

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

**FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

JAGUAR ANIMAL HEALTH, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

2834
(Primary Standard Industrial
Classification Code Number)

46-2956775
(I.R.S. Employer
Identification Number)

**201 Mission Street, Suite 2375
San Francisco, California 94105
(415) 371-8300**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive office)

Lisa A. Conte
Chief Executive Officer and President
Jaguar Animal Health, Inc.
201 Mission Street, Suite 2375
San Francisco, California 94105
(415) 371-8300

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Donald C. Reinke, Esq.
Reed Smith LLP
101 Second Street, Suite 1800
San Francisco, California 94105
(415) 543-8700

Ivan K. Blumenthal, Esq.
Merav Gershtenman, Esq.
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
666 Third Avenue
New York, New York 10017
(212) 935-3000

**Approximate date of commencement of proposed sale to the public:
As soon as practicable after this registration statement is declared effective.**

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. 333-208905

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a
smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1) (2)	Amount of Registration Fee(3)
Common Stock, par value \$0.0001 per share	\$ 98,900	\$ 9.96

(1) Represents only the additional dollar amount of shares of common stock being registered and includes the additional dollar amount of shares of common stock that the underwriters have the option to purchase to cover over-allotments, if any. Does not include the securities that the registrant previously registered on the registration statement on Form S-1 (File No. 333-208905).

(2) Calculated in accordance with Rule 457(o) under the Securities Act of 1933, as amended. Based on the public offering price per share.

(3) The registrant previously paid filing fees of \$1,251.05 in connection with previous filings of its registration statement on Form S-1 (File No. 333-208905).

EXPLANATORY NOTE AND INCORPORATION BY REFERENCE

This registration statement is being filed with respect to the registration of additional shares of common stock, par value \$0.0001 per share of Jaguar Animal Health, Inc., a Delaware corporation, pursuant to Rule 462(b) under the Securities Act of 1933, as amended. The contents of the Registration Statement on Form S-1 (File No. 333-208905) filed by the Registrant with the Securities and Exchange Commission, as amended, declared effective on February 3, 2016, including exhibits and power of attorney thereto, are incorporated by reference in this Registration Statement.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of San Francisco, State of California, on February 3, 2016.

JAGUAR ANIMAL HEALTH, INC.

By: /s/ LISA A. CONTE
Name: Lisa A. Conte
Title: *Chief Executive Officer and President*

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ LISA A. CONTE</u> Lisa A. Conte	Chief Executive Officer, President and Director (Principal Executive Officer)	February 3, 2016
<u>/s/ KAREN WRIGHT</u> Karen Wright	Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	February 3, 2016
<u>*</u> James J. Bochnowski	Chairman of the Board	February 3, 2016
<u>*</u> Jiahao Qiu	Director	February 3, 2016
<u>*</u> Zhi Yang, Ph.D.	Director	February 3, 2016
<u>*</u> Folkert Kamphuis	Director	February 3, 2016
*By: <u>/s/ LISA A. CONTE</u> Lisa A. Conte, Attorney-in-Fact		

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Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
5.1	Opinion of Reed Smith LLP.
23.1	Consent of Independent Registered Public Accounting Firm.
23.2	Consent of Reed Smith LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included on the signature page of the initial filing of the Registration Statement on S-1 (File No. 333-208905) filed by the Registrant on January 7, 2016.

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Reed Smith LLP
 101 Second Street
 Suite 1800
 San Francisco, CA 94105-3659
 Tel +1 415 543 8700
 Fax +1 415 391 8269
 reedsmith.com

February 3, 2016

Jaguar Animal Health, Inc.
 201 Mission Street, Suite 2375
 San Francisco, California 94105

Ladies and Gentlemen:

We have acted as U.S. securities counsel to Jaguar Animal Health, Inc., a Delaware corporation (the "Company"), in connection with the registration of 230,000 shares of the Company's common stock, par value \$0.0001 (the "Shares"), pursuant to Rule 462(b) promulgated under the Securities Act of 1933, as amended (the "Securities Act"), on February 3, 2016 (the "Rule 462(b) Registration Statement") with the Securities and Exchange Commission (the "Commission"). The Shares, including 30,000 Shares to cover over-allotments, if any, are being offered for sale, together with the securities previously registered pursuant to the Company's Registration Statement on Form S-1 (Registration No. 333-208905), as amended (the "Initial Registration Statement"), which was declared effective by the Commission on February 3, 2016, by the Company to the underwriters (the "Underwriters") pursuant to the terms of the Underwriting Agreement, dated February 3, 2016 (the "Underwriting Agreement"), by and among the Company and Aegis Capital Corp., as representatives of the Underwriters.

In rendering the opinion set forth herein, we have examined originals or copies, certified or otherwise identified to our satisfaction, of such documents, corporate records, certificates of public officials and other instruments as we have deemed necessary or advisable.

In such examination, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all items submitted to us as originals, the conformity with originals of all items submitted to us as copies, and the authenticity of the originals of such copies. As to any facts material to the opinions expressed herein that we did not independently establish or verify, we have relied upon statements and representations of officers and other representatives of the Company and public officials.

This opinion is based solely on the General Corporation Law of the State of Delaware (including all related provisions of the Delaware Constitution and all reported judicial decisions interpreting the General Corporation Law of the State of Delaware and the Delaware Constitution).

Based upon and subject to the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when issued, delivered and paid for in accordance with the terms of the Underwriting Agreement, the Shares will be validly issued, fully paid and nonassessable.

We consent to the inclusion of this opinion as an exhibit to the Rule 462(b) Registration Statement and further consent to all references to us under the caption "Legal Matters" in the Initial Registration Statement. In giving this consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

/s/ REED SMITH LLP
 REED SMITH LLP

DCR/AI



Tel: 415-397-7900
Fax: 415-397-2161
www.bdo.com

One Bush Street
Suite 1800
San Francisco, CA 94104

Consent of Independent Registered Public Accounting Firm

Board of Directors and Stockholders
Jaguar Animal Health, Inc.
San Francisco, CA

We hereby consent to the use in the Prospectus constituting a part of this Registration Statement of our report dated March 20, 2015, except for Note 15 which is as of April 17, 2015, relating to the financial statements of Jaguar Animal Health, Inc., which is contained in that Prospectus. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

We also consent to the reference to us under the caption "Experts" in the Prospectus.

/s/ BDO USA, LLP
San Francisco, CA

February 1, 2016

BDO USA, LLP, a Delaware limited liability partnership, is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.

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