A. Conte, Jaguar Animal Health, Inc., by e-mail
Dan Harris, BDO USA, LLP, by e-mail
Doug Hart, BDO USA, LLP, by e-mail
Brad L. Shiffman, Blank Rome LLP, by e-mail
Donald C. Reinke, Reed Smith LLP, by e-mail

