

October 28, 2014

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. 2 to Registration Statement on Form S-1  
Filed October 10, 2014  
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 October 21, 2014 (the "Letter") regarding the Company's above-referenced Amendment No. 2 to Registration Statement on Form S-1 (the "Registration Statement"), as filed with the Commission on October 10, 2014. Contemporaneous with this filing, the Company is filing on the EDGAR system an Amendment No. 3 to the Registration Statement on Form S-1 (the "Form S-1/A") reflecting the responses of the Company below. In addition, because the Form S-1/A now contains an estimated price range, the Company is also including an amended and restated response to comment 1 of the Staff of the Commission issued in a letter dated September 23, 2014 ("Comment 1").

The Company's responses are numbered to correspond to the Comments as numbered in the Letter and Comment 1. For your convenience, each of the Comments contained in the Letter and Comment 1 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.

Letter dated October 21, 2014

#### **Risk Factors**

##### **If we fail to retain current members, page 20**

- We note that Mr. Thompson is no longer your Chief Financial Officer. We also note on page 20 of your amended registration statement filed on September 9, 2014 that you are dependent on Mr. Thompson. Please expand your disclosure to discuss his departure and its expected impact on your company.**

**Response:** The Company respectfully acknowledges the Staff's Comment and has revised the disclosure on page 20 of the Form S-1/A accordingly.

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

##### **We do not believe that our non-prescription products . . . , page 36**

- We note your response to comment 13 in the comment letter dated July 14, 2014 that Neonorm is not intended to diagnose, cure, mitigate, treat or prevent disease. However, we also note on page 73 that Neonorm is intended to address scours in dairy calves. Please expand your disclosure to clarify why you do not believe that Neonorm meets the definition of a drug under 21 U.S.C. § 321(g)(1)(B).**

**Response:** The Company respectfully acknowledges the Staff's Comment and has revised the disclosure on pages 36 and 87 of the Form S-1/A accordingly. The Company has also revised the disclosure throughout the S-1/A to further clarify that Neonorm is not intended to diagnose, cure, mitigate, treat or prevent scours, but is intended to improve gut health and normalize stool function in animals suffering from scours.

- We note that the FDA may choose in the future to exercise jurisdiction over animal supplement products. Please expand your disclosure to specifically address whether you have previously discussed with the FDA your belief that the FDA has no regulatory authority over your Neonorm product.**

**Response:** The Company respectfully acknowledges the Staff's Comment and has revised the disclosure on page 37 of the Form S-1/A accordingly.

##### **Business, page 62**

- Please amend your disclosure to identify your distributor for the Upper Midwest region and your national master distributor. Additionally, please expand your disclosure to explain services that your national master distributor will provide in contrast to your regional distributors.**

**Response:** The Company respectfully acknowledges the Staff's Comment and has revised the disclosure on pages 63 and 76-77 of the Form S-1/A accordingly.

**Capitalization, page 46**

1. We acknowledge your response to previous comment 9. Please revise your disclosure, when you establish your anticipated offering price range, to disclose the amount of the contingent beneficial conversion feature charge to loss applicable to common shareholders that will be recorded upon the completion of your offering related to your Series A redeemable convertible preferred stock.

**Response:** The Company respectfully acknowledges the Staff's Comment and advises the Staff that because the midpoint of the anticipated offering price range exceeds \$3.3788 (\$2.2472 x 1.5) that there is no beneficial conversion feature charge to loss applicable to common stockholders that will be recorded upon the completion of its offering related to the Company's Series A redeemable convertible preferred stock.

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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  
Bryan Gendron, BDO USA, LLP, by e-mail  
Donald C. Reinke, Reed Smith LLP, by e-mail  
Divakar Gupta, Cooley LLP, by e-mail  
John T. McKenna, Cooley LLP, by e-mail

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