



DIVISION OF  
CORPORATION FINANCE

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

April 16, 2015

Via E-mail

Lisa A. Conte  
Chief Executive Officer and President  
Jaguar Animal Health, Inc.  
185 Berry Street, Suite 1300  
San Francisco, California 94107

**Re: Jaguar Animal Health, Inc.  
Amendment No. 5 to Registration Statement on Form S-1  
Filed March 20, 2015  
File No. 333-198383**

Dear Ms. Conte:

We have reviewed your amended 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 amending your registration statement and providing the requested information. 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 any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Product Pipeline, page 3

1. Please do not include planned events as anticipated near-term milestones in the table on pages 3 and 66 that are dependent on another preliminary step or milestone or that you do not expect to accomplish in the next 12 months.

Capitalization, page 46

2. Please revise your disclosure of the pro forma as adjusted transaction to include the repayment of your \$1.0 million standby bridge financing as indicated in your Use of Proceeds disclosure on page 43. In addition, please explain why the pro forma as adjusted accumulated deficit related to this transaction appears to reflect only the repayment of principal and exclude the \$300,000 of repayment premium.

Summary Compensation Table, page 99

3. Please continue to provide 2013 executive compensation information in your Summary Compensation Table. Please refer to Instruction 1 to Item 402(c) of Regulation S-K.

Report of Independent Registered Public Accounting Firm, page F-2

4. Please explain the reference in the opinion paragraph to the period from “June 6, 2013 (inception) through December 31, 2014,” which appears to be inconsistent with your financial statements.

Notes to Financial Statements

7. Commitments and Contingencies, page F-16

5. Please revise your disclosure of the fees to be paid to Indena S.p.A. to include the €300,000 bonus fee consistent with the information on page 83.

8. Debt and Warrants, page F-17

6. Please revise your disclosure of your October 30, 2014 standby bridge financing agreement to address the following apparent discrepancies:
  - You disclose that the fair value of the associated warrants at issuance was recorded as a debt discount of \$505,348 and that the aggregate discount recorded (including the original \$100,000 discount) was only \$504,348.
  - The net balance derived at December 31, 2014 by taking the \$1 million principal amount, subtracting the \$504,348 aggregate discount recorded and adding back the \$84,057 amortization of debt discount recorded during 2014 is \$579,709, while the amount reflected on your balance sheet is \$478,709.
7. Please tell us why you recorded the warrant issued with the August 2014 standby line of credit as research and development expense. Reference for us the authoritative literature you relied upon to support your classification.

15. Subsequent Events, page F-28

8. Please explain your planned accounting treatment for the March 2015 amendments to the terms of the outstanding convertible promissory notes and warrants and reference for us the authoritative literature you rely upon to support your accounting treatment. Please tell us how you reflected this accounting treatment in your pro forma and pro forma as adjusted presentation in Capitalization on page 46. In your response, please tell us whether these amendments or your planned IPO causes you to stop accounting for your October and December 2014 warrant issuances as liabilities.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- 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 filing; 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.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

Lisa A. Conte  
Jaguar Animal Health, Inc.  
April 16, 2015  
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You may contact Frank Wyman at (202) 551-3660 or Mark Brunhofer at (202) 551-3638 if you have questions regarding comments on the financial statements and related matters. Please contact Matthew Jones at (202) 551-3786, John Krug at (202) 551-3862, or me at (202) 551-3715 with any other questions.

Sincerely,

/s/ Daniel Greenspan for

Jeffrey P. Riedler  
Assistant Director

cc: Donald C. Reinke, Esq.  
Marianne C. Sarrazin, Esq.  
Reed Smith LLP  
101 Second Street, Suite 1800  
San Francisco, California 94105