



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 4546

May 15, 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.
Registration Statement on Form S-4
Filed April 18, 2017
File No. 333-217364
Form 10-K for Fiscal Year Ended December 31, 2016
Filed February 15, 2017
File No. 001-36714**

Dear Ms. Conte:

We have reviewed your 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.

General

1. Please revise your registration statement and proxy card to allow for separate voting on the increase of authorized shares of common stock, authorization of non-voting common stock, and Nantucket's prior written consent for issuance of dividends. You may condition the completion of the transaction on shareholder approval of the separate proposals.
2. Please include prominent disclosure quantifying the minimum Hurdle Amounts needed for the vesting of the contingent rights to be issued in the merger and that Napo shareholders may not receive any shares of Jaguar in the merger. Please also disclose the minimum time

period that Napo holders will need to wait prior to the vesting of the contingent rights. It would appear from disclosure on page 10 that the contingent rights will not vest for at least three years.

Questions and Answers about the Merger, page 9

3. Please provide a Q&A describing the conditions to the merger. We note the related discussion in your summary and that the merger will not be completed unless Jaguar stockholders approve proposals (i), (iv) and (v).
4. We note your reference to what Jaguar stockholders will receive under “What will Napo stockholders receive in the merger for their shares?” Under a separate Q&A please provide a description of what Jaguar stockholders will receive in the merger.

Summary – The Merger

The Proposed Merger, page 17

5. Please tell us the factors you considered in determining that the issuance of Jaguar common stock are exempt pursuant to Section 4(a)(2), Regulation D or Regulation S.

Merger Consideration, page 18

6. Please disclose the market value of the shares that will be issued for each share of Napo common stock as of the latest practicable date.

Conditions to Completion of the Merger, page 22

7. Please revise “Conditions to the Completion of the Merger” to identify conditions that the parties may waive.

Risk Factors

If the NASDAQ Stock Market determines the merger with Napo..., page 28

8. If the listing approval is a condition that can be waived, please revise the caption and discussion to clarify that the consequences also apply if the combined company fails to obtain NASDAQ listing but decides to complete the transaction. Please tell us whether NASDAQ will determine if the transaction is a change of control transaction prior to shareholders voting at the special meeting.
9. Please disclose the possibility of a decrease in the share price of your common stock if delisted and the effect that would have on Nantucket’s ability to satisfy the Hurdle Amounts.

The Elanco Agreement is important to Jaguar's business..., page 34

10. Please tell us whether Glenmark has consented to the quality assessment of their facility that is the subject of the Elanco Agreement.

The success of the combined company will also depend on the pre-existing..., page 82

11. Please identify any material relationships or agreements that are likely to be affected by the transaction, describe the nature of the relationship and the potential consequences if the transaction results in the cancellation of a material agreement or negative impact on a relationship with a third party.

The combined company will record goodwill that could become impaired ..., page 82

12. Please quantify the amount of goodwill included in the pro forma financial statements.

Jaguar Business, page 86

13. We note that Jaguar entered into an exclusive evaluation period with a leading multinational animal health pharmaceutical firm relating to Equilevia. Identify your collaborative partner throughout the filing. File the agreement as an exhibit or provide an analysis supporting your determination that you are not required to file it pursuant to Item 601(b)(10) of Regulation S-K.

Napo Business, page 118

14. Please edit your Product Pipeline table to clarify the current phase of development. We note from the MD&A section that Napo did not conduct any clinical trial activity in 2016.
15. We note that Napo signed an agreement with Alamo Pharma Services, Inc. for the establishment and management of a national sales team for Mytesi. Please file the agreement as an exhibit or provide an analysis supporting your determination that you are not required to file it pursuant to Item 601(b)(10) of Regulation S-K.
16. We note that you have completed clinical studies for various indications. Please expand your disclosure for each indication to provide the specific details and parameters of the studies such as primary and secondary endpoints, patient populations, and current status.
17. We note your description of competition for Napo's products. Please revise to include a description of competitive conditions in the marketplace and competing products, both commercial and in development.
18. We note your statement that Napo's pipeline includes prescription drug candidates which are backed by strong Phase 2 evidence. Please clarify whether the Phase 2 clinical studies

are complete for these products. If the Phase 2 clinical trials are not complete, please revise this statement to provide the proper context.

Government Regulation, page 129

19. Please expand this section to describe the regulation to which Napo's business is subject in the United States and in foreign jurisdictions.

Market Prices of and Dividends on Jaguar Common Stock, page 154

20. Please include the market price information in this section.

Napo Management's Discussion and Analysis of Financial Condition and Results of Operations Refinancing, page 158

21. We note that Napo entered into settlement agreements with certain additional creditors. Identify your additional creditors and file the agreements as exhibits or provide an analysis supporting your determination that you are not required to file them pursuant to Item 601(b)(10) of Regulation S-K.

Background of the Merger, page 226

22. Please expand your discussion to clarify what strategic alternatives and other opportunities were reviewed in the second half of 2015, including continuing development, licensing, and winding up the operations and distributing net cash to Jaguar shareholders in liquidation. Your disclosure should identify the parties present at each meeting where members of the Jaguar board and management met with representatives from different financial institutions.
23. Please supplementally provide us with copies of all materials prepared by Stifel and shared with your board of directors and their representatives, including copies of all board books and all transcripts and summaries, that were material to the board's decision to approve the merger agreement and the transaction contemplated thereby.
24. Please revise your disclosure throughout this section to provide greater detail as to the background of the transaction, including the material issues discussed and key negotiated terms. The disclosure should provide shareholders with an understanding of how, when, and why the material terms of your proposed transaction evolved and why this transaction is being recommended as opposed to any alternatives. In your revised disclosure, please ensure that you address the following:
 - the material terms in the initial proposal and subsequent proposals and counter offers;
 - identification of the parties involved;
 - valuations;
 - negotiation of the transaction documents and the parties involved;

- the Board's basis for approving the proposed offer;
- at what point other strategic alternatives were eliminated from consideration; and
- details as to the debt restricting

25. Please expand the background disclosure to explain why a contingent right to receive shares of Jaguar common stock was proposed as a form of consideration, rather than having the shareholders receive all of the merger consideration at the closing of the merger.

Opinion of Jaguar Financial Advisor, page 234

26. Please disclose the relevant selection criteria for each of the companies used by Stifel for their analysis, including the underlying data for the companies such as number of products, the pipeline, and the clinical stage of products. Please also disclose whether any of these companies have products in commercial stage. Finally, please disclose whether any companies that met the selection criteria were excluded from the analysis and why.
27. In the comparable company analysis for Napo, please disclose the basis for using the market capitalization criteria and how the market capitalization for the selected companies compare to Napo. Similarly, please quantify the implied equity values for the target companies used in the precedent transaction analysis.
28. We note that Jaguar disclosed financial projections to Stifel. Please revise your registration statement to disclose these projections.

Stock Options, page 253

29. Please expand this discussion to disclose the number of options held by each officer and director that will vest upon the closing of this transaction.

Unaudited Pro Forma Combined Condensed Financial Statements

Acquisition of Napo, page 275

30. Please break out the amount of IPR&D separately from the developed technology. Please clarify the nature of the developed technology and whether it is a definite lived asset subject to amortization, and estimated useful life. For the IPR&D, please describe the current status of the project(s) and the nature and timing of the remaining efforts and related cash requirements necessary to develop the incomplete technology into a commercially viable product.

2. Pro Forma Adjustments, page 276

31. Adjustment (a) shows an increase to cash of \$2 million. Note (a) describes an increase to cash of \$3 million and a decrease to cash of \$2 million, resulting in a net increase to cash of \$1 million. Please provide disclosure showing how you arrived at the \$2 million

increase to cash in adjustment (a) or revise as necessary. Indicate in the disclosure where the \$8 million of cash described in note (b) is reflected. Also, explain where the \$2 million of cash acquisition consideration is reflected.

32. Adjustment (a) indicates it reflects recording the issuance of 45.2 million shares. Adjustment (b) indicates it reflects recording the issuance of 43.0 million shares. Please disclose the number of shares issued assumed in the pro forma information and reconcile to the statement on page 19 that discloses issuance of approximately 69.3 million shares upon closing of the merger.
33. Reference is made to adjustment (d). In light of the significant amount of goodwill you plan to record in connection with this acquisition, please include a qualitative discussion of the factors that make up the goodwill to be recorded. Refer to ASC 805-30-50-1.
34. Please show in detailed disclosure how the number of pro forma weighted average shares outstanding was determined.

Napo Pharmaceuticals, Inc. Consolidated Financial Statements

Notes to Consolidated Financial Statements

12. Litigation Settlements, page F-64

35. Please tell us how the gain on settlement of \$1,888,319 was calculated and the authoritative literature you relied upon in the accounting for this litigation settlement.

Form 10-K for the fiscal year ended December 31, 2016

Item 9A. Controls and Procedures

Internal Control Over Financial Reporting, page 132

36. You disclose that you have not included a report of management's assessment regarding internal control over financial reporting or an attestation report of the company's registered public accounting firm due to a transition period established by rules of the SEC for newly public companies. Please note that although you are not required to have an attestation report done by your independent public accounting firm, you are required to include a report of management's assessment regarding internal control over financial reporting in your Form 10-K due to the passage of time since your initial registration statement and the number of Form 10-Ks filed since that initial registration statement. Please revise by amending your Form 10-K for the year ended December 31, 2016 to include this report as required by Item 308 of Regulation S-K.

37. In addition, please consider whether management's failure to perform or complete its report on internal control over financial reporting impacts its conclusions regarding the effectiveness of your disclosure controls and procedures as of the end of the fiscal year covered by the report and revise your disclosure as appropriate.

Exhibits 31.1 and 31.2

38. Please revise Item 4 of your Section 302 Certification to include the language set forth in paragraph (B)(31) of Section 601 of Regulation S-K in its entirety. In this regard, since management is required to provide a report on its assessment of internal controls over financial reporting in the Form 10-K, as noted in the comment above, Item 4 of your certification should include paragraph (b) which certifies that you have designed such internal controls over financial reporting, or caused such internal control over financial reporting to be designed under your supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Please revise by filing an amended Form 10-K for the year ended December 31, 2016.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

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/ Mary Beth Breslin for

Suzanne Hayes
Assistant Director
Office of Healthcare and Insurance

cc: Michael Lee, Esq.
Reed Smith LLP