



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

June 9, 2017

Lisa A. Conte
Chief Executive Officer and President
Jaguar Animal Health, Inc.
201 Mission Street, Suite 2375
San Francisco, California 94105

**Re: Jaguar Animal Health, Inc.
Amendment No. 2 to Registration Statement on Form S-4
Filed May 26, 2017
File No. 333-217364
Amendment No. 1 to Form 10-K for Fiscal Year Ended December 31, 2016
File No. 001-36714**

Dear Ms. Conte:

We have reviewed your amended filings 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. Unless we note otherwise, our references to prior comments are to comments in our May 15, 2017 letter.

Registration Statement on Form S-4

General

1. We note that you have a pending request for confidential treatment. Please be advised that we will not be in a position to declare your registration statement effective until we resolve any issues concerning the confidential treatment request.

Merger Consideration, page 18

2. We note your response to prior comment 6. Please include prominent disclosure that at the current market value of the shares the resale of the Tranche A shares to third parties will not provide Nantucket sufficient proceeds to satisfy the applicable Hurdle Amount.

Napo Business, page 118

3. We note your revised disclosure in response to prior comment 16. Safety and efficacy determinations are solely within the FDA's authority. As your product candidates have not received FDA approval, it is premature to state that they are safe or effective. To the extent that your clinical trials support the statements, you may state that your product candidates have shown to be well tolerated and demonstrated statistically significant improvements. Please revise your statement "Crofelemer was effective in shortening the duration of traveler's diarrhea by 21%" and all other statements indicating that your products are safe and effective.

Management's Discussion and Analysis of Financial Condition and Results of Operations
Overview, page 153

4. You disclose that Jaguar received a \$1.5 million upfront payment under the terms of the Elanco agreement. The \$1.5 million is also disclosed on pages 166 and F-39. However, the disclosure on page 158 and elsewhere in the document states that the initial upfront payment was \$2,548,689. Please explain the difference or revise.

Unaudited Interim Financial Statements

Notes to the Condensed Financial Statements, page F-44

5. Please note that your interim financial statements must include all adjustments that, in the opinion of management, are necessary to make the financial statements not misleading and an affirmative statement to this affect must be included in your disclosures. If true, please revise to add this disclosure. Reference is made to Regulation S-X, Rule 8-03, Instruction 2. In addition, please clearly label the notes as unaudited.

Summary of Significant Accounting Policies

Revenue Recognition

Collaboration Revenue, page F-48

6. We note that under the terms of the Elanco agreement you will receive additional payments upon achievement of certain development, regulatory and sales milestones in the aggregate amount of up to \$61.0 million. Please revise your disclosure to describe each substantive milestone and the related contingent consideration. Refer to ASC 605-28-50-2b.

Lisa A. Conte
Jaguar Animal Health, Inc.
June 9, 2017
Page 3

Form 10-K/A for Fiscal Year Ended December 31, 2016

Exhibits 31.1 and 31.2

7. The executive certifications you have filed as exhibits to your Form 10-K/A do not contain the exact certification wording required by Item 601(b)(31) of Regulation SK. Please confirm that in your future filings you will revise the certifications to include the entire introductory language of paragraph 4 to also address your officers' responsibility for establishing and maintaining internal control over financial reporting.

You may contact Vanessa Robertson at (202) 551-3649 or Lisa Vanjoske at (202) 551-3614 if you have questions regarding comments on the financial statements and related matters. Please contact Jeffrey Gabor at (202) 551-2544 or Chris Edwards at (202) 551-6761 with any other questions.

Sincerely,

/s/ Joseph McCann for

Suzanne Hayes
Assistant Director
Office of Healthcare & Insurance

cc: Michael Lee, Esq.
Reed Smith LLP